



FEEDBACK ON DRAFT NSW MAINLAND MARINE PARK NETWORK MANAGEMENT PLAN 2021-2031

Australian Marine Conservation Society

National Parks Association of NSW

Nature Conservation Council of New South Wales

CONTACT:

Katie Walters / Cat Dorey
Gary Dunnett
Jacquelyn Johnson

AMCS
NPA NSW
NCC NSW

katiewalters@amcs.org.au / catdorey@amcs.org.au
garyd@npansw.org.au
jjohnson@nature.org.au

Table of contents

Contents

1	Summary	2
2	Framework for the Plan	3
2.1	Strategic context	3
2.2	Legislated context	4
2.3	Suitability of NSW policy and underpinning material	5
2.4	Managing the Marine Estate vs Managing Marine Parks	7
3	Marine Sanctuaries	9
4	Values and Threats.....	11
5	Objectives.....	13
6	Actions	13
6.1	General.....	13
6.2	Aboriginal Culture Program	15
6.3	Infrastructure Program	15
6.4	Research Program	16
6.5	Planning.....	17
6.6	Education program	18
6.7	Rules.....	19
6.8	Compliance	22
6.9	Partnerships	22
6.10	Policy.....	23
7	Implementation, Monitoring and Reporting	23
8	Accountability, Transparency and Community Engagement.....	25
8.1	Community partners	25
8.2	Advisory committees and community engagement	26
8.3	Community Engagement, Accountability, and Transparency.....	27
	Appendix A: List of Recommendations	30
	References	34

The **Australian Marine Conservation Society (AMCS)** is Australia's peak marine conservation organisation, representing around 300,000 people from all around the country. For over 50 years, we have used scientific research, policy advocacy, community engagement, and education to protect and restore Australia's oceans.

The **National Parks Association of NSW (NPA)** was formed in 1957 and sixty-five years later has 15 branches, 4,000 members and over 20,000 supporters. NPA's mission is to protect nature through community action. NPA regards protected areas, whether terrestrial or marine, as the centre-piece of conservation. NPA has a long history as an advocate for in both the expansion of the protected area network and best-practice management of gazetted reserves.

The **Nature Conservation Council of New South Wales (NCC)** is the state's peak environment organisation. We represent over 160 environment groups across NSW. Together we are dedicated to protecting and conserving the wildlife, landscapes and natural resources of NSW.

Our organisations welcome the opportunity to submit a response to the proposed NSW Mainland Marine Park Network Management Plan 2021-2031* (the draft Plan).¹

1 Summary

The primary purpose of NSW marine parks, as stated in the Marine Estate Management Act 2014 (the Act), is 'to conserve the biological diversity, and maintain ecosystem integrity and ecosystem function, of bioregions in the marine estate'.

In our shared view, the draft Plan fails to meet this statutory objective, and requires substantial revision to render it fit for purpose.

The described 'new approach' appears to represent a deliberate effort to shift the management of Marine Parks from the international norms for protected area management towards a resource management model. We regard this shift as wholly inappropriate and inconsistent with Australia's international commitments for the conservation of biodiversity and natural systems.

The 2021 report by the Marine Estate Expert Knowledge Panel *Evaluation of the performance of NSW Marine Protected Areas; biological and ecological parameters*¹ stated that the success of marine parks should be measured by the primary purpose, and definitively found that highly protected areas (marine sanctuaries) are critical to that success. NSW's provision of these highly-protected areas is under 7% of the entire marine estate – far below the level of protection that is required for marine ecosystems to withstand current and future pressures.

Simply put, without a major shift toward a science and evidence-based approach, and substantial increases to marine sanctuaries, the marine park network in NSW will fail in reaching its primary objective.

The draft Plan consistently describes 'balancing' values of the marine park across environmental, social, and economic incentives, completely undermining the philosophical and legally established purpose of NSW marine parks.

As described in the Act, secondary purposes of marine parks (to maintain social, cultural and economic values) are to be provided for only 'where consistent with the primary purpose'. The draft Plan has failed to actualise this very important distinction: *different criteria must apply for these small areas of the wider marine estate.*

¹ We note this management plan is either misdated, or in use **prior** to public feedback and finalisation.

Unfortunately, even secondary purposes are unlikely to be met for the broader community of NSW, given the lack of transparency and accountability, and poor community engagement strategies displayed in both this consultation process and in the draft Plan itself. Community education and partnerships display a marked intent to promote, encourage and facilitate extractive use while stewardship, conservation and science are almost entirely absent. Persistent reference to Community Advisory Committees as ‘the voice of communities’ – both in the draft Plan and throughout the process – completely misrepresent the way these Committees have been set up and operate, particularly with regard to a high level of confidentiality imposed on Committee members that limited their ability to consult with stakeholders on this draft Plan.

In this submission we provide detailed comment on the draft Plan, as thoroughly as possible, in the sincere hope that the Department will correct course. NSW’s marine ecosystems are incredibly valuable – to NSW lifestyles, livelihoods, and for their own unique and inherent worth. The draft Plan must be urgently revised to protect them.

2 Framework for the Plan

All management of marine parks in NSW must fulfil the purposes and descriptions of marine parks in the legislative context. Unfortunately, the draft Plan obfuscates the statutory purposes and descriptions in the Act², diminishing their contribution to sustaining the marine resources of NSW for the future.

2.1 Strategic context

Despite the draft Plan’s reference to developing and adhering to ‘best practice’ management techniques, it does not appear to be informed by global best practice, wise practice management, nor international targets for marine protection. To illustrate this point:

- The draft Plan does not meet the IUCN’s *Conservation Standards [for] Marine Protected Areas*³ – standards that are explicitly framed to meet sustainable development objectives. The failure to meet these standards is evident in respect to the IUCN’s primary objective to scale up full protection ‘with the ultimate aim to create a fully sustainable ocean, *at least 30% of which has no extractive activities*’ (emphasis added).
- Despite NSW’s overarching pledge to Ecologically Sustainable Development (ESD) as defined by the Act, no effort appears to have been made in the draft Plan to include objectives which can be measured and reported using the Sustainable Development Goals indicators (viz SDG14 Life Below Water), even though all Australian jurisdictions have agreed to adopt such measurements for use in future State of the Environment reports⁴.
- The devaluing of rule-based management does not accord with the IUCN World Commission on Protected Areas’ *Guidelines for Marine Protected Areas (1999)*^{5(p51)} which states a zoning plan ‘should be the foundation for the management plan’ and that managers should encourage public understanding and support for the management objectives of such plans.
- Neither does the draft Plan’s ‘new approach’ acknowledge the growing evidence that spatial management through Marine Protected Areas (MPAs) can provide a measure of protection against a number of threats that *originate* outside the boundaries of the MPA, such as providing carbon storage, mitigating against extreme weather and providing resilience against marine disease^{6–11}.

A comprehensive MPA guide was published in leading peer-reviewed journal *Science* in 2021; the guide’s authors are globally-recognised experts in effects and management of marine protected areas¹². This guide recommends a science-driven framework for planning, managing, and evaluating

marine protected areas to achieve global goals in marine conservation and sustainable use. The draft Plan falls far short of the standards proposed in the guide, including:

- the absence of conflict-resolution mechanisms or ‘ongoing efforts to build trust, local leadership or partnerships’ between stakeholders. This omission is particularly notable in the section on decision-making and trade-offs (pp15-16). Conflict between different stakeholders should be expected, and dealing with these in a planned and meaningful way is a legitimate and necessary endeavour.
- there is no explicitly stated objective or action to **expand** fully-protected sanctuary zones as would be required to provide ‘representativeness and replication of habitats’
- there are no hints of a ‘stakeholder engagement plan’; nor of a strategy to meet ‘staffing and funding’ requirements
- the draft Plan does not commit to retaining existing protections for a ‘minimum of 25 years.’

Perhaps most surprising is the draft Plan’s failure to recognise the Australian Marine Sciences Association’s *Position Statement on Marine Protected Areas (MPAs)*, which notes that ‘MPAs with at least 30% sanctuary (no-take) zone are the **most effective** and therefore the preferred design option’¹³.

The draft Plan also omits reference to any Australian national and international marine conservation commitments or sustainability context, for example:

- Australia’s contribution within the High Level Panel on a Sustainable Ocean Economy (2020), and national commitments to achieve ‘100% sustainable ocean management of areas within national jurisdiction’, which both require Sustainable Ocean Plans by 2025¹⁴.
- Australia’s contribution to the Global Ocean Alliance Initiative to protect 30% of ocean area by 2030¹⁵.

2.2 Legislated context

The *Marine Estate Management Act 2014 No 72* (Part 5 Div 1) clearly describes the *primary purpose* of marine parks is to ‘conserve the biological diversity, and maintain ecosystem integrity and ecosystem function, of bioregions in the marine estate’ (22.1). Disturbingly, this primary purpose has been deliberately minimised throughout the draft Plan through the inappropriate equivalence of ‘NSW marine parks’ with ‘the NSW marine estate’.

In simplest terms, our view is that the only element of the marine estate that satisfy the legislative purpose are those areas that are classified as sanctuary zones in marine parks or aquatic reserves.

The secondary purposes of marine parks (i.e. to provide for the management and use of resources in the marine park in a manner that is consistent with ESD principles; to enable the marine park to be used for scientific research and education; to provide opportunities for public appreciation and enjoyment of the marine park; and to support Aboriginal cultural uses of the marine park) are described in the Act as to be provided for ‘**where consistent with the primary purpose**’ (22.2).

These secondary purposes are worthy ones, and we recognise that social acceptance and licence are contributors to the biological success of MPAs^{16,17}. However, despite the draft Plan claiming it ‘does not nest neatly within a strategic framework’ (p13) it then goes on to apply decision-making tools and consider Values/Threats under the framework outlined for use across the *Marine Estate*, rather than categorise and prioritise these under a modified-but-consistent framework for marine *parks*.

It must also be noted that the secondary purposes providing for management and use of resources must also be consistent with ESD principles (22.2.a). As noted in the definitions of the Act, the principles that are required to be used are:

- (a) *the precautionary principle*
- (b) *inter-generational equity*
- (c) *conservation of biological diversity and ecological integrity*
- (d) *improved valuation, pricing and incentive mechanisms*².

The draft Plan contains a single page on these principles (p12) but makes no further reference to their application. The most critical omission of these principles is in the description of decision-making processes and ‘trade-off’ outcomes (p15) – the draft Plan does not commit to application of the *precautionary principle* when assessing trade-offs to ensure *future generations* may experience their marine heritage in an as-healthy, or healthier, state as do current generations.

Recommendation 1: A revised Plan should clearly articulate a differentiation between management of the marine estate, and management of marine parks which have special purposes and require application of the principles of ESD.

The formal definition of what constitutes a ‘marine park’ is to some extent assumed within the Act, but it is nevertheless quite clear that a marine park is *a spatially defined area* – one defined by a boundary, within which human activities must be *regulated* (5.1.23, 5.1.26, 5.4)².

The draft Plan systematically downplay the importance of regulatory tools in respect to the management of marine parks (pp 3, 9, 43). Yet the scientific consensus is that regulations are the *best* and most effective tool for *conserving marine biodiversity*, the primary statutory purpose of marine parks under the Act.

Recommendation 2: A revised Plan should affirm that clear and easily understandable Regulations / Rules are the most critical tool for delivering the primary objective for marine parks, in amendments to pages 3, 9 and 43.

2.3 Suitability of NSW policy and underpinning material

The draft Plan reflects the inconsistent and inadequate NSW Government approach to the marine estate. This is a lost opportunity to interpret the NSW policies and strategies in a clear, coherent, and consistent manner, to prioritise the primary purpose of Marine Parks under the Act.

One of the major challenges for the draft Plan is that many of the previous marine estate policies and strategies produced by the NSW Government are themselves inconsistent with the statutory purposes of marine parks. The draft Plan is highly inconsistent and selective in the manner in which it draws upon previous NSW Government and other relevant policies, strategies, and research. The following discussion highlights some of the flawed policies that have been incorporated without appropriate review into the draft Plan.

The *Marine Estate Management Strategy 2018-2028* acknowledges that ‘Marine protected areas are less effective in dealing with off-site impacts such as land-based runoff, water pollution, litter and marine debris, erosion, marine pests, overcrowding, and legacy issues (including contamination, habitat loss, and reclamation)’¹⁸. Noting this, it would seem obvious that the Marine Estate Management Strategy would be the most appropriate place to consider objectives and actions that primarily deal with these issues.

Conversely, the same document states that: ‘The Government is assessing options for enhancing the protection of biodiversity in the Hawkesbury (Sydney) and Twofold Shelf marine bioregions of NSW, which have been identified in the Audit as current gaps. Spatial management has been recommended to address identified social, cultural, economic, and environmental threats in the Hawkesbury Shelf marine bioregion. An assessment of mechanisms to enhance conservation of marine biodiversity in the Twofold Shelf marine bioregion is pending.’ This is reinforced in the policy statement *Marine Protected Areas within the NSW Marine Estate - their role & purpose*: ‘The NSW Government is committed to enhancing the protection of biodiversity in the gaps identified in the 2012 NSW Independent Scientific Audit of Marine Parks in NSW and will assess mechanisms for enhancing the protection of biodiversity in those identified gaps, namely within the Hawkesbury and Twofold Shelf marine bioregions.’

The *Marine Estate Management Strategy 2018-2028* makes a number of commitments in relation to marine parks:

1. ‘Develop and pilot a new approach to management planning at Batemans Marine Park and Solitary Islands Marine Park.
2. Prepare management plans for remaining marine parks in accordance with statutory requirements and make recommendations to update rules and improve management, where needed.
3. Explore and implement mechanisms to enhance conservation of marine biodiversity while balancing community outcomes in the Hawkesbury Shelf marine bioregion (Newcastle – Sydney – Wollongong).
4. Explore mechanisms to enhance conservation of marine biodiversity while balancing community outcomes in the Twofold Shelf marine bioregion (far south coast of NSW).
5. Investigate and apply the use of spatial management tools, in consultation with the community, that are most effective at reducing priority threats at a bioregion and site-based scale’^{18(p19)}.

Only commitments 1 and 2 are addressed in any form within this Marine Parks Plan. Disturbingly, there is no reference to Commitments 3-5, despite the previous acknowledgement that they are essential priorities for marine parks.

These commitments do not appear as planned initiatives/actions for NSW in either the Marine Estate Strategy or the draft Marine Parks Plan.

Only a single vague Action about extending the Marine Parks network is included in the draft Plan, and it is only within the context of finding climate refuges (3.1b).

The most troubling inconsistencies in underpinning documents are those between the ‘Report of the Independent Scientific Audit of Marine Parks in New South Wales’¹⁹ and the *Government Response to that Audit*²⁰.

The draft Plan references an ‘evidence-based’ approach to management (p5, 15, 17, 38, and Action items) and suggests the ‘marine parks audit’ is used to underpin it (p13). Far from adopting the recommendations in the Scientific Audit, it is clear that the draft Plan is based upon the flawed and inadequate Government Response to the Scientific Audit. This perpetuates the consistent pattern across NSW policy of dismissing the critical importance of sanctuaries and protective regulatory mechanisms for the effective protection of marine biodiversity.

The Government Response ignored a number of key recommendations from the Independent Scientific Audit, and repurposed a single recommendation to *include* threat analyses in management of the marine estate (R5.1) to instead build an *entire framework* for management using Threat and Risk Analysis (TARA).

The NSW Marine Estate Statewide Threat and Risk Assessment²¹ (Statewide TARA) even acknowledges the considerable uncertainty inherent in the approach. It is not fit for identifying, assessing, or addressing the complexities of bio-physical interactions in the marine environment. It can identify primary existing effects, but cannot identify or address secondary or cumulative effects such as trophic and ecosystem outcomes, or climate change impacts.

The deficiencies of the TARA approach are reflected throughout the draft Plan. Examples include:

- The assessment of threats and values derives from community *perceptions* (Step 1 of the decision-making process, p 25), which are validated by so-called ‘ground-truthing’ (Step 2, p 29). This second step requires both the collection of peer-reviewed evidence to support or contradict these perceptions AND further input from the community members, who would presumably have already had the opportunity to input through Step 1. This increases the margins of uncertainty for all proposed strategies.
- There’s no requirement for the ‘local marine park stakeholders’ (p29) who feed into the second step to have expertise relating to the primary purpose of marine parks, or for declarations of relevant pecuniary interests be declared.
- The process entirely ignores the changeability of community perception in response to external events, education or misinformation²²⁻²⁵.

A great deal of uncertainty is unnecessarily introduced into decisions under consideration in Steps 3 and 4, related to assessment of current and future management strategies. Consequently, the objective measurement of impacts (Step 5) is almost impossible.

A more efficient, rigorous, and cost-effective assessment process is suggested:

- a) an assessment of community values and perceived threats
- b) identify peer-reviewed evidence of values and threats, and/or fill knowledge-gaps with peer-reviewed science
- c) identify and carry out engagement activities designed to enrich community perceptions to, and build social licence for, marine parks *within the context of existing perceptions*
- d) enact management solutions supporting progress to the primary purpose of marine parks in the context of a more supportive, unified, and engaged community.

The adoption of the flawed TARA framework has resulted in a wealth of relevant, high-credentialed research and ‘best practice’ being overlooked. For example, the vast amount of social-ecological systems research and practice that has developed and accrued over the past few decades²⁶⁻²⁹ could have proven extremely beneficial, given NSW’s commitment to balance human use with healthy environments. In the specific context of the management plan for marine parks, the significant body of research on the nature of human values with relation to natural resources³⁰⁻³³ is similarly lacking.

2.4 Managing the Marine Estate vs Managing Marine Parks

The draft Plan’s statements that ‘Marine parks are special places’ that have been declared in order to achieve special objectives’ (p5) stands in contrast with the attempt to manage them under the same guidance and strategies as the entire marine estate.

This approach fails to acknowledge that Marine Parks are *protected areas*, gazetted to achieve a *highly specific subset* of the goals of marine estate management. NSW marine parks are subject to internationally accepted norms, expectations and commitments as protected areas, none of which are appropriately acknowledged or factored into the draft Plan.

Special purposes require that modified framework be used within these areas; one that is consistent with, but more specialised than the framework used outside of them.

We note that nowhere in the draft Plan is there any action to quantify the benefits marine parks bring to the broader marine estate, or the reverse, to determine if the marine estate is undermined by lack of MPAs.

The draft Plan contains the minimum content for marine park management plans as required by the Act (Part 5, Div 5, 48), but it has not evidenced that these were produced with appropriate consideration of the *purposes of marine parks* under Part 5, Div 1, 22.

*Managing the NSW Marine Estate: purpose, underpinning principles and priority setting*³⁴ describes ten principles, each of which should have specific application under marine parks, which can be entirely consistent within the context of the marine estate.

For example, Principle 2 as outlined in *Managing the NSW Marine Estate*:

‘Identification of priority actions will be based on threat and risk assessment’³⁴

should be applied within this Plan of management for the NSW Marine Park Network as:

‘Identification of actions for marine parks will be determined based on threat and risk assessment and will be prioritised according to the primary or secondary purposes of marine parks’

Further to our comments related to the TARA framework above, we oppose the proposed ‘trade off’ scenarios (p15-16) where some outcomes will be evaluated in respect to management of the marine estate as a whole (p16), *rather than in accordance with the purposes of marine parks under the Act*.

Two specific principles outlined in *Managing the NSW Marine Estate* are particularly relevant in the context of Marine Parks: Principle 5: the well-being of future generations will be considered; and Principle 7: the precautionary principle will be applied.³⁴

These two principles are particularly relevant within this context, given they are *also* principles of ESD which must be applied when considering secondary purposes of marine parks under the *Marine Estate Management Act* (5.1.22.2a), and as such, must be incorporated into management decisions.

While there is no definition of these principles within the Act, the *Protection of the Environment Administration Act 1991 No 60* provides clarity for what is intended in the application (emphasis added):

‘(a) the precautionary principle—namely, that if there are threats of serious or irreversible environmental damage, *lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation*.

In the application of the precautionary principle, public and private decisions should be guided by—

- (i) careful evaluation to avoid, wherever practicable, serious or irreversible damage to the environment, and
- (ii) an assessment of the risk-weighted consequences of various options

(b) inter-generational equity—namely, that the present generation should ensure that the health, diversity and productivity of the environment are *maintained or enhanced* for the benefit of future generations³⁵

Given the above, within the context of marine parks, any management option must ensure environmental values are protected.

In our view, Principle 3 as outlined in *Managing the NSW Marine Estate*:

‘Values will be assigned to enable trade-off decisions between alternative uses of the Marine Estate’³⁴

should be applied within the draft Plan as:

‘Marine park values will be assigned priority in accordance with the primary and secondary purposes of Marine Parks to enable assessment of trade-off decisions between alternative use and activity within marine parks.’

Principle 4 as outlined in *Managing the NSW Marine Estate*

‘Best available information will be used in trade-off decisions, but judgment will still be required’³⁴

should be applied within the draft Plan as:

‘Best available information will be used in trade-off decisions, and judgments will be made in accordance with the primary and secondary purposes for marine parks, applying the principles of ESD.’

We also draw attention to ‘conservation of biological diversity and ecological integrity’ which is both the primary purpose of marine parks under the Act, *and* an ESD principle². The *Environment Administration Act* even notes it should be the *priority* principle of ESD:

‘(c) conservation of biological diversity and ecological integrity—namely, that conservation of biological diversity and ecological integrity should *be a fundamental consideration*.’³⁵

Recommendation 3: A revised Plan should outline the specific application of the Ten Underpinning Principles for Managing the Marine Estate³⁴ *within the context of marine parks*.

Recommendation 4: ‘Making Decisions for Marine Parks’ (pp15-16) should be amended to provide clear assurance that trade-off decisions on Marine Park approvals and management actions a) will always favour biological and ecosystem outcomes, in accordance with the primary purpose of marine parks as defined by the Marine Estate Management Act (2014); and b) will be adjudicated using the principles of ESD as defined by the Marine Estate Management Act (2014) and the Environment Administration Act (1991).

3 Marine Sanctuaries

The description of the value of Marine Sanctuaries (p44), is based on the Government’s Response to the Independent Scientific Audit, rather than the Independent Scientific Audit itself. It seriously understates the conservation significance of marine sanctuaries.

We note the lack of inclusion of the findings of the Marine Estate Expert Knowledge Panel's Technical Paper¹ which appears to have been produced more than a year before, but was not released until one month after, this draft Plan.

The significance of this excluded reference cannot be overstated.

The findings of the Expert Knowledge Panel clearly support no-take Sanctuary Zones as the greatest contributor to the success of Marine Parks in NSW, when measured against the primary purpose of Marine Parks^{1(p19)}.

Given such clear guidance, it's nothing short of astonishing that the draft Plan downplays a Rules-based approach to management (e.g. pp3, 9, 43). Even statements like those on p44 that assure extractive activities will not take place in current or future-designated sanctuary zones *do not provide assurance that the current total area of sanctuary protection will be maintained, nor do they commit to increasing sanctuary protection in the future*, as is necessary if marine parks are to fulfil their primary purpose under the Act.

Moreover, this attempt to present the Rules as 'just one' of the management tools for marine parks conflicts with the information provided on p44, AND the following finding from the Expert Knowledge Panel's review:

'while an integrated approach is desirable and indeed underpins the overall MEMA strategy, the more recent science reviewed here since Beeton et al. (2012) supports the conclusions of the Audit, that is: that *the current network of NSW MPAs, with effective zoning restrictions, established on a bioregional basis and applying the CAR principles, provides a critical component* of an integrated approach to the management of the NSW Marine Estate' (emphasis added) (p24)¹.

CAR principles

The CAR (Comprehensive, Adequate, Representative) principles are the guiding nationally agreed principles for the National Reserve System, including Marine Protected Areas (NRSMPA)³⁶.

The information on CAR principles on p44 describes their use to assess areas for sanctuary protection *only within currently existing marine parks*. This approach is entirely contradictory to the accepted national process for using CAR principles, which require application in a *bioregional* context.

As previously noted, the Marine Estate Management Strategy 2018-2028 notes that 'spatial mechanisms have been recommended' for protecting two completely unprotected bioregions of NSW (Hawkesbury Shelf and Twofold Shelf)^{18(p16)}.

The map of the NSW marine estate (p6) entirely omits these bioregions, and contains no action or objective for creating new marine parks over the next 10 years, despite the particular suitability of this management instrument for such action.

Of further concern are indications that NSW intends to entirely abandon CAR principles even *within* marine parks. The EconSearch technical report commissioned by the DPI and released in 2021 states: 'MPA management planning is transitioning from an approach focused on Comprehensive, Adequate and Representative (CAR) management of marine biodiversity and ecosystems in marine bioregions via MPAs, based on zoning, to an evidence-based threat and risk assessment focus on conserving the full suite of values (environmental, social, cultural and economic) and threats to those values

implemented through MPA management plans' (emphasis added). This repudiation of CAR principles has been reiterated in recent Department Staff statements³⁷ at public information sessions.

As noted above we regard the apparent decision to base the management of marine parks upon TARA as entirely inappropriate; however, even if pursued, it should not involve the abandonment of CAR principles. *Marine parks are spatial tools with the primary goal of protecting biodiversity.* The CAR approach is recognised in all other jurisdictions of Australia and in many other parts of the world as the benchmark for creating and adjusting them¹³.

The current marine park network in NSW does not meet evidence-based benchmark targets for spatial protection, guided by CAR principles, to ensure biodiversity and ecosystem functioning. Sanctuary-or-higher level protection currently makes up only 6.44% of NSW's marine estate³⁸, well below the substantial body of evidence that we need to protect *at least five times* that amount of our marine resources in such spaces^{13,39-42} – not only for conservation benefits but for safeguarding our economic future as well^{43,44}.

The draft Plan does not provide for *increasing* such protections, either within marine parks or across the marine estate, to provide intergenerational equity as required by the Act.

We note that the Australian Government recently became a signatory of the international 'High Ambition Target' to preserve biodiversity by protecting a minimum of 30% of our nation's waters and land in some form of conservation reserve⁴⁵. The current figure of 6.44% of the NSW marine estate clearly falls shockingly below that national target. It is imperative that a revised draft Plan be produced with a clear pathway to meeting this international obligation.

Recommendation 5: A revised Plan should provide thorough disclosure on marine spatial management in NSW by including the Hawkesbury Shelf and Twofold Shelf bioregions in the map of the NSW marine estate (p6).

Recommendation 6: A revised Plan should note NSW's unfulfilled progress to a National Representative System of Marine Protected Areas (Marine Parks) and provide measurable goals for providing protection to the unprotected bioregions mentioned within the next decade

(see also Recommendation 28 and 29: that a revised Plan includes Actions to apply CAR principles to identify and protect areas for sanctuary and other spatial protection **beyond** current marine park boundaries, and particularly in the Hawkesbury and Twofold Shelf Bioregions.)

4 Values and Threats

The Values and Threats section (pp25-36) confuses activities, values, threats, and risks. This results in complex, difficult to comprehend lists (p27, 33-36) that ignore the priority rankings of the Statewide TARA²¹ and consider threats to community activities and uses as directly *equivalent* with threats to environmental values.

For example, in the table of Threats (pp33-36):

1. *Reductions in abundance of species and trophic levels from extraction* has not been identified as a risk to environmental values (p34).
2. *Excessive or illegal extraction of species* has not been identified as a risk to environmental values (p34).
3. *Water pollution on environmental values - litter, solid waste, marine debris and microplastics* is unclear as it relates to activities/threats and values (p35).

4. *Sediment contamination* has not been identified as a risk to environmental, social, or economic values (p35).
5. *Overcrowding/congestion* has not been identified as a risk to environmental values (p36).

The draft Plan acknowledges that ‘environmental values critically underpin social, cultural and economic values’ (p28), yet fails to recognise that management actions that *enhance* biological diversity, ecosystem integrity and ecosystem function must therefore enhance other values. It similarly omits to recognise the converse – that actions that are designed purely to satisfy social, economic or cultural aspirations may represent a threat to biological diversity, ecosystem integrity and ecosystem function.

TARA provides a categorisation of threats and values that could be adopted in this section of the draft Plan – that is 1) Threats to Environmental Values (corresponding with primary purpose); and 2) Threats to Social, Cultural and Economic Values (corresponding with secondary purposes) **because** the biological diversity, ecosystem integrity, and ecosystem function of bioregions in the marine estate face a threat under 1). Threat themes could still be represented within this section, as second-order categorisations.

The detailed table in Appendix D (p123) presents threats under the themes used in the draft Plan, rather than by their priority as assigned by TARA. Representing the underpinning TARA threats appropriately would afford the public the opportunity to meaningfully assess the Actions described in the following section (pp48-80).

For example: in the Statewide TARA, seven different categories of Commercial and Recreational fishing activities appear in the High and Moderate Priority Threats to Environmental Assets. Additionally, ‘reductions in abundances of species and trophic levels’ is ranked as a *higher* risk to Social Cultural and Economic Benefits than is ‘loss of public access (by private development or Government area closures)’. Accurately portraying the urgency of these threats/risks in this section would greatly contextualise and inform the public’s assessment of Action items intended to ‘increase access’ listed under the ‘Rules’ program.

Recommendation 7: A revised Plan should recategorize the Threats Section to correspond with and reflect the primary and secondary purpose of marine parks as defined by the Act, and the ranked priorities of the Statewide Threat and Risk Assessment, in both the Threat Section and Appendix D.

The draft Plan ascribes stakeholder input into the Values upon which it is based, but it does NOT provide information about whether values were primarily informed by expert scientific advice, peer-reviewed evidence, input from the community, or input from identified stakeholder groups. The resulting list offers no guidance on the level of uncertainty, the relevance of values in relation to marine park purposes, or transparency of stakeholder interests. Additionally, the ‘community values’ construct used in Step 1 of the decision-making framework overlooks the nature of socially-assigned values for natural resources, which are variable through time, and may be informed, expanded, or influenced by familiarity, education, social norms, and simple proximity^{30–33}.

The designation of ‘intrinsic’ and ‘bequest’ values as economic values serves as another indication of the inappropriate use of TARA in considering sustainable marine resources generally, but particularly in the specific context of NSW marine parks’ statutory purpose to protect biodiversity and marine ecosystems. These two value designations are quite distinct from ‘economic’ value in most peer-reviewed literature, to capture social views that a) natural resources, places, species or habitats have value *whether or not they are experienced or used by humans*; and b) subsequent generations should be allowed to experience and enjoy natural resources to the same degree as those of the present^{46–}

⁵⁰ (respectively). Interpretation of these values in the context of marine parks should, rather, be made with direct reference to the ESD principles ‘conservation of biological diversity and ecological integrity’ and ‘intergenerational equity’.

Recommendation 8: A revised Plan provides transparency and confidence in the *rigor* of assessment of ‘community values’

Recommendation 9: A revised Plan includes a clear description of the fluid nature of ‘community values’ and provides education and engagement activities (see also Recommendations 24-26) that will result in enhanced values for the biological diversity, ecosystem integrity and ecosystem function protected by marine parks

Recommendation 10: A revised Plan reassesses the ‘Values’ section within the context of the principles of Ecologically Sustainable Development and the primary purpose for marine parks.

5 Objectives

We welcome the categorisation of the broader management objectives by their link to either primary or secondary purposes of marine parks.

However, as noted earlier, a coherent differentiation must be made between decision-making for marine *parks* and the marine *estate*. The description of the development of these objectives into management actions (pp39-40) omits reference to the prioritisation of the primary purpose for marine parks, the principles of ESD, or the priority threats as noted by the Statewide TARA. This information is particularly relevant to Step D (p39) of the decision-making process (assessing cost-effectiveness and ‘trade-offs’).

Recommendation 11: The section ‘Developing Actions to Make a Positive Difference for Marine Parks’ (p39) should include a clear description of how the prioritisation of purposes for Marine Parks, and the principles of Ecologically Sustainable Development have been applied in the decision-making process.

The underpinning policy document *Guidelines for Assessing Management Options for the NSW Marine Estate* notes that ‘in finalising management options, more specific management objectives will be developed. Such objectives should be specific, measurable, [achievable]², realistic and time-based (known as ‘SMART’ objectives)⁵¹.

The draft Plan includes no such detail. Without these SMART objectives there are no benchmarks by which the management of these ‘special places’ can be evaluated over the coming 10 years.

Recommendation 12: A revised Plan should include SMART objectives, corresponding with the three, six, and nine-year implementation plans (see also Recommendation 39).

6 Actions

6.1 General

While we strongly support endeavours to meaningfully consider the range of drivers and pressures that impact our marine parks, this section of the draft Plan – the only section that provides insight

² P5 of the NSW *Guidelines for Assessing Management Approaches* erroneously lists ‘agreed’ as a SMART measure. In common use, and in other sections of the same document, it is accepted to be ‘Achievable’.

into the detail of activities and how they have/will be conducted – starkly demonstrates the serious deficiencies of the current and proposed approach to management.

A number of Actions describe ‘streamlining’ processes or ‘reducing regulatory burden’ without any assurance that other agencies will prioritise the protection of the statutory primary purpose and ESD principles.

Marine park users are likely to be overwhelmed by the volume of described actions, which range from markedly vague ‘business as usual’ actions (1.2a, 1.1d) to highly specific actions requiring specialist knowledge (1.3f, 6.1c).

It is difficult to imagine how the NSW community can be expected to provide meaningful input to this draft Plan (if indeed the approach is to prioritise ‘effective community engagement’ (p15)).

As a single example, Action 1.1d, allocated under the Rules program, describes an action to ‘ensure DPI Fisheries has concurrence for riparian and coastal foreshore development that is directly adjacent to a marine park.’ DPI Fisheries *already* has this concurrence responsibility, as provided for in the Act. Additionally, we note that late last year, amendments were made which removed the concurrence/referral authority of the Marine Estate Management Authority and/or DPI in many situations related to marine parks and the marine estate⁵². While comment on the scope of these amendments is outside of this submission, when they are combined with the summary statement admission that advice is not often applied, we find it hard to feel confident that such an action is in any sense meaningful.

There are unacceptable indications that priority actions in the draft Plan were determined with minimal, or extremely selective, community engagement, and with little to no transparency to the public. Of 152 identified Actions for implementation, less than 15 named or unspecified partnerships are listed with any non-governmental local, state or national conservation groups, marine educators or researchers, academic institutions, or marine science professional bodies *even for actions which are clearly within the immediate interest, expertise and scope of conservation or science stakeholders* (for example 1.2c, 1.2e, 2.2b, J&B 5.6e, 5.7b, 6.1h). Indeed, the overwhelming absence of non-departmental research/science groups is utterly confounding, in a so-called ‘evidence-based’ approach.

By contrast, more than 120 named and unspecified partnerships are listed with non-governmental stakeholders from extractive industries *even when they have no direct relationship to or expertise in the listed action item* (for example items, 3.1d; all actions under 1.1 and 1.3). Concerningly, these stakeholders are listed as *sole* partners on action/decisions that may have extremely deleterious consequences for the primary purpose of marine parks (for example S5.2i; B5.2i; items under 5.5).

We recognise that in some cases, actions are projected to take place some years hence, and specific partners have not yet been sourced. This does not explain why the *only* anticipated partners for these actions are from fishing bodies.

This imbalance implies a deliberate intention to exclude other stakeholders from future management of marine parks and provides further indication that the proposed ‘new approach’ to management will be contrary to the statutory primary purpose of marine parks.

The allocation of action items to management programs throughout this section is misleading. For example, the draft Plan includes action items which appear to be paving the way to allowing for approvals that have already been determined, prior to education or engagement with the public to canvas benefits and threats. Action 5.7c, for example, describes a preliminary risk assessment to

determine if cruise ship visitations are appropriate in Jervis Bay (Planning program), despite such visitations already being planned and sold to consumers⁵³.

Recommendation 13: A revised Plan must reconsider and show amendments to the proposed partners for **all** Action items to a) reflect that all Actions must protect and enhance to the primary purpose of marine parks under the Act and b) appropriately include partnerships with the vast, active network of local, state and national ENGOs; marine scientists and educators; citizen science; and local community groups who have collective decades of learning and experience in marine science, education, conservation practice, data collection, and associated expertise in marine park management.

Recommendation 14: The DPI-Fisheries and DPIE-EES call for Expressions of Interest from the stakeholders listed above (in Recommendation 13) to nominate interest in partnering to deliver and/or advise on all Actions under a revised Plan.

We address our comments on proposed actions according to the Program categories assigned within the draft Plan.

6.2 Aboriginal Culture Program

We welcome the specific objective, and all specific actions under the Aboriginal Culture program, particularly those that address specific recommendations made in the 2017 review of TARA (then in draft) by peak bodies, advisory groups, Land Councils, Elders Groups, Aboriginal organisations and community member⁵⁴.

The report's recommendations were relevant not only to the TARA, but to the management of the Marine Estate and Marine Parks. One such recommendation was that 'culturally authoritative Aboriginal voices must be involved in MEMA *decision-making processes and management*' (emphasis added).

We thus welcome action items under *other* programs that name Traditional Owners as Partners, or Lead Agencies. We do note here, again, the predominance of other select stakeholders in the listed partnerships throughout the 152 action items. While recognising that all stakeholder groups have limited capacity to engage with every decision related to management of marine parks, we hope that marine park management will significantly progress the above recommendation over the coming decade, and thoroughly reconsider partnerships across *all* actions to prioritise support and inclusion of Traditional Owners.

Recommendation 15: We urge the ongoing consideration of *all* Actions and partnerships to progress Objective 4 (To partner with Aboriginal people for protection of Aboriginal cultural values and improved marine park management).

6.3 Infrastructure Program

We generally support the actions described under the Infrastructure program. However, some (and *all* actions that foreshadow 'increased access and opportunity') must be conducted *after* consideration of Action 5.6a – an assessment of resource use, overcrowding, and conflict issues. The assessment conducted under 5.6a should attempt to determine the *environmental* carrying capacity separately and explicitly, as appropriate given that management actions should progress the primary purpose of marine parks before other purposes.

Similarly, Infrastructure actions should be *preceded* by a research Action to understand the social objectives, wellbeing, satisfaction, cultural values of the full community of marine park users, not just recreational fishers as in Action 5.5e.

In 2019 the Gold Coast Waterways Authority commissioned a review of marine conflicts in the expectation of increased on-water users and user-types^{55,56}. The review found increased conflict arose when their *expectations* of their use were unmet by reality, particularly when it came to expectations of ‘naturalness’ of location, or quietude. In addition, conflict tends to stem from asymmetric arrangements where some users are always least tolerated and/or least affected. Concerningly, ‘conflicts tend to be ‘won’ by the people who are having the largest negative impact’⁵⁵, as they will displace others from locations, leading to an overall decrease in community satisfaction.

The installation of new and unfamiliar structures and the introduction of new vessels and user types may thus create substantial opposition/conflict, if progressed without consideration of these outcomes. As “conflict over resource access and use” is a key Threat identified in the Statewide TARA and within this draft Plan, not only should Action 5.5e be amended, but an additional action should also be created under the Education program: to build mutual support between user groups.

Recommendation 16: A schedule for anticipated delivery of the 152 activities (see Recommendation 39) should show Planning Action 5.6a and Research Action 5.5e will precede Infrastructure Actions (see also Recommendation 19, with reference to building mutual support between users.)

6.4 Research Program

We appreciate all endeavours to fill knowledge gaps that are necessary to support evidence-based decision making. However, actions listed under the ‘research’ program give us cause for alarm.

Two items (1.2e; 6.1a) describe Actions to conduct evidence reviews. Two technical papers were available to management during the preparation of this plan that address the scope described within these Actions^{1,57}. As the draft Plan notes multiple times, departmental resources are low. Further reviews are unnecessary, especially if the assessment of management options included – as it should have – the required application of the Precautionary Principle ‘*lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation.*’

While we encourage the delivery of a research prospectus (additional action in 6.1a), these Actions should be amended to reflect research to be conducted to fulfil specific knowledge gaps that have already been identified.

Recommendation 17: Amend Actions 1.2e and 6.1a to propose new activities conducted in response to recommendations of the *Social, cultural and economic science technical paper for NSW marine protected areas*⁵⁷ and *Evaluation of the performance of NSW Marine Protected Areas; biological and ecological parameters*¹.

Of the 28 research actions outlined, 12 are to be conducted in partnership with two specific organisations representing commercial fishing interests; a further three are to be conducted with general ‘commercial fishing stakeholders.’

These 15 partnerships with commercial fishing interests include actions where these stakeholders have no significant expertise, notably:

- research on beach nourishment (1.3c)
- management of Intermittently Closed and Open Lakes and Lagoons (1.3f)

- implementation of water quality monitoring programs (2.3f)
- research on the effect of endocrine stressors (2.3g) and elevated nutrients on habitats and ecosystems (S2.3j).

Additional actions with a concerning absence of representatives from science and academic bodies, marine conservation groups and educators, tourism bodies, and non-fishing users include:

- supporting litter monitoring programs (2.2a)
- habitat mapping to identify 'low-risk' areas for ocean prawn trawling (S5.2i, B5.2i)
- conducting a knowledge review and developing a 'network research prospectus' (6.1a)
- identifying citizen science opportunities (6.1b)
- developing a marine park monitoring plan (6.1d)
- supporting spatial mapping of marine park values (6.1e).

(see Recommendation 13, with reference to Research Actions)

There are three opportunities for citizen science programs; one is specifically for recreational fishers to report their experience (5.5d); one (2.2a) on marine debris does not indicate partnerships with non-governmental bodies other than commercial fishing organisations; and despite being very general, the last (6.1b) adds only 'underwater research groups' to the roster of fishing interest-partners.

Recommendation 18: Identify and add additional Actions for citizen science opportunities to include the full diversity of engaged marine park users.

As previously noted, Action 5.5e foreshadows research on recreational fishing values, in order to 'promote these values to enhance understanding between marine park users.' It is unclear why only recreational fishing values are to be 'understood and promoted' while other user group activities are not.

Recommendation 19: Amend Action 5.5e to include the full diversity of marine park users; and add an additional Education Action to engage the diversity of marine park users to build mutual support between groups.

The Research program uses a number of terms for activities: 'identify' 'research' 'undertake an assessment' and 'undertake a threat and risk assessment'. A number of actions under the Planning program also indicate activities of a similar nature 'undertake risk assessment' 'assess issues' 'identify'. The distinction between the categorisation is unspecified, and while internally, these terms may be assumed to be understood, the draft Plan purports a Key Objective to support 'evidence-based, inclusive and effective decision-making.'

Given the significant uncertainties captured within the framework for decision-making, it would be beneficial if these terms are defined and used more deliberately in these programs.

Recommendation 20: Ensure the use of similar terms 'identify' 'research' 'undertake an assessment' etc, are used deliberately and meaningfully, and their use conveys the reality of what is proposed in a revised Plan.

6.5 Planning

The distinction between the Planning and Research programs is unclear. It is difficult to decipher why certain actions have been categorised as Planning. For example, items such as 1.2f, 1.6c, 5.2a,

5.2g, 5.3a, P2.4b etc were not allocated to the Research program, while Action 5.7c appears far beyond the Planning stage, since cruise visitations are already being planned and sold to consumers⁵³.

While it's feasible to see 'plans to make a plan' within this draft Plan, some Actions under this program appear to have been given little to no consideration. For example, what does 'plan for marine park habitat migration or translocation under climate change scenarios' (3.1c) involve? The summary description describes marine park values being 'squeezed out' but doesn't suggest any meaningful path of action (for example a State or Marine Park scale Pressures-Drivers-States-Impact-Response analysis.)

Recommendation 21: Amend Action descriptions under the Planning program to accurately convey specific, meaningful activities.

Action 5.6a (assessing resource use and overcrowding) should be broadened in scope to include conflicts between uses/activities and marine ecosystems, reflecting the primary purpose of marine parks.

Recommendation 22: Action 5.6a should be broadened to include an assessment of environmental carrying capacity.

6.6 Education program

The Actions listed under the Education program are disappointing, with activities and partnerships overweighted toward promoting use and extractive activity.

Just as in our comments about Actions generally and the Research program specifically, we again draw attention to the overwhelming involvement of commercial fishing partners and the omission of other stakeholders in the delivery of Education activities.

There is no explanation for why commercial fishing interests would be expected to have the required expertise to deliver:

- community education about litter and marine debris (2.2b)
- educating consent authorities on development approval requirements (2.3b)
- supporting best practice for agricultural and public land managers (2.3e)
- communicating marine park research to the general public (6.1h)
- developing local community stewardship through education and engagement (6.2a).

Similarly, there is no explanation for why these stakeholders should be *solely* listed as partners to developing best-practice guidelines for common activities including scuba-diving or catch-and-release (6.2c), in the absence of any other stakeholder engagement.

(see Recommendation 13, with reference to Education Actions)

In relation to specific Actions, while we broadly support endeavours 5.2c and 5.7b in principle, we recommend a research Action to determine carrying capacity (primarily environmental carrying capacity) before promotion of activities that may increase pressure on marine ecosystems.

Recommendation 23: A schedule for anticipated delivery of the 152 activities (see Recommendation 39) should anticipate Planning Action 5.6a preceding Actions 5.2c and 5.7c.

In addition, as application of the principles of ESD are required by the Act, Actions 5.2c, S5.2j, P5.2i, should also be confined to the support and promotion of *sustainable* seafood, and local commercial operators who demonstrate sustainable and equitable fishing and farming practices.

Recommendation 24: Actions 5.2c, S5.2j, P5.2i should be amended to the promotion of *sustainable* seafood, and local producers with sustainable and equitable practices.

We strongly support education activities 6.1h and 6.2a, IF delivered through a balanced set of partnerships. We are concerned at the absence of educational activities related to common misconceptions about marine parks, including levels of protection and the value of sanctuaries. These misconceptions widen the divide between stakeholders and are regularly exploited by special interests. For example, in a 2020 study, less than 20% of respondents from New South Wales understood that fishing is allowed in Marine Protected Areas⁵⁸. Such a finding echoes those of the 2014 Marine Estate Community Survey, which recommended that such confusion should be countered with awareness-raising strategies⁵⁹, not evidenced in the draft Plan.

The technical paper reviewing social, cultural and economic science of NSW marine protected areas for DPI⁵⁷ noted that objections to marine parks and sanctuaries is concentrated within a subset of recreational fishing stakeholders. The review also noted the increasing evidence that the majority of recreational fishers *support* sanctuaries, and this support grows substantially the longer the sanctuaries are in place⁶⁰⁻⁶²

It would immensely benefit the primary purpose of marine parks if education activities were designed to specifically target misconceptions about the proportion of the marine *estate* which is fully protected and the corresponding availability of NSW coastal areas which remain available for recreational fishing (more than 93%). In addition, given the findings noted in the technical report⁵⁷ that recreational fishers often believe they have no, or minimal impact, on marine resources, it would benefit the primary purpose of marine parks if target education was conducted with recreational fishers to raise awareness that collective impact can be substantial.

Data collected in 2008/2009 from NSW Industry and Investment showed recreational catch exceeded commercial catch for a number of targeted species, including dusky and bluespotted flathead, yellowfin bream, sand whiting, and yellowtail kingfish⁶³. Catch and release is not zero-harm. It causes stress and injury to fishes^{64,65}, and mortality can be high (in some cases fishers are unaware their efforts to release have been futile as mortality is delayed until well after release)⁶⁶⁻⁶⁹. Many recreational fishers believe that they have no interactions with endangered grey nurse sharks (GNSs), but research shows a high incidence of GNS injury from 'hooking'^{70,71}.

Recommendation 25: Broaden the scope of Action 6.1h to specifically combat known misconceptions about marine parks.

Recommendation 26: Add an additional Education Action to raise recreational fishers' understanding of recreational fishing impacts on marine park biological values.

6.7 Rules

We commend and support the following Actions:

- 1.3e (Protect dune vegetation, shorebird and turtle nesting sites from the impacts of four-wheel drives and domestic dogs, including through spatial and temporal access management)

- 1.6e (Retain existing intertidal protected areas to provide areas of protection while the sustainability of changed harvesting practices is assessed)
- 4.1b (Provide areas of protection for Aboriginal cultural sites or values)
- 5.6c (Require marine park consent for organised fish feeding)
- 6.2h (Ensure the boundaries of any spatial management rules are easy to understand and comply with)
- 6.2j (Build efficient and complementary regulation and compliance partnerships for intertidal and on-water activities, including four-wheel drives, dogs, heritage sites, pollution, boat speeds and marine mammal interaction)
- 6.4d (Ensure legislative definitions of marine park boundaries are easy to understand, clear and consistent across the network)
- B5.4e (Provide safe, high quality, shore-based snorkel and dive opportunities in Batemans Marine Park).

We support planned Action to encourage State terrestrial planning and development to conserve marine park values (items under 1.1). However, noting the draft Plan's apparent commitment to 'evidence-based' decision-making (Objective 6) it is unclear how commercial fishing stakeholders will partner to deliver the majority of these Actions, which describe ensuring land-based planning and development approvals will consider marine park values (1.1a, 1.1b, 1.1c, 1.1d).

Similarly, it is unclear how these stakeholders can meaningfully contribute to assessment or delivery of actions to:

- strengthen land use consent provisions for new developments to protect riparian buffers in catchments, or developments north and south of marine park boundaries (2.1a)
- map terrestrial catchments that require DPI concurrence for development (2.3a).

(see Recommendation 13, with reference to Rules Actions)

We note Action 1.1d ensuring 'DPI Fisheries has concurrence for riparian and coastal foreshore development that is directly adjacent to a marine park' though this concurrence is already in place. The need for inclusion of this item is thus unclear.

We support most Actions to conserve marine habitat, species and ecosystem values (items under 1.2) in principle. However, we note action **1.2d** heralds the removal of local protection from species that aren't *currently listed* as locally threatened and we note:

1. The strong likelihood that species under current threat do not yet appear on Threatened Species list in the (NSW) Fisheries Management Act or the (Commonwealth) EPBC Act due to data deficiency or delays in the listing process
2. The State Fisheries Management Act provides for protection of threatened *populations and communities*, as well as species⁷²
3. The threat list, and listing process, described in the Fisheries Management Act is intended to correspond with and supplement the list and process in the NSW Biodiversity Conservation Act (2016), which considers terrestrial species. Species are eligible for listing in the latter Act if they are facing elevated risk of extinction *in Australia* in the near or medium-term future⁷³.

This Action must be amended to provide clarity on the standard of evidence that must be provided prior to any changes to Rules. Any removal of protection should be accompanied by overwhelming, peer-reviewed evidence that removal of protections for any species or habitat will not result in increased threat to State OR national populations or ecological communities.

Recommendation 27: Amend Action 1.2d to ensure that changes will be accompanied by overwhelming evidence they will not result in increased threat to any species, habit or ecosystem at a State or national level, and that the precautionary principle will be applied.

We support Action **3.1b** to identify areas to provide representative protection for marine park ecosystems to provide resilience against climate stressors (Objective 1). This Action should be replicated as a priority action for Objective 2 – to protect and enhance species, habitats, and ecosystems within marine parks. As noted above, NSW’s current level of CAR protection is under 7%, woefully inadequate to protect against the cumulative stressors to marine ecosystems. Furthermore, two entire bioregions of NSW are entirely unprotected in MPAs.

Similarly, we support Action **5.8a** to identify areas for protection of high conservation value to enhance bequest and intrinsic values. However, we note that throughout the draft Plan, Objectives and Actions describe implementing *increased* area for social, cultural and economic values (*‘improve access’*); while Actions related to environmental values do NOT indicate improvements or increases for environmental protections (e.g. *‘identify’* and *‘protect’*). Given the insufficiencies of high protection in NSW, this action must be amended to ensure conservation targets are met.

Recommendation 28: Add an additional Action to Objective 1 – to apply CAR principles to identify and protect areas for sanctuary and other spatial protection beyond current marine park boundaries as well as within them.

Recommendation 29: An additional action should be included within a revised Plan, to identify and protect areas of the Hawkesbury Shelf and Twofold Shelf within marine parks. These marine parks should include marine sanctuary areas identified using the best available evidence and CAR principles, prioritising the protection of NSW ecological values and reflecting Australia’s commitment to science-based international goals for MPAs.

Recommendation 30: Action 5.8a should be amended *‘increase* areas for protection of high conservation value to enhance bequest and intrinsic values *and ensure intergenerational equity.*

With regard for reviewing the Rules for access and use by recreational and commercial fisheries and aquaculture (including 5.2b, 5.2d, 5.2e, 5.2f), we support the overarching goal of ensuring that rules are consistent across the network, based on scientific evidence, and that legislation and approvals for use are clear and consistent.

However, we must reiterate that under no circumstance do we support removal of any of the limited sanctuary zones to allow access to *any* type of fishing, including spear-fishing (5.5c, C5.5f), or aquaculture. While we appreciate the language on the descriptive page on sanctuaries (p44), given the current “amnesty” on sanctuaries in Batemans Marine Park, clarity in these Actions is necessary.

We urge caution in engaging with the Marine Stewardship Council certification program (noted in 5.2b), as in our experience the MSC standards and processes are not strong enough to ensure that only truly sustainable fisheries practices are certified, and they often fall short of Australia’s own State and Federal fisheries management regulations (see for example the criticisms raised by the Make Stewardship Count Coalition⁷⁴).

We also note that in the absence of strong ecosystem-based fisheries management, marine parks are the primary tool for managing Australian fisheries impacts on marine habitats and ecosystems and can therefore be key in getting a passing score under Principle 2 of the MSC Standard. Given the lack of any sophisticated management of ecosystem impacts in NSW fisheries, other than marine

parks, CAR marine parks should be treated as a critical asset for meeting market access-driven sustainability requirements, like certification. Protection levels in marine parks should be enhanced, not wound back, as they add significant value to fisheries through enhanced market access.

Recommendation 31: Amend all Actions describing ‘increased access’ for fishing and aquaculture to clearly state this will not apply to, or result in a reduction of, sanctuary zones.

We generally support Action 6.1c to identify areas to provide sites for scientific research. However, the supporting statement describes manipulative or destructive research. It is unclear if this action is describing the provision of very small, restricted-to-all-public ‘control sites’ for research (usually classed as IUCN categories 1a or 1b); or if these are to be provided under special designations within existing sanctuary zones. We note these areas must NOT be excised from the already-limited sanctuary areas.

Recommendation 32: Provide clarity on the nature of Action 6.1c, and affirm scientific research areas will be provided beyond existing or future sanctuary areas.

We support Action 6.4a in principle, while noting that some of the general activities listed *may or may not be* low impact (e.g. ‘tourism’). We await further thorough explanation of the changes considered under review of the Regulations.

We support Action 6.4b in principle, provided that legislative approvals that affect marine park ecological values must still prioritise the primary purpose of marine parks and the principles of ESD.

Recommendation 33: Action 6.4b should be amended to assure that judgements will continue to favour the primary purpose of marine parks and the principles of ESD under the Marine Estate Management Act 2014.

6.8 Compliance

The draft Plan is ambiguous in its language about commercial fishing bodies as partners in the delivery of 2.1c and 6.2a, implying an entirely inappropriate level of self-regulation.

(see Recommendation 13, with reference to Compliance Actions)

We support other described Actions to increase compliance with Regulations related to the marine park network.

6.9 Partnerships

Actions 6.3a, 6.3b, and 6.3c relate to the Marine Park Advisory committees. These committees are inconsistently managed, and their operations are closed to scrutiny from the communities they are said to represent. Further responses and recommendations related to the activities and management of Advisory Committees can be found in Section 8.2.

Specific recommendations for Partnerships Actions follow.

(see Recommendation 13, with reference to 6.3a)

Recommendation 34: Action 6.3a should be amended to ensure the public is able to contribute through Advisory Committees e.g. *‘Provide clear channels for communities to provide feedback to their stakeholder representatives on Advisory Committees, and ensure current Advisory Committee minutes are available to the public.’*

Recommendation 35: The Partnerships program should include an additional Action to bring consistency to Advisory Committee positions across marine parks.

We support, in principle, other partnership Actions listed.

6.10 Policy

We support Action 2.1b, but again request that the list of partners is expanded to include great representation of all relevant stakeholders, as per Recommendation 13.

We support Action 6.4c only if approvals required continued judgement favouring the primary purpose of marine parks and the principles of ESD under the Act.

(see Recommendation 13, with reference to 2.1b)

Recommendation 36: Action 6.4c should be amended to assure that judgements will continue to favour the primary purpose of marine parks and the principles of ESD under the Act.

7 Implementation, Monitoring and Reporting

This, and the subsequent section on Monitoring, reveal the draft Plan's entirely aspirational nature. Staff, budget and enforcement capacity are the strongest predictors of ecological success of Marine Protected Areas^{75,76}, and there is scant evidence in the draft Plan that thorough consideration has been given to these critical components of management.

The Guidelines for assessing management options for the NSW marine estate describes the required process:

- consider program/project implementation, including planning, program of work, governance roles and responsibilities, procurement methods, change management, sustainability issues, technical standards and legislative requirements, benefits realisation, risk management and involvement of stakeholders
- establish clear program/project objectives (specific, measurable, achievable, realistic and timely)
- identify the resources necessary to deliver the program/project⁵¹.

These issues do not appear to have been considered in any meaningful way during preparation of the draft Plan, undermining confidence that Objectives and Actions will be delivered upon.

The draft Plan proposes to replace '10 separate zoning and operational plans for the five mainland marine parks' (p9). This sentence is highly misleading: zoning plans for all parks are contained within a single statutory instrument (the *Marine Estate Management Regulation 2017*⁷⁷); there have been no formal 'operational plans' for most marine parks since 2010 and any that were in existence have long since expired; the 'management plan pilot' created in 2018 for Batemans Marine Park and the 'management plan pilot for Port Stephens – Great Lakes Marine Park were never delivered.

The foreshadowed additional 15 'implementation plans' at three, six, and nine years after implantation, for each marine park (p45) suggest that rather than streamlining, this new approach will create an immense amount of *additional* work for the Department over the current arrangement (even if it were delivered upon), while allowing for less public scrutiny on specific activities.

While the resource-deficiency provides some justification for the categorisation of Actions into Programs (p42), the uncertainty evidenced in the Resourcing section (e.g. ‘it is hoped’ p43) means that this draft Plan is almost entirely aspirational, and public comment at this stage meaningless.

Recommendation 37: A revised Resources section should provide the NSW community with confidence that this management plan will be delivered upon.

The draft Plan does not refer to any guidelines related to resourcing sourced from grants, sponsorships, or philanthropy. The marine estate, and marine parks within them, are acknowledged assets of the people of NSW. At minimum, the public requires thorough disclosure on the criteria for accepting funds from private interests, and a statement within this Plan on how potential conflicts of interest will be managed in reference to the primary goal of marine parks. (This should also reference potential Partnership agreements for delivering proposed Actions).

Recommendation 38: A revised Resources section should provide assurances that sponsorships, grants and philanthropic donations will be transparently reported, will be unattached to vested-interest-outcomes, and will be used in service of the primary purpose for marine parks under the Act.

Just as the draft Plan does not include SMART Objectives, neither does the draft Plan include any benchmarks for the delivery of Actions. The recent review on social, cultural and economic benefits of NSW marine parks⁵⁷ highlighted the stark inadequacies of current marine park management in this regard: ‘There are no key performance indicators, either specific to or tailored for, MPAs that we could refer to with respect to managing social, cultural and economic benefits and threats to those benefits by MPAs. These may be included in the forthcoming MPA management plans, but this remains immaterial for the reasons stated above. A lack of MPA specific performance indicators has limited our ability to assess whether the literature has informed the current performance of MPAs.’⁵⁷

Not only does this finding expose the lack of planning from previous management, *it highlights the lack of scientific robustness upon which all Objectives related to these social, cultural and economic benefits and threats have been based.*

Subsequently, and as previously noted, it will be very difficult to report progress toward Objectives with any degree of confidence, given the current Threats and Risk Assessment framework and the 5-step decision-making process attached to it. These describe the incorporation of a great deal of anecdotal and grey data, which cannot be considered rigorous evidence, and any change to this data over time can’t be considered attributable to the actions of management.

The lack of accountability measures in the draft Plan must be rectified. The ‘network’ approach makes this onerous; however, even *estimations* of which actions are prioritised for delivery within each period of the implementation plans, with even a single measurable target for each, will provide some confidence. Action 6.1d ‘develop a marine park monitoring plan’ should be prioritised for completion *prior* to the delivery of any Implementation Plans.

Inclusion of these timeframes and targets would also show commitment to demonstrating ‘best practice’ as outlined in the *NSW Government Program Evaluation Guidelines*. These guidelines stress that planners should build evaluation into program design from the outset, by clearly defining measurable outcomes⁷⁸.

Recommendation 39: Action items (pp48-80) should include at least one measurable target, and a timeframe for delivery corresponding to the three, six, or nine-year Implementation plans.

8 Accountability, Transparency and Community Engagement

The proposed Plan, and the process for soliciting public feedback to it, inspire little confidence that the key Objective to ‘support evidence-based, inclusive and effective decision-making and marine park management’ to address the key Threat Theme ‘Community engagement and governance’ will be achieved.

The existing five mainland marine parks have all been in place since at least 2006, yet no reports have been made on any management or operational plans have been produced in the last decade. The people of NSW have not been given the opportunity to review any progress made toward the ‘the biological diversity, and maintain ecosystem integrity and ecosystem function, of bioregions in the marine estate’ nor to the secondary purposes of marine parks. The current proposed plan doubles down on this lack of transparency; committing to releasing future Implementation Plans and reports only to Advisory Committees and the Marine Estate Management Authority (p45).

Social licence and public trust for marine park management in NSW is justifiably low, reflecting heavy politicisation and ministerial interference^{79,80} over the last decade. Well-planned and resourced management would begin the linked processes of rebuilding community trust⁸¹, and shifting towards sustainable social-ecological systems²⁶. Such activities would not only make for less fertile ground for polarisation to foment, but would increase community stewardship for our marine parks *and* create more resilient communities generally^{81,82}.

8.1 Community partners

The number and the diversity of stakeholders in social ecological systems affects the quality of social and ecological outcomes, so too does cross-stakeholder capacity building^{16,83}.

None of the organisations who are signatory to this submission were contacted by the NSW Department of Primary Industries (DPI) nor by the Department of Energy, Environment and Science (DP-EES) to recommend or advise on the creation of this draft Plan, despite our collective decades of training and expertise in marine social science, marine conservation, natural resource management, marine education, and community capacity building for conservation.

Even more alarmingly, there’s very little indication that science-driven organisations such as the Australian Marine Sciences Association, or Sydney Institute of Marine Science, were asked to contribute to management strategies. Only 4 of 28 expected Actions under the ‘Research’ program commit to partnerships with science bodies. This lack of commitment to science undermines the purported commitment to ‘evidence-based decision making.’

We acknowledge that the Department does consult with individual expert researchers on an ad hoc basis. However, ‘grey’ data and literature, often without peer review, is infrequently available for public perusal. Tellingly, neither of the two most recent Technical Papers, which could be expected to have strongly informed the development of the draft Plan, are referenced within it, and neither were made available prior to the release of the draft Plan. No reference to these highly relevant papers appears on the YourSay ‘engagement’ website about the draft Plan.

Given the above, and the extreme imbalance towards commercial fishing partnerships, it seems unlikely that either the primary purpose of marine parks *or* Objective 6 will be meaningfully progressed over the next decade.

Recommendation 40: An updated and amended Plan must reflect the Department has urgently increased engagement with *all* non-fisheries sectors, in particular with the marine science and marine social science sectors, and marine conservation organisations across the state.

8.2 Advisory committees and community engagement

The draft Plan's description of marine park Advisory Committees as representing the 'voice of communities' (pp 20,46,79) seriously misrepresents the nature of these committees. Appointment to these committees is said to require the 'ability to liaise and engage with other members of the expertise area' yet members are also bound by confidentiality constraints, and are forbidden from discussing many of the issues under consideration with other members of their stakeholder group⁸⁴. It has been made clear to members that they are on the committee in their personal capacity only, not as representatives of their organisations.

Furthermore, their workings are a mystery. As of 17 January, 2022, no Advisory Committee minutes have been available to the public since 2020⁸⁵⁻⁸⁹.

This misrepresentation of the role of Advisory Committees is especially egregious as DPI and DP-EES staff continue to reinforce it, repeatedly telling the public that they can 'have your say via the Advisory Committees'^{37,90,91}. *There is currently NO SUCH PATHWAY available.* There is no formal channel for community members to interact with these Committees to: a) learn about decisions under consideration that will affect their marine heritage; b) to review the history of advice given by committees or their members, so they can make informed judgement about whether the Advisory Committees are representing their interests; or c) provide feedback on general marine issues or on Committee workings. There is no media, local or otherwise, on the work of the Advisory Committees, with the result that local communities have no awareness of their existence, far less their deliberations.

In addition, a number of roles on these committees are currently unfilled, including Marine Science, Aboriginal Culture, Aquaculture and Maritime Industry^{88,89}. Input from these stakeholder groups is clearly necessary and appropriate, yet there are no guidelines for ensuring these voices are present on Advisory Committees through active recruitment, nor is there advice on how these committees should proceed in the absence of these important stakeholders.

There are currently differing membership positions on each marine park Advisory Committee, and this is accompanied by a lack of guidelines for ensuring these rosters are appropriately guarded against 'stacking'. As example, the Cape Byron Advisory Committee has a single role for a Recreational Fishing representative⁸⁵, whereas the Port Stephens-Great Lakes, Batemans, and Jervis Bay Advisory Committees have the additional roles: Recreational Water Use, Recreational Boating, and Spear Fishing⁸⁷⁻⁸⁹. These interests *may or may not* overlap, depending on the individual who inhabits the roles, but there is nothing to ensure that they are not all filled by people whose primary stake is 'recreational fishing'. The process for identifying and creating any additional roles is opaque⁸⁴ (notwithstanding the inclusion of a single Action 6.3b in the draft Plan), has demonstrably been subject to external interference⁹², and has led to a substantial erosion of public trust *and* the removal or resignation of existing Advisory Committee members⁹³⁻⁹⁵.

Finally, there is no requirement that either the roster of roles for any marine park Advisory Committee, nor the Committees' contribution to management decisions, is proportionally commensurate with a) the primary purpose of marine parks, b) the principles of ESD, or c) the priority threats as identified by the TARA.

Simply, these Advisory Committees do NOT represent an avenue for community engagement. Neither the Plan, nor Department Staff, should claim they do.

We recommend the adoption of ‘best practice’ approach to the role of Advisory Committees in statutory planning for marine protected areas. This includes the listing of expertise and affiliations, declaration of conflicts of interest, published minutes of Advisory Committee meetings, and the publication of Advisory Committee recommendations in relation to statutory plans. We note that the existing legislation for Regional Advisory Committees under the *National Parks and Wildlife Act* was subject to review and amendment in 2021 and could serve as a contemporary model for an improved governance model for Marine Park Advisory Committee.

Recommendation 41: The Department should reform Advisory Committees to ensure they are managed in the service of the primary statutory purpose of marine parks, and their workings are transparent and accessible to the broader community:

- A list of members for each Advisory Committee, along with their expertise and affiliations, must be made public and kept up to date
- Roles and responsibilities should be clarified to ensure Members may consult with their stakeholder network
- The public should be provided with a means of contacting their local Advisory Committee to ensure *all* ‘local voices can be heard’
- Up-to-date minutes of Committee meetings, including record of voting decisions, should be available to the public via the Advisory Committee websites
- Positions on Committees should be consistent across all marine parks unless there is no stakeholder activity within a specific park (for example, if there are no aquaculture operations present within the marine park)
- Unfilled positions should be filled as a matter of urgency, and must be advertised through DPI and via expert networks related to the vacant position. The Handbook for Advisory Committee members⁸⁴ should be updated to require a timeframe for filling vacant positions, particularly where the vacant position is related to the primary purpose of marine parks (i.e. marine science; conservation).

Recommendation 42: A revised Plan should *accurately* reflect the nature of Advisory Committees and their proceedings, and provide *specific methods* for how the public can provide input or become more engaged with management of their marine park.

8.3 Community Engagement, Accountability, and Transparency

The *Marine Protected Areas within the NSW Marine Estate – their role & purpose* states: ‘When considering new, or undertaking a review of existing marine protected areas, the Authority will ensure there is early and effective engagement with the community to better understand the costs, benefits and implications of any management decisions’⁹⁶. The *Marine Estate Management Strategy* notes that ‘community engagement is a critical component’ of management of marine parks^{18(p17)}, and yet there are no true engagement approaches to be found within the draft Plan, despite the fact it is a key Threat theme and appears as a key Objective.

Information on the website dedicated to the review of this Plan includes a description of ‘consultation’ that leans heavily on the involvement of Advisory Committees, Traditional Owners and Native Title claimants, but no engagement with the much broader spectrum of engaged, or potentially engaged marine stewards.

The ‘new approach’ as represented in the draft Plan appears to suggest it is in fact *preferred* that the community have fewer opportunities to engage in management of their marine parks, in order to ‘reduce engagement fatigue’ (p10). This new approach, combined with feedback / public submission

process in use by the Department, severely diminishes opportunities for engagement and scrutiny. For example:

- Many of the links to documents which were referred to as underpinning the draft Plan lead to dead web-pages. Readers must take additional steps to search for these reports on the NSW Marine Estate website.
- Recent ecological, social, cultural and economic reports^{1,57} which were clearly available to the department during creation of the draft Plan, were not indicated as source material for the draft Plan, nor were they made publicly available until one month after draft Plans' release.
- Underpinning material is not easily found via the YourSay website that the Department considers its 'engagement' portal⁹⁰.
- Different information sessions, containing slightly modified content, have been delivered by different Departments, were held for different stakeholder groups.
- Additional information sessions have been held for the general public⁹⁷ – attendees were not able to view the questions that people asked in these information sessions, nor have responses to these questions appeared on the NSW Marine Estate or YourSay websites as at 18 January 2022.

The method used to solicit feedback on the draft Plan indicates the cursory nature of community engagement by the Department. Avenues for providing feedback on the draft Plan are restricted to via post or web-form (YourSay survey tool), without any provision for emailed comments, the most familiar and straightforward means of communication. Department staff justify this on the basis of avoiding 'multiple submissions' – a disturbingly undemocratic view.

The YourSay survey tool itself is unlikely to produce informed feedback on such a complex draft Plan. Notably:

- Questions are worded and framed to maximise positive responses
- The use of Likert scales minimises the possibility people will provide additional, nuanced comments in optional text boxes
- Questions contain multiple concepts, forcing respondents to produce a singular response to multiple questions.

In earlier stages of the public comment period, Department staff were unwilling to commit to compiling public feedback into a formal report, noting only that Department staff themselves would compile a report only given to the Ministers, and that casual feedback was *already* being incorporated into a changed management plan, potentially making the efforts of those who submit later worthless.

As of 18 January 2022, the Department has now confirmed an independent consultant will compile this report, yet only a recommendation of proposed changes (not the report itself), will be produced for Ministerial review⁹¹. This report will not be released to the public, and there's no indication the Department will consider this opportunity as part of ongoing efforts to understand public sentiment around marine parks, even though this is a stated aim of all underpinning material, and the draft Plan itself. This continued secretive and highly politicised management of marine park undermines any community confidence or social licence.

Best practice community engagement – including transparency – should be *a key strategy* toward achieving both the primary and secondary goals of marine parks. More than that, it should be seen

as fulfilment of the NSW Government's duty to the people of NSW. The cavalier approach to community engagement displayed throughout this draft Plan, and this process has been disgraceful.

Recommendation 43: The Department should employ or engage trained/experienced community engagement practitioners to conduct best practice engagement activities to enhance marine park objectives.

Recommendation 44: The Department should release a formal report of the feedback to the draft Plan that includes an accounting of methodology.

Appendix A: List of Recommendations

Recommendation 1: A revised Plan should clearly articulate a differentiation between management of the marine estate, and management of marine parks which have special purposes and require application of the principles of ESD

Recommendation 2: A revised Plan should affirm that clear and easily understandable Regulations / Rules are the most critical tool for delivering the primary objective for marine parks, in amendments to pages 3, 9 and 43.

Recommendation 3: A revised Plan should outline the specific application of the Ten Underpinning Principles for Managing the Marine Estate³⁴ *within the context of marine parks*.

Recommendation 4: ‘Making Decisions for Marine Parks’ (pp15-16) should be amended to provide clear assurance that trade-off decisions on Marine Park approvals and management actions a) will always favour biological and ecosystem outcomes, in accordance with the primary purpose of marine parks as defined by the Marine Estate Management Act (2014); and b) will be adjudicated using the principles of ESD as defined by the Marine Estate Management Act (2014) and the Environment Administration Act (1991).

Recommendation 5: A revised Plan should provide thorough disclosure on marine spatial management in NSW by including the Hawkesbury Shelf and Twofold Shelf bioregions in the map of the NSW marine estate (p6).

Recommendation 6: A revised Plan should note NSW’s unfulfilled progress to a National Representative System of Marine Protected Areas (Marine Parks) and provide measurable goals for providing protection to the unprotected bioregions mentioned within the next decade.

(see also Recommendation 28 and 29: that a revised Plan includes Actions to apply CAR principles to identify and protect areas for sanctuary and other spatial protection **beyond** current marine park boundaries, and particularly in the Hawkesbury and Twofold Shelf Bioregions.)

Recommendation 7: A revised Plan should recategorize the Threats Section to correspond with and reflect the primary and secondary purpose of marine parks as defined by the Act, and the ranked priorities of the Statewide Threat and Risk Assessment, in both the Threat Section and Appendix D.

Recommendation 8: A revised Plan provides transparency and confidence in the *rigor* of assessment of ‘community values.’

Recommendation 9: A revised Plan includes a clear description of the fluid nature of ‘community values’ and provides education and engagement activities (see also Recommendations 24-26) that will result in enhanced values for the biological diversity, ecosystem integrity and ecosystem function protected by marine parks.

Recommendation 10: A revised Plan reassesses the ‘Values’ section within the context of the principles of Ecologically Sustainable Development and the primary purpose for marine parks.

Recommendation 11: The section ‘Developing Actions to Make a Positive Difference for Marine Parks’ (p39) should include a clear description of how the prioritisation of purposes for Marine Parks, and the principles of Ecologically Sustainable Development have been applied in the decision-making process.

Recommendation 12: A revised Plan should include SMART objectives, corresponding with the three, six, and nine-year implementation plans (see also Recommendation 39).

Recommendation 13: A revised Plan must reconsider and show amendments to the proposed partners for **all** Action items to a) reflect that all Actions must protect and enhance to the primary purpose of marine parks under the Act and b) appropriately include partnerships with the vast, active network of local, state and national ENGOs; marine scientists and educators; citizen science; and local community groups who have collective decades of learning and experience in marine science, education, conservation practice, data collection, and associated expertise in marine park management.

Recommendation 14: The DPI-Fisheries and DPIE-EES call for Expressions of Interest from the stakeholders listed above (in Recommendation 13) to nominate interest in partnering to deliver and/or advise on all Actions under a revised Plan.

Recommendation 15: We urge the ongoing consideration of *all* Actions and partnerships to progress Objective 4 (To partner with Aboriginal people for protection of Aboriginal cultural values and improved marine park management).

Recommendation 16: A schedule for anticipated delivery of the 152 activities (see Recommendation 39) should show Planning Action 5.6a and Research Action 5.5e will precede Infrastructure Actions (see also Recommendation 19, with reference to building mutual support between users.)

Recommendation 17: Amend Actions 1.2e and 6.1a to propose new activities conducted in response to recommendations of the *Social, cultural and economic science technical paper for NSW marine protected areas*⁵⁷ and *Evaluation of the performance of NSW Marine Protected Areas; biological and ecological parameters*¹

Recommendation 18: Identify and add additional Actions for citizen science opportunities to include the full diversity of engaged marine park users.

Recommendation 19: Amend Action 5.5e to include the full diversity of marine park users; and add an additional Education Action to engage the diversity of marine park users to build mutual support between groups.

Recommendation 20: Ensure the use of similar terms ‘identify’ ‘research’ ‘undertake an assessment’ etc, are used deliberately and meaningfully, and their use conveys the reality of what is proposed in a revised Plan.

Recommendation 21: Amend Action descriptions under the Planning program to accurately convey specific, meaningful activities.

Recommendation 22: Action 5.6a should be broadened to include an assessment of environmental carrying capacity.

Recommendation 23: A schedule for anticipated delivery of the 152 activities (see Recommendation 39) should anticipate Planning Action 5.6a preceding Actions 5.2c and 5.7c.

Recommendation 24: Actions 5.2c, S5.2j, P5.2i should be amended to the promotion of *sustainable* seafood, and local producers with sustainable and equitable practices.

Recommendation 25: Broaden the scope of Action 6.1h to specifically combat known misconceptions about marine parks.

Recommendation 26: Add an additional Education Action to raise recreational fishers’ understanding of recreational fishing impacts on marine park biological values.

Recommendation 27: Amend Action 1.2d to ensure that changes will be accompanied by overwhelming evidence they will not result in increased threat to any species, habit or ecosystem at a State or national level, and that the precautionary principle will be applied.

Recommendation 28: Add an additional Action to Objective 1 – to apply CAR principles to identify and protect areas for sanctuary and other spatial protection beyond current marine park boundaries as well as within them.

Recommendation 29: An additional action should be included within a revised Plan, to identify and protect areas of the Hawkesbury Shelf and Twofold Shelf within marine parks. These marine parks should include marine sanctuary areas identified using the best available evidence and CAR principles, prioritising the protection of NSW ecological values and reflecting Australia’s commitment to science-based international goals for MPAs.

Recommendation 30: Action 5.8a should be amended ‘*increase* areas for protection of high conservation value to enhance bequest and intrinsic values *and ensure intergenerational equity*.’

Recommendation 31: Amend all Actions describing ‘increased access’ for fishing and aquaculture to clearly state this will not apply to, or result in a reduction of, sanctuary zones.

Recommendation 32: Provide clarity on the nature of Action 6.1c, and affirm scientific research areas will be provided beyond existing or future sanctuary areas.

Recommendation 33: Action 6.4b should be amended to assure that judgements will continue to favour the primary purpose of marine parks and the principles of ESD under the Marine Estate Management Act 2014.

Recommendation 34: Action 6.3a should be amended to ensure the public is able to contribute through Advisory Committees e.g. ‘*Provide clear channels for communities to provide feedback to their stakeholder representatives on Advisory Committees, and ensure current Advisory Committee minutes are available to the public.*’

Recommendation 35: The Partnerships program should include an additional Action to bring consistency to Advisory Committee positions across marine parks.

Recommendation 36: Action 6.4c should be amended to assure that judgements will continue to favour the primary purpose of marine parks and the principles of ESD under the Act.

Recommendation 37: A revised Resources section should provide the NSW community with confidence that this management plan will be delivered upon.

Recommendation 38: A revised Resources section should provide assurances that sponsorships, grants and philanthropic donations will be transparently reported, will be unattached to vested-interest-outcomes, and will be used in service of the primary purpose for marine parks under the Act.

Recommendation 39: Action items (pp48-80) should include at least one measurable target, and a timeframe for delivery corresponding to the three, six, or nine-year Implementation plans.

Recommendation 40: An updated and amended Plan must reflect the Department has urgently increased engagement with *all* non-fisheries sectors, in particular with the marine science and marine social science sectors, and marine conservation organisations across the state.

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Recommendation 44: The Department should release a formal report of the feedback to the draft Plan that includes an accounting of methodology.

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