

Submission: Draft Harvest Strategy Policy for Tasmanian Wild Fisheries and Implementation Guidelines

The Draft Harvest Strategy Policy for Wild Fisheries is a significant step towards strengthening fisheries management in Tasmania. However, it does not commit to recover overfished stocks or prevent future overfishing. Tasmania's depleted fish stocks urgently need action, yet the implementation timeframe is far too long - 10 years. Other shortcomings may relate to implementing legislation, currently under review. Yet nowhere is this review mentioned.

The Australia Institute recommends a holistic approach to strengthen the Policy, including reducing excess fishing effort, returning rights to First Nations Tasmanians, keeping more fish in the sea with higher biomass targets, and further prioritising ecosystem health.

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Acknowledgement of Country

The Australia Institute Tasmania acknowledges that lutruwita/Tasmania was taken forcibly and unethically and that palawa and pakana people continue to suffer the consequences of this today. The Institute offers respect to palawa and pakana Elders past and present. We stand for a future that recognises Aboriginal and Torres Strait Islander sovereignty and respects and acknowledges their perspectives, culture, language and history.

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Summary

With several depleted fish stocks and the declining health of Tasmanian waters, the Tasmanian Government's renewed commitment to strengthening wild fisheries management is to be commended. The Australia Institute Tasmania welcomes the opportunity to make a submission to the *Draft Harvest Strategy Policy for Tasmanian Wild Fisheries* (the Harvest Policy) and *Draft Implementation Guidelines for the Harvest Strategy Policy for Tasmanian Wild Fisheries* (policy guidelines).

It has been 14 years since the last integrated assessment of ecosystem health by resource managers in Tasmania. However, we know enough to know that Tasmania's coastal waters are in trouble. Recent Australia Institute research shows that public opinion backs the science and that Tasmanians want action to protect marine life. A vast majority of Tasmanians are concerned that the health of Tasmania's coastal waters is declining.

Tasmania's main marine law, the *Living Marine Resource Management Act 1995*, is currently being reviewed for the first time in 28 years. As the relevant legislation for fisheries management in Tasmania, this is important context.

Best practice contemporary resource management takes account of all uses and users, including the rights of First Nations peoples, which have not been adequately accounted for to date. A Tasmanian Harvest Strategy Policy should be introduced as part of a government commitment to establish an overarching legal and policy framework for integrated ecosystem based management for Tasmanian state waters.

The Australia Institute Tasmania's submission builds on previous research on marine resource management and governance. The Institute commends many aspects of the Harvest Policy, including principles on the use of best available data and the precautionary principle, as well as the introduction of biomass targets, the development of rebuilding strategies, improvements in transparency, and the ambition to overcome jurisdictional challenges. However, there are a number of omissions and areas for improvement. This submission recommends:

1. The Harvest Strategy Policy and related initiatives should be introduced as part of a Tasmanian Government commitment to establish an overarching legal and policy framework for integrated ecosystem based management for Tasmanian state waters.
2. To develop a Sustainable Fisheries Strategy for Tasmania.
3. To assist in implementing ecosystem based fisheries management, integrated spatial management measures should be considered when developing harvest strategies for fisheries.
4. Undertake *Ecological Risk Assessments for the Effects of Fishing* for Tasmanian fisheries.

5. Appropriate recognition of the Traditional Owners of Tasmania and co-management of resources with First Nations Tasmanians, in collaboration with scientists and the community, should be articulated in the Policy.
6. Further quota returns should be made to the Traditional Owners of Tasmania which should not be restricted to non-commercial purposes.
7. The introduction of the Harvest Strategy Policy should be accompanied by:
 - A Direction to recover overfished stocks and prevent future overfishing within specified timeframes.
 - A structural adjustment package which aims to:
 - (i) reduce excess effort and improve profitability for the remaining fleet through a government buy-out; and
 - (ii) assists in implementing a network of marine protected areas in Tasmania.
8. Set precautionary stock biomass targets that at least 48% of original/unfished biomass should be retained within the ecosystem, in accordance with CSIRO research findings.
9. Amend the objectives of the Harvest Policy so that:
 - Tasmanian harvest strategies are developed for all Tasmania's fisheries, not the limited number in Appendix 1.
 - They are implemented within 3 years, rather than 10 years currently proposed.
10. Amend the principles of the Harvest Policy to prioritise strategies for stocks that are currently depleted or depleting.
11. Amend the decision rules of the Harvest Policy to commit to close fisheries when species biomass falls below 20% of unfished biomass.
12. Amend the principles of the Harvest Policy to account for climate change and mitigate its impacts.
13. All sectors should pay for the cost of management. Cost recovery from both recreational and commercial sectors ensures appropriate economic signals are being provided and funding is available for necessary scientific assessments and management arrangements.
14. An economic return should be paid to the community for the private use of public resources and should be negotiated in advance of any new quota policy settings. This could be achieved through royalty payments, auctions of permits or a range of other mechanisms.
15. The Harvest Policy should include the setting and managing of resource allocation, that being the allocation of catch between sectors, to provide for an informed and transparent approach to the management of Tasmania's fisheries.
16. Resource sharing arrangements should also be clearly spelt out between extractive and non-extractive uses.

Introduction

Tasmania is an island state; the ocean and coasts are embedded in Tasmanians psyche. This connection to the sea is ancient – First Nations Tasmanians have cared for sea country for over 40,000 years. Tasmania has some of the highest levels of marine diversity and endemism in the world.¹ Habitats supporting the rich variety of marine life include kelp forests, rocky reefs, seagrass beds, sponge gardens and open water, each with their own communities of fish, seabirds, marine mammals and invertebrates.

However, depleted fish stocks, ignored ecosystem flow-on effects, threatened species, paltry habitat protection, poor community returns, and a lack of community input into planning and management decisions, all demonstrate that the current management framework for managing Tasmania’s coastal waters is not achieving its objectives. This, alongside increasing pressure from climate change, aquaculture operations, agricultural run-off, urban development, and population growth, all call for fundamental improvements to the way Tasmanians care for their seas.

The multiple uses of Tasmania’s marine environment vary from commercial uses such as fishing, aquaculture, ports and shipping, and emerging offshore industries (such as renewable energy and aquaculture), to a diverse range of cultural, tourism and recreational activities.

Tasmania’s fishing and aquaculture industries generated \$534 million in value added terms in 2017/18. While this represents just 1% of Tasmanian economic output, these industries can be significant local employers, with an estimated 3,410 full-time equivalent employees.²

The UN Decade of Ocean Science for Sustainable Development and Australia’s commitment to the High Level Panel for a Sustainable Ocean Economy, is helping to build momentum for a more sustainable ocean economy. Sustainable production and protection of habitats and biodiversity are core elements of a sustainable ocean economy.

The Living marine Resource Management Act 1995 (LMRM Act) is currently being reviewed for the first time in its 28 years of existence. This is an important consideration because deficits in the LMRM Act now may have flow-on impacts in the Harvest Policy, for example with regards to addressing First Nations rights and the impacts of climate change.

The Australia Institute Tasmania commends the Tasmanian Government for developing a *Harvest Strategy Policy for Tasmanian Wild Fisheries* (the Harvest Policy) and *Draft*

¹ Edyvane, K. S. (2000) *Tasmanian Marine Protected Areas Strategy Background Report* Department of Primary Industries, Water and Environment.

² Tasmanian Fisheries and Aquaculture Industry (2019) *2017/18: Economic Contributions Summary* FRDC project 2017-210.

Implementation Guidelines (policy guidelines). The Harvest Policy should significantly improve the management of Tasmania's wild fisheries. However, there are a number of omissions and areas for improvement. This submission addresses the following topics:

- *Review of the Living Marine Resource Management Act 1995*
- Managing for healthy ecosystems
- First Nations rights
- Commonwealth Harvest Strategy Policy and related initiatives
- Objectives and principles
- Managing for climate resilience
- Cost recovery and economic returns
- Resource sharing and allocation
- Reference point settings
- Consultation and decision-making: existing bodies and mechanisms

Public opinion backs science

Tasmania's coastal waters are in trouble. Recently published research in the journal *Nature*, the world's leading science journal, found that more than 500 common species of marine life have declined around Australia in the past decade. These declines are most marked in the rocky kelp-dominated reefs around Tasmania.³

Tasmania's east coast is a climate change hotspot and sea temperatures are rising four times faster than elsewhere worldwide. The scientists explain that coastal development, catchment degradation, pollution and fishing are also having impacts.

Tasmanians are concerned about the health of the coast, as demonstrated in recently released research. An Australia Institute survey on 4-5 April 2023 asked Tasmanians a range of question about the health of our coast.⁴ Three quarters (76%) of Tasmanians are concerned about the health of our coastal environment. Despite most people (59.3%) being unaware just how bad the situation is for some of Tasmania's most popular fish stocks, almost half of Tasmanians surveyed (49.8%) were not confident that the State Government's current law reforms will do enough to protect the health of Tasmania's coastal waters.

Over 80% support one or more key management action to strengthen protection of marine life including:

- 19% supporting reducing catch limits.
- 22.3% supporting protecting fish nurseries.

³ Edgar, G.J., Stuart-Smith, R.D., Heather, F.J. et al. (2023) *Continent-wide declines in shallow reef life over a decade of ocean warming*. *Nature* 615, 858–865. <https://doi.org/10.1038/s41586-023-05833-y>

⁴ The Australia Institute (2023) *Polling: Reduce Inshore Salmon Farming to Protect Tassie Coast* <https://australiainstitute.org.au/post/reduce-inshore-salmon-farming-to-protect-tassie-coast-research/>

- 10.1% supporting an immediate ban on recreational gill netting.
- 30.2% supporting all the above actions.
- Only 5.6% did not support any of these management actions being taken.

It is clear that Tasmanians want to protect their marine life and have little confidence in the Government to undertake meaningful environmental protection.

The message from this research is clear: public opinion backs the science – an overwhelming number of Tasmanians support what the evidence is telling us we need to do.

Review of the *Living Marine Resource Management Act 1995*

The *Living Marine Resources Management Act 1995* (the LMRM Act) is the primary legislation for administering the protection, development and management of living marine resources in State waters.⁵ Sustainable development is the cornerstone of the LMRM Act. Schedule 1 defines 'sustainable development' to mean managing the use, development, and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic, and cultural well-being, and for their health and safety while:

- Sustaining the potential of natural and physical resources to meet the reasonably foreseeable needs of future generations; and
- Safeguarding the life-supporting capacity of air, water, soil, and ecosystems; and
- Avoiding, remedying, or mitigating any adverse effects of activities on the environment.

Depleted fish stocks, ignored ecosystem flow-on effects, threatened species, paltry habitat protection, poor community returns, and a lack of community involvement in planning and management decisions, all demonstrate the LMRM Act is not achieving its goals. This, alongside increasing pressure from climate change, aquaculture operations, agricultural run-off, urban development, and population growth call for a fundamentally improved management framework for Tasmania's coastal waters. The Policy is an important step in the right direction towards achieving this, if we get the settings right.

The LMRM Act is currently being reviewed for the first time in its 28 years of existence. Yet, nowhere does the Harvest Policy, or supporting consultation material mention this review. This is important information because deficits in the LMRM Act may have flow-on impacts in the Harvest Policy, for example with regards to addressing First Nations rights and the impacts of climate change.

The Harvest Strategy Policy and related initiatives should be introduced as part of a Tasmanian Government commitment to establishing a coordinated and integrated marine management framework for Tasmania. This requires the Harvest Policy to address current issues, including deficits in existing legislation, currently under review. The only appropriate alternative option would be to align the review of the LMRM Act with the development of the Harvest Policy.

⁵ *Living Marine Resource Management Act 1995*

<https://www.legislation.tas.gov.au/view/html/inforce/current/act-1995-025>

Recommendation 1:

The Harvest Strategy Policy and related initiatives should be introduced as part of a Tasmanian Government commitment to establish an overarching legal and policy framework for integrated ecosystem based management for Tasmanian state waters.

A Sustainable Fisheries Strategy for Tasmania

Tasmania's current fisheries management framework is outdated and is not keeping up with community expectations and modern fisheries management practices. The Australia Institute Tasmania recognises that the development of the Harvest Policy and policy guidelines is seeking to address this.

Some of the omissions and areas for improvement which our submission addresses could be captured by a Sustainable Fisheries Strategy, however, unlike other states, Tasmania does not have one.

Recommendation 2:

To develop a Sustainable Fisheries Strategy for Tasmania.

Managing for healthy ecosystems

The Commonwealth State of Environment Report 2021 highlighted that Tasmanian waters are facing multiple significant pressures and that action is needed to ensure the marine environment remains healthy and productive.⁶

It is difficult to have a thorough understanding of the health of Tasmania's living marine resources, beyond individual stock assessments for a few commercial species, because the Tasmanian Government has not conducted a state-wide assessment of the condition of Tasmania's marine environment for more than 14 years. This is despite a statutory requirement to produce a Tasmanian State of the Environment (SOE) Report every 5 years.⁷ The last Tasmanian SOE Report was produced in 2009 by the independent Tasmanian Planning Commission to assess the sustainable use of ecosystems, including their condition, pressures and trends. SOE Reports are important for their data on ecosystem health, advice on whether management objectives are being achieved and recommendations for responsive actions.

⁶ Australian Government (2021). *Australia: State of Environment Report 2021* <https://soe.dcceew.gov.au>

⁷ State Policies and Projects Act 1993, s.29

According to the 2009 report, it was not possible then to describe the status or trends in the conditions of estuarine, coastal and marine ecosystems due to insufficient information being available.⁸ The report identified issues associated with a lack of whole of government direction in environmental policies and recommended improved alignment across government. The development of a comprehensive environmental policy framework was recommended, including a risk assessment based approach and a long-term strategic environmental management plan.

Ecosystem based management is being implemented across Australian Commonwealth fisheries through an Ecological Risk Management Framework.⁹ *Ecological Risk Assessment for the Effects of Fishing* are a set of hierarchical tools that continue to develop in order to meet the ecosystem based management mandate. Semi-quantitative Level 2 species and habitat assessment tools have already been developed and could be applied to Tasmanian fisheries, at least at the qualitative level.

The *Commonwealth Fisheries Harvest Strategy Policy* identifies spatial management as a tool that can be used to complement other management measures.¹⁰ The effect of a spatial (or temporal) closure on the pursuit of fishery objectives must be evaluated and reflected in the harvest strategy for Commonwealth fisheries. This is consistent with ecosystem-based fisheries management and the need to consider a fish stock across its full distribution and should be considered when developing harvest strategies for fisheries.

Recommendation 3:

To assist in implementing ecosystem based fisheries management, integrated spatial management measures should be considered when developing harvest strategies for fisheries.

Recommendation 4:

Undertake *Ecological Risk Assessments for the Effects of Fishing* for Tasmanian fisheries.

⁸ Tasmanian Planning Commission (2009) *State of the Environment Report: Tasmania 2009*.

⁹ Australian Fisheries Management Authority (2022) *Ecological risk management strategies for Commonwealth commercial fisheries* <https://www.afma.gov.au/ERM>

¹⁰ Department of Agriculture and Water Resources (2018), *Commonwealth Fisheries Harvest Strategy Policy*. <https://www.agriculture.gov.au/sites/default/files/sitecollectiondocuments/fisheries/domestic/hsp.pdf>

First Nations rights

The LMRM Act defines Aboriginal activities as non-commercial and for cultural purposes. Its language and intent are not appropriate in the 21st Century. First Nations Tasmanians value healthy marine ecosystems as part of a range of associated values, including integrated land and sea country access rights, spiritual and cultural practices and economic values.¹¹

First Nations Tasmanians have successfully established their right to fish but expect to also gain an economic benefit from the exploitation of their traditional resources. A comprehensive and modern approach to marine resource management should acknowledge and provide for this. Further, the practices of First Nations Tasmanians provide relevant management strategies which have not been adequately considered or incorporated.¹² Recent developments in returning abalone quota are a step in the right direction.¹³

Queensland's Harvest Strategy Policy supports fishing-related economic opportunities for Aboriginal peoples and Torres Strait Islanders and their communities by establishing a sustainable Indigenous commercial allocation, which can be accessed under an Indigenous Fishing Permit.¹⁴

Tasmanian Aboriginal communities are best placed to respond to improvements to the Harvest Policy to strengthen recognition of their rights. The Institute strongly encourages direct, meaningful engagement and co-management with First Nations representatives and commends recent First Nations departmental appointments.

Recommendation 5:

Appropriate recognition of the Traditional Owners of Tasmania and co-management of resources with First Nations Tasmanians, in collaboration with scientists and the community, should be articulated in the Policy.

Recommendation 6:

Further quota returns should be made to the Traditional Owners of Tasmania which should not be restricted to non-commercial purposes.

¹¹ Ogier, E. & Macleod, C. K. (2013) *Your Marine Values: Public Report. IMAS Technical Report*

¹² Ogier, E. & Macleod, C. K. (2013) *Your Marine Values: Public Report. IMAS Technical Report*

¹³ *Indigenous Tasmanians sign deal to run commercial abalone fishery* <https://www.abc.net.au/news/2022-03-18/indigenous-tasmanians-commerical-abalone-fisheries-deal/100916392>

¹⁴ Queensland Government (2021) *Queensland Harvest Strategy Policy* https://www.daf.qld.gov.au/?a=109113%3Apolicy_registry%2Fharvest-strategy-policy.pdf

Commonwealth Harvest Strategy Policy and related initiatives

Effective fisheries management is no longer measured by single species objectives but rather by recognising interactions across ecosystems and managing marine systems holistically. Depleted fish stocks, ignored flow-on effects, threatened species, lack of habitat protection, poor economic returns to the community, and a lack of community involvement in planning and management decisions, all reflect poorly on the current management framework.

With some notable exceptions, most Tasmanian-managed fisheries are relatively low value and have not received the same investment in management as more valuable fisheries. For example, to date, only two Tasmanian-managed fisheries have harvest strategies, the high-value abalone and rock lobster fisheries.

Most states and the Commonwealth have management plans and include harvest strategies for their fisheries. A 5-year review of harvest strategies in Australia found since their introduction, the proportion of stocks subject to overfishing reduced, the proportion of stocks of uncertain status declined, and the economic status of most fisheries improved.¹⁵

Shortly after the adoption of Commonwealth Harvest Strategy Policy (HSP), the Federal government announced two related initiatives:¹⁶

1. A Direction to recover overfished stocks and prevent future overfishing;
2. A structural adjustment package which sought to (i) reduce excess effort and improve profitability for the remaining fleet through a government buy-out; and (ii) assist in implementing a network of marine protected areas in south-eastern Australia.

As Smith et.al. describe, the Direction required the development and implementation of an HSP to be applied to *all* targeted stocks within Commonwealth managed fisheries as well as the implementation of fishery-independent surveys and improved monitoring of fishing activity. The intent was to manage fish stocks sustainably and profitably, end overfishing, and ensure that currently overfished stocks were rebuilt in reasonable time frames.

The network of marine protected areas in south-eastern Australia contributed to the Commonwealth waters component of the National Representative System of Marine

¹⁵ Anthony D. M. Smith, David C. Smith, Malcolm Haddon, Ian A. Knuckey, Keith J. Sainsbury, Sean R. Sloan, (2014), Implementing harvest strategies in Australia: 5 years on, *ICES Journal of Marine Science*, Volume 71, Issue 2, January/February, Pages 195–203, <https://doi.org/10.1093/icesjms/fst158>

¹⁶ Ibid.

Protected Areas (NRSMPA). In 1998 the Commonwealth, States and Northern Territory governments committed themselves to establishing the NRSMPA by 2012.

Tasmania's contribution to the NRSMPA remains unfinished business. Four of Tasmania's nine geographically distinct marine bioregions are not represented within any MPAs. Only 1.1% of State waters are fully protected and 2.7% partially protected.¹⁷ This is inadequate at the most fundamental levels comprehensiveness, adequacy and representativeness.

In 2003–04 the first inquiry into establishing MPAs in Tasmania was undertaken and resulted in the Kent Group National Park marine extension and Port Davey Marine Reserve being declared.¹⁸ The Bruny Bioregion was the second bioregion referred for inquiry and 14 Marine Conservation Areas were subsequently proclaimed in 2009.¹⁹ However, as fishing continues across all these areas unrestricted, minimum standards have not been met.²⁰

Two of the bioregions without MPAs are shared with Victoria/SA and NSW. One runs along the west coast, north of Port Davey. The fourth, Boags, lies along most of the length of north Coast (excluding Cape Otway and Hunter Island).²¹

The Australian Marine Sciences Association (AMSA), Australia's largest professional association of marine scientists, consider protected areas to be an integral part of ecosystem-based fisheries management.²² Without such reference areas, there is no way to accurately measure impacts or success.

While their design may differ according to the objectives they are trying to achieve, appropriately-designed and managed protected areas offer an effective, efficient, and publicly acceptable tool to achieve scientific, fisheries and/or biodiversity conservation purposes.^{23, 24}

This deficit in habitat protection occurs despite the objectives of the LMRM Act, overwhelming evidence in support of the effectiveness of protecting habitat for multiple objectives, government commitments past and present at state and national levels, and

¹⁷ Wescott, G. & Fitzsimons, J. (2016). *Big, Bold & Blue: Lessons from Australia's Marine Protected Areas*. CSIRO.

¹⁸ Resource Planning and Development Commission (2003). Inquiry into the establishment of marine protected areas within the Davey and Twofold Shelf Bioregions. Final recommendations report.

¹⁹ Wescott, G. & Fitzsimons, J. (2016). *Big, Bold & Blue: Lessons from Australia's Marine Protected Areas*. CSIRO.

²⁰ Carr, E. and Minshull, L. (2020). *Towards a sustainable marine management regime for Tasmania*. The Australia Institute.

²¹ Commonwealth of Australia (2006). A guide to the Integrated Marine and Coastal Regionalisation of Australia. IMCRA version 4.0.

²² Australian Marine Sciences Association (2019) *AMSA Position Statement on Marine Protected Areas (MPAs)*

²³ Edgar GJ, Ward TJ, Stuart-Smith RD. *Rapid declines across Australian fishery stocks indicate global sustainability targets will not be achieved without an expanded network of 'no-fishing' reserves*. *Aquatic Conserv: Mar Freshw Ecosyst*. 2018;1–14.

²⁴ Australian Marine Sciences Association (2019) *AMSA Position Statement on Marine Protected Areas (MPAs)*

community support for action to protect Tasmania’s coastal waters.^{25,26} There is currently an incongruence between Tasmanian and Federal governments commitments to habitat protection.

In June 2021, Australia became part of an international coalition of countries committed to conserving 30% of the world’s land and sea by 2030, in order to halt the loss of biodiversity.²⁷ Members of the Ocean Panel also committed to sustainably manage 100% of their oceans by 2025. This will be guided by a Sustainable Ocean Plan which will cover all waters in Australia’s Exclusive Economic Zone, from the coastline out to 200 nautical miles.

The Tasmanian Government should commit to a holistic and integrated approach and to sustainably manage its coastal waters by 2025. This will see Tasmania address the same issues the Commonwealth Government did when it introduced its Harvest Strategy Policy, namely to recover overfished stocks and prevent future overfishing; to reduce excess effort and improve profitability for the remaining fleet through a government buy-out; and implement a network of marine protected areas.

Recommendation 7:

The introduction of the Harvest Strategy Policy be accompanied by:

1. A Direction to recover overfished stocks and prevent future overfishing within specified timeframes.
2. A structural adjustment package which aims to:
 - (ii) reduce excess effort and improve profitability for the remaining fleet through a government buy-out; and
 - (iii) assists in implementing a network of marine protected areas in Tasmania.

²⁵ The Australia Institute (2023) *Polling: Reduce Inshore Salmon Farming to Protect Tassie Coast*

<https://australiainstitute.org.au/post/reduce-inshore-salmon-farming-to-protect-tassie-coast-research/>

²⁶ Wescott, G. & Fitzsimons, J. (2016) *Big, Bold and Blue: Lessons from Australia’s Marine Protected Areas*. CSIRO Publishing.

²⁷ Australian Government (2021) *Australia joins international alliance to conserve planet’s biodiversity*

<https://www.pm.gov.au/media/australia-joins-international-alliance-protect-planet%E2%80%99s-biodiversity>

Reference point settings

The Commonwealth HSP provided an improved approach to fisheries management because it set a target to be achieved, as well as a limit to be avoided. The target is to achieve a stock biomass of 48% of unfished biomass. The limit is to remain above 20% of unfished biomass at least 90% of the time.

CSIRO research has found a stock biomass target set at 48% of original/unfished biomass is a precautionary target that is generally appropriate for fisheries.²⁸ Some Australian fisheries set more conservative reference points for species of ecological importance. Responsible fisheries management uses multiple tools, including a precautionary approach, to avoid unrecoverable damage to stocks and related ecosystems.²⁹

In the Southern Ocean, the rule applied to toothfish aims to achieve a target of 50% of spawning biomass rather than 48%. This is to allow for the needs of dependent species and is part of implementing an ecosystem based approach. The Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR) has ecosystem based management at the core of the international agreement it implements. CCAMLR's harvesting principles can be summarised as:³⁰

1. Maintain productivity of stocks.
2. Maintain ecological relationships and restore depleted populations.
3. Any negative effects should be reversible within 2-3 decades, taking account of direct and indirect impacts, alien species, associated activities, environmental changes and the aim of biodiversity conservation.

Queensland's Harvest Strategy Policy provides another example of clearly defined objectives with specific timeframes. Queensland's Policy introduced new target reference points for all Queensland fisheries in 2021. These are to achieve at least maximum sustainable yield (MSY), initially around 40-50% biomass (where a more specific estimate is not available), and move towards achieving maximum economic yield (MEY), around 60% biomass (where a more specific estimate is not available), by 2027.³¹

²⁸ Haddon, M., Klaer, N., Smith, D.C., Dichmont, C.D. and A.D.M. Smith (2012) *Technical reviews for the Commonwealth Harvest Strategy Policy*. FRDC 2012/225. CSIRO. Hobart. 69 p.

²⁹ Ibid.

³⁰ Andrew J. Constable (2006) *International implementation of the ecosystem approach to achieve the conservation of Antarctic marine living resources*, Presentation to UNICPOLOS 7

³¹ Queensland Government (2021) *Queensland Harvest Strategy Policy*
https://www.daf.qld.gov.au/?a=109113%3Apolicy_registry%2Fharvest-strategy-policy.pdf

Reference point settings in Tasmania's Harvest Policy should be in accordance with Commonwealth and other jurisdictions' settings. While Queensland changes are relatively recent, both Commonwealth and Southern Ocean examples have been demonstrated to work well across a range of species over the long term.

Recommendation 8:

Set precautionary stock biomass targets that at least 48% of original/unfished biomass should be retained within the ecosystem, in accordance with CSIRO research findings.

Objectives and principles

The Draft Harvest Policy states that the objectives of the Policy require Tasmanian harvest strategies to:

- Be in place for all fisheries listed in Appendix 1 within the next 10 years
- Use output-based or input-based controls as appropriate
- Ensure biological objectives are protected with decision rules that use the precautionary principle
- For data-poor and non-quota species, stock status and fishing mortality will be quantitatively assessed when possible, using, for example, catch-only assessments (e.g., Catch-maximum sustainable yield (CMSY) or length-based assessments or other assessment approaches as appropriate.

The Australia Institute Tasmania supports the objectives and principles in the draft Harvest Policy, in particular the use of best available science and the precautionary principle. However, there are several important objectives that are currently missing and should be included. This section outlines additional objectives and the rationale for their inclusion.

Harvest strategies for all Tasmanian fisheries

Harvest strategies are management procedures that set out decision-making frameworks for fisheries to achieve defined biological and economic objectives.³² They include processes for monitoring and assessing the biological and economic conditions of fish species against fishery-specific reference levels (a reference point or points); and pre-determined decision rules that control fishing activity according to the biological and economic conditions of the fishery.

Depleted fish stocks

Values of a biomass of 20% of unfished levels and below are commonly used to determine whether stocks are depleted. That is, when stocks are unable to replenish themselves through reproductive output and are unlikely to recover to more productive levels.³³ As Tasmania's latest Scalefish Fishery Assessment notes, biomass depletion below 20% is an internationally applied limit reference point, beyond which directed fisheries under Australian harvest strategies are commonly closed.

³² Department of Agriculture and Water Resources (2018), *Commonwealth Fisheries Harvest Strategy Policy*. <https://www.agriculture.gov.au/sites/default/files/sitecollectiondocuments/fisheries/domestic/hsp.pdf>

³³ Fraser et al (2022) *Tasmanian Scalefish Fishery Assessment 2020/2021*, https://www.imas.utas.edu.au/__data/assets/pdf_file/0005/1632515/Scalefish-Assessment_2020-21.pdf

It is concerning that there is no clear commitment to close Tasmanian fisheries when they reach a biomass below 20% of their unfished levels. Of further concern is that not all of Tasmania’s fisheries will have harvest strategies developed, and nor with those that do, be developed within appropriate timeframes.

Of particular concern is the multi-species Scalefish Fishery, which contains 6 depleted species and one depleting species, is not included in the list of fisheries for which harvest strategies will be developed in Appendix 1 (see Table 1 below). It is inadequate to develop a harvest strategy for only two of these species, sand flathead calamari, and not for the four other depleted stocks.

Table 1: Species assessed as depleted or depleting in the 2020/21 Scalefish Fishery Assessment.

Species	Status
Southern calamari	Depleting
Sand flathead	Depleted
Striped trumpeter	Depleted
Bastard trumpeter	Depleted
Southern garfish	Depleted
Blue warehou	Depleted
Jackass morwong	Depleted

Source: Tasmanian Scalefish Fishery Rule Review – Public Consultation Paper 2023
<https://fishing.tas.gov.au/Documents/Scalefish-Rules-Review-Public-Consultation-Paper-2023.pdf>

Development timeframes

The Draft Harvest Policy does not provide any explanation of why it will take 10 years to develop four harvest strategies for the species listed in Appendix 1 (plus emerging species). The Queensland Government committed to have harvest strategies in place for all its fisheries within 3 years of announcing its Sustainable Fisheries Strategy.³⁴

The Australia Institute recommends greater urgency should be given to the development of harvest strategies for depleted or depleting fish stocks.

Recommendation 9:

Amend the objectives of the Harvest Policy so that:

- Tasmanian harvest strategies are developed for all Tasmania’s fisheries, not the limited number in Appendix 1.

³⁴ Queensland Government (2021) *Queensland Harvest Strategy Policy*
https://www.daf.qld.gov.au/?a=109113%3Apolicy_registry%2Fharvest-strategy-policy.pdf

- They are implemented within 3 years, rather than 10 years currently proposed.

Recommendation 10:

Amend the principles of the Harvest Policy to prioritise strategies for stocks that are currently depleted or depleting.

Recommendation 11:

Amend the decision rules of the Harvest Policy to commit to close fisheries when species biomass falls below 20% of unfished biomass.

Managing for climate resilience

Ecosystem based management, climate modelling, marine protected areas and dynamic stock assessments are well recognised tools for managing fisheries under climate change.³⁵ However, most broad-scale or ecosystem models are too uncertain for tactical use, such as for setting Total Allowable Catches.³⁶ A 2017 review of integrated modelling to support decision-making for marine social–ecological systems in Australia identified important gaps in available capability.³⁷ Considerable uncertainty still exists especially where rapid change is underway and observational data to inform and test model representations, is among the recommended future consideration.

It is likely to be some time before these uncertainties are adequately resolved. A practical response to this is to take a precautionary approach, improve risk or vulnerability assessments (including with more regular updating of advice, for example on stock productivity), adopt marine protected areas and implement effective integrated ecosystem based management.

In 2022, the Australian Marine Sciences Association published recommendations to this effect on ocean management under climate change:³⁸

*“The increasing threat posed by anthropogenic climate change reinforces the need and importance of effective and equitable management of marine systems and threatened species, including **improved vulnerability assessments, fisheries management, marine protected areas and integrated coastal zone planning**, all of which take cognisance of anticipated future climate change. Such management*

³⁵ Chavez-Molina, V., Nocito, E.S. and Carr, E.J., et. al. (2023). *Managing for climate resilient fisheries: Applications to the Southern Ocean*, Ocean & Coastal Management, 239, <https://doi.org/10.1016/j.ocecoaman.2023.106580>.

³⁶ DAWR (2018) *Guidelines for the Implementation of the Commonwealth Fisheries Harvest Strategy Policy*, Australian Government.

³⁷ Melbourne-Thomas, e., al. (2017) *Integrated modelling to support decision-making for marine social–ecological systems in Australia*. – ICES Journal of Marine Science, doi:10.1093/icesjms/fsx078.

³⁸ AMSA (2022) *AMSA Position Statement: Climate Change*

actions will not necessarily eliminate impacts of climate, but reduce pressure on marine species to maximise their potential for adaption to changing conditions.”

Conservation of Tasmania’s marine carbon sinks has important potential to mitigate impacts and help meet climate change commitments. Blue carbon ecosystems can store up to four times as much carbon per area as land-based forests³⁹ and, if undisturbed, can store carbon in sediments over hundreds or thousands of years. However, for their carbon sequestering values to be retained, we need to prevent disturbance from activities such as bottom trawling, dredging and coastal development (we now know that bottom trawling releases as much carbon as air travel⁴⁰).

Recommendation 12:

Amend the principles of the Harvest Policy to account for climate change and mitigate its impacts.

Cost recovery and economic returns

Tasmania’s fishing and aquaculture industries generated \$534 million in value added terms in 2017/18. While this represents just 1% of Tasmanian economic output, these industries generate hundreds of millions in revenue and can be significant local employers, with an estimated 3,410 full-time equivalent employees.⁴¹

Tasmania’s 106,000 recreational fishers spend about \$161 million per year on bait, gear, fuel, accommodation and the other goods and services (employing 837–1,674 people, at a rough estimate), and catch about 1,039,800 fish.⁴² Australia Institute research has previously explained some of the pitfalls of simplistic employment figure statistics,^{43,44} however, these figures recognise the importance of these industries to the state’s economy.

A major shortcoming of current policy is that the Tasmanian community does not receive an economic return from the commercial use of its marine resources, with the sole exception of abalone royalties. Private sales or export revenue does not accrue to the public, despite public resources being exploited. Fees and licencing are important parts of regulating

³⁹ International Partnership for Blue Carbon, <https://bluecarbonpartnership.org/> viewed 11/11/2021

⁴⁰ Enric Sala, *et al.* (2021) Protecting the global ocean for biodiversity, food and climate. *Nature* **592**, 397 <https://www.nature.com/articles/s41586-021-03371>

⁴¹ Tasmanian Fisheries and Aquaculture Industry (2019) 2017/18: Economic Contributions Summary FRDC project 2017-210

⁴² Lyle, J. M., Stark, K. E., Ewing, G. P. & Tracey, S. R. (2019) 2017-18 Survey of Recreational Fishing in Tasmania.

⁴³ Minshull, L. and Browne, B. (2019) Making mountains out of minnows: Salmon in the Tasmanian economy. The Australia Institute

⁴⁴ Browne, B. (2018) Fishing for compliments: Fishing in the Tasmanian economy. The Australia Institute.

Tasmanian fisheries, but this revenue is aimed simply at recovering management costs, not providing a return to the community.

This is poor policy from an economic and equity perspective and questions have long been asked as to whether Australia's policy settings are providing appropriate community returns.⁴⁵ Previous Australia Institute research has highlighted potential mechanisms for improving community returns demonstrated by Norwegian aquaculture policy.⁴⁶ The public benefit to Norwegians from the salmon industry includes auctioning biomass licenses, as well as other taxes and fees. This research also noted the potential case for royalties on aquaculture operations, if the public resource was conceived of as a community's waterways, rather than fish. Iceland could provide other lessons in how to (and not to) ensure that the wealth generated by marine resources is fairly distributed.⁴⁷ Iceland introduced Individual Tradable Quotas in the 1980s to improve sustainability. However, the initial free allocations of quotas led to windfall gains and an uneasy social situation, with 'undesirable distributional effects for a sector with strong regional and traditional roots.'

The OECD report on Iceland's situation makes recommendations to avoid this, including negotiating resource rent in advance of any new quota policy settings.

Recommendation 13:

All sectors should pay for the cost of management. Cost recovery from both recreational and commercial sectors ensures appropriate economic signals are being provided and funding is available for necessary scientific assessments and management arrangements.

Recommendation 14:

An economic return should be paid to the community for the private use of public resources, and should be negotiated in advance of any new quota policy settings. This could be achieved through royalty payments, auctions of permits or a range of other mechanisms.

Resource sharing and allocation

The Harvest Policy states it will establish harvest strategies that manage extraction by all sectors, however, it does not include an Indigenous commercial fishing allocation, as outlined above.

⁴⁵ Rodgers, T. and Webster, S. (2007) Resource rent mechanisms in Australian primary industries: some observations and issues. Paper presented at the 51st Annual Conference of the Australian Agricultural and Resource Economics Society Conference

⁴⁶ Minshull, L. and Browne, B. (2019) Making mountains out of minnows: Salmon in the Tasmanian economy. The Australia Institute

⁴⁷ OECD (2015) Iceland Policy Brief: Fisheries - Ensuring a fairer distribution of wealth generated by fisheries, <https://www.oecd.org/iceland/iceland-ensuring-fairer-distribution-of-wealth-generated-by-fisheries.pdf>

Neither does it provide a framework for resource sharing, that being the allocation of catch between sectors. Setting and managing resource allocations through harvest strategies provides an informed and transparent approach to the equitable management of Queensland's fisheries.⁴⁸

There are multiple sector groups in the Tasmanian community: non-extractive users (including divers, tourism operators and environmental NGOs), First Nations Tasmanian communities, recreational fishers, commercial fishers, and marine farming operators.

The Harvest Policy could provide for resource sharing and allocation among extractive sectors. Marine spatial planning it is an effective tool to incorporate ecological, social, cultural and economic information and could be further used to implement resource sharing and allocation between extractive and non-extractive sectors.

Recommendation 15:

The Harvest Policy should include the setting and managing of resource allocation, that being the allocation of catch between sectors, to provide for an informed and transparent approach to the management of Tasmania's fisheries.

Recommendation 16:

Resource sharing arrangements should also be clearly spelt out between extractive and non-extractive uses.

⁴⁸ Queensland Government (2021) *Queensland Harvest Strategy Policy*
https://www.daf.qld.gov.au/?a=109113%3Apolicy_registry%2Fharvest-strategy-policy.pdf

Conclusion and Recommendations

Marine resources are a public asset. They are owned and managed by the state on behalf of, and for the benefit of, all Tasmanians.

The past 28 years has seen a deterioration of the condition of Tasmania's marine life.

Australia Institute research finds that the legislative and regulatory frameworks that manage marine resource use operate in isolation and need to be modernised and integrated.

Marine spatial planning, by definition, includes all sectors and values. This tool, used correctly, provides a powerful mechanism to plan for the various uses of Tasmania's ocean resources as they continue to expand and compete with one another in the future. It is a core element of integrated ecosystem-based management.

Tasmanians want to protect their marine life, but the government should take seriously the fact that Tasmanians appear to have lost faith in this government to undertake meaningful reform to protect the environment. The message from recent Australia Institute research is clear: public opinion backs the science – an overwhelming number of Tasmanians support what the evidence is telling us we need to do.

The introduction of a Harvest Policy should significantly improve the management of Tasmania's wild fisheries. However, without strengthening key aspects of this draft Policy, improvements will be limited and may miss the opportunity to end overfishing and move Tasmania towards a more integrated approach to marine management. To achieve this, the Australia Institute Tasmania makes the following recommendations:

1. The Harvest Strategy Policy and related initiatives should be introduced as part of a Tasmanian Government commitment to establish an overarching legal and policy framework for integrated ecosystem based management for Tasmanian state waters.
2. To develop a Sustainable Fisheries Strategy for Tasmania.
3. To assist in implementing ecosystem based fisheries management, integrated spatial management measures should be considered when developing harvest strategies for fisheries.
4. Undertake *Ecological Risk Assessments for the Effects of Fishing* for Tasmanian fisheries.
5. Appropriate recognition of the Traditional Owners of Tasmania and co-management of resources with First Nations Tasmanians, in collaboration with scientists and the community, should be articulated in the Policy.
6. Further quota returns should be made to the Traditional Owners of Tasmania which should not be restricted to non-commercial purposes.
7. The introduction of the Harvest Strategy Policy should be accompanied by:

- A Direction to recover overfished stocks and prevent future overfishing within specified timeframes.
 - A structural adjustment package which aims to:
 - (i) reduce excess effort and improve profitability for the remaining fleet through a government buy-out; and
 - (ii) assists in implementing a network of marine protected areas in Tasmania.
8. Set precautionary stock biomass targets that at least 48% of original/unfished biomass should be retained within the ecosystem, in accordance with CSIRO research findings.
 9. Amend the objectives of the Harvest Policy so that:
 - Tasmanian harvest strategies are developed for all Tasmania's fisheries, not the limited number in Appendix 1.
 - They are implemented within 3 years, rather than 10 years currently proposed.
 10. Amend the principles of the Harvest Policy to prioritise strategies for stocks that are currently depleted or depleting.
 11. Amend the decision rules of the Harvest Policy to commit to close fisheries when species biomass falls below 20% of unfished biomass.
 12. Amend the principles of the Harvest Policy to account for climate change and mitigate its impacts.
 13. All sectors should pay for the cost of management. Cost recovery from both recreational and commercial sectors ensures appropriate economic signals are being provided and funding is available for necessary scientific assessments and management arrangements.
 14. An economic return should be paid to the community for the private use of public resources and should be negotiated in advance of any new quota policy settings. This could be achieved through royalty payments, auctions of permits or a range of other mechanisms.
 15. The Harvest Policy should include the setting and managing of resource allocation, that being the allocation of catch between sectors, to provide for an informed and transparent approach to the management of Tasmania's fisheries.
 16. Resource sharing arrangements should also be clearly spelt out between extractive and non-extractive uses.