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Tasmania

Off the hook?

Submission to the Tasmanian Scalefish Fishery Rules Review

After decades of ignoring evidence of overfishing, the Tasmanian Government is finally playing catch-up on the state's depleted fish stocks, resetting fishery rules in the context of out-of-date legislation and the absence of relevant policies.

However, the proposed rules do not keep pace with other Australian jurisdictions. Tasmania needs to modernise its ocean management to prioritise keeping ecosystems healthy against climate change and other increasing and competing pressures.

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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.

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How long is too long when it comes to tackling overfishing? A decade? Two decades? That's how long successive Tasmanian Governments have taken to address evidence of some species being overfished in Tasmania.

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 research conducted by The Australia Institute 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 that Act is 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.

Given the depleted and depleting status of several scalefish species, we commend the Government for taking immediate action to address the situation with the *Scalefish Fishery Rules Review*, despite the presence of concurrent, overarching legal reforms and policy development. It is important to note that these reforms are ongoing in order to avoid deficiencies being carried into new fishery management arrangements. Establishing an overarching legal and policy framework to implement integrated ecosystem-based management for Tasmanian state waters should be a priority for the Tasmanian Government.

The ongoing development of a *Tasmanian Harvest Strategy Policy* is also to be commended. This policy should be in place to inform the Scalefish Fishery reforms.

The Australia Institute Tasmania commends the proposed rule changes as the minimum intervention required. However, there are a number of omissions and areas for improvement. This submission recommends that:

1. The *Scalefish Fishery Rules Review* and related initiatives be introduced as part of a Tasmanian Government commitment to establish an overarching legal and policy framework for integrated ecosystem-based management of Tasmania's marine estate.

2. The precautionary principle be applied to all fishery rule changes to support healthy and resilient ecosystems.

3. The introduction of Tasmania's *Harvest Strategy Policy* and the changes to Scalefish Fishery Rules be accompanied by:

(i) A Direction to recover overfished stocks and prevent future overfishing within specified timeframes, based on best available science.
(ii) A structural adjustment package that aims to:
    a) reduce excess effort and improve profitability for the remaining fleet through a government buy-out; and
    b) assists in implementing a network of marine protected areas in Tasmania.

4. Appropriate recognition of the Traditional Owners of Tasmania and co-management of resources with First Nations Tasmanians be implemented in the development of all fishery rule changes.

5. Fishery Rules be set in accordance with a *Harvest Strategy Policy* that commits to close targeted fisheries when species are classified as depleted, i.e. when biomass estimates reach 20% or less of unfished biomass, 10% or more of the time.

6. Fishery Rules be set in accordance with a *Harvest Strategy Policy* that applies to all Tasmanian fish stocks and commits to:

(i) Setting a precautionary stock biomass target of at least 48% of unfished biomass, in accordance with CSIRO research, to be achieved within specified timeframes
(ii) Requiring that all targeted fish stocks remain above 20% of the unfished biomass for at least 90% of the time. If not, the stock is classified as depleted.

7. The Tasmanian Government bring forward its commitment to phase out recreational gillnetting by 2030 and immediately end it, without exception.

8. The proposed changes to scalefish fishing rules be implemented as the minimum response required, including changes to species size, bag, possession and boat limits.

9. Mandatory requirements be implemented for:

(i) Vessel Monitoring Systems (VMS) for all commercial vessels operating in Tasmanian waters; and
(ii) Registration and catch reporting for charter vessel operators and passengers.

10. A recreational fishing licence for scalefish fishing be introduced in Tasmania, in line with Victoria, NSW and WA's requirements.

Introduction

The Australia Institute welcomes the opportunity to make a submission to the *Scalefish Fishery Rules Review*.

Many Tasmanians have a deep connection to the sea. 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] The habitats that support 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.

These environments support multiple uses of Tasmania's marine environment, from commercial uses such as fishing, aquaculture, ports and shipping, and emerging offshore industries, 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 Tasmania's economic output, these industries can be significant local employers, with an estimated 3,410 full-time equivalent employees.[2]

In Tasmania's Scalefish Fishery, 114 species were caught in Tasmanian State Waters in 2020–21, although only 22 species are assessed for the status of their stock. Overall, there is a declining trend in total catch from assessed species since 1995–96. The number of vessels used to catch the assessed species have also declined since 1995–96, when approximately 350 vessels were active in the fishery, compared to around 150 vessels in 2020–22.[3] Of 22 assessed species in the 2020–21 Scalefish Fishery Assessment, seven are classified as depleted or depleting in the *Scalefish Fishery Rules Review Public Consultation Paper 2023.*

These depleted fish stocks—along with the ignored flow-on effects to ecosystems, threatened species, paltry habitat protection, poor community returns, and a lack of community input into planning and management decisions—all demonstrate the current management framework is not achieving what Tasmanians want for their coastal waters. Alongside increasing pressure from climate change, aquaculture operations, agricultural run-off, urban development, and population growth, the situation calls for fundamental improvements to the way Tasmanians manage and care for their seas.

[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.

[3] Scalefish Fishery Advisory Committee (SFAC), November 2022, SFAC 77 Meeting minutes Tasmanian Government, fishing.tas.gov.au/Documents/SFAC%2077%20Minutes%20-%2018%20November%202022.pdf

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

The *Living Marine Resource Management Act 1995* (LMRM Act) is currently being reviewed for the first time in its 28 years of existence. Tasmania is also developing its first *Harvest Strategy Policy for Tasmanian Wild Fisheries.* These are important considerations to keep in mind, because deficiencies in the current LMRM Act, along with the absence of relevant policy settings, have potential flow-on consequences for any changes to fishery rules. The lack of a contemporary approach to addressing First Nations rights and the impacts of climate change are just two examples.

The Australia Institute Tasmania commends the Tasmanian Government for finally addressing depleted and depleting fish stocks. While the proposed rule changes should improve the management of these stocks, we are concerned they do not go far enough and may not achieve recovery in appropriate timeframes. This submission provides an overview of relevant policies in other Australian jurisdictions that the Tasmanian Government could adopt. We put this in the context of relevant legislative and policy considerations that seek to achieve a more integrated approach to managing Tasmania's coastal waters.

PUBLIC OPINION BACKS SCIENCE

Tasmania's coastal waters are in trouble. We know this from a range of sources—despite the absence of a Tasmanian *State of the Environment* Report, which would quantify the scale and detail of the problems, as well as how to address them.

The national *Australia: State of the Environment 2021* report painted a dire picture of how Australia's wildlife and ecosystems are coping with a litany of pressures.[4] It tells an alarming story of the decline of natural and cultural heritage, on the mainland as well as in Tasmania.

Recently published research in the journal *Nature* 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.[5] Tasmania's east coast is a climate change hotspot, and sea temperatures there are rising four times faster than elsewhere worldwide.[6] Scientists explain that coastal development, catchment degradation, pollution and fishing are also affecting these waters.

[4] Cresswell et al (2021) *Australia: State of the Environment 2021*, https://soe.dcceew.gov.au/

[5] 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

[6] Bennett, S. et al. The "Great Southern Reef": Social, ecological and economic value of Australia's neglected kelp forests. Marine and Freshwater Research 67, 47–56 (2016).

Tasmanians' concern about the health of their coast was demonstrated in a survey undertaken by The Australia Institute on 4 and 5 April 2023.[7] Three quarters (76%) of respondents were concerned or very concerned about the health of their coastal environment. Despite most respondents (59.3%) being unaware of just how bad the situation is for some of Tasmania's most popular fish stocks, almost half of Tasmanians surveyed (49.8%) were nevertheless not confident that the State Government's current legal reforms would do enough to protect the health of Tasmania's coastal waters.

Over 80% of respondents supported one or more key management actions to strengthen protection of marine life:

- 19% supported reducing catch limits;
- 22.3% supported protecting fish nurseries;
- 10.1% supported an immediate ban on recreational gill netting; and
- 30.2% supported all the above actions.

Only 5.6% of respondents did not support any of these management actions being taken.

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

The message from this research is clear: public opinion backs the science, and an overwhelming number of Tasmanians support what the scientific evidence is telling the government to do.

[7] 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/

Review of the *Living Marine Resource Management Act 1995*

The *Scalefish Fishery Rules Review* is long overdue, given how long some fish stocks have been depleting. However, the urgency of the proposed rule changes should be seen in the context of out-of-date legislation, the absence of relevant policy settings, and the fact that no State of the Environment Report has been published since 2009.

The LMRM Act is the primary legislation for administering the protection, development and management of living marine resources in Tasmanian waters.[8] Its objectives and regulations provide the framework for management of those resources, including for fisheries. The current, ongoing review of the LMRM Act—the first time the Act has undergone review since it was passed 28 years ago—is important context for the development of any new fisheries management arrangements.

The concurrent development of a *Harvest Strategy Policy for Tasmanian Wild Fisheries* is also important context for the *Scalefish Fishery Rules Review*. Deficiencies in the LMRM Act and the absence of related policy settings have the potential to flow into proposed rule changes, for example with regards to addressing First Nations rights, the impacts of climate change, and depleted and depleting species policy.

Sustainable development is the cornerstone of natural resource management in Tasmania. Schedule 1 of the LMRM Act 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."

Tasmania's current fisheries management framework is outdated. It is not keeping up with community expectations or modern practices. Its siloed approach and sector-based management are contributing to cumulative impacts on coastal waters being overlooked. The Australia Institute Tasmania recognises that the development of the *Harvest Strategy*

[8] *Living Marine Resource Management Act 1995* https://www.legislation.tas.gov.au/view/html/inforce/current/act-1995-025

Policy and associated guidelines seeks to address these issues; we have made a submission separately on the Drafts of these policy documents.

Contemporary ocean and fisheries management takes a holistic, integrated and coordinated approach, considering all uses and users of coastal waters and giving priority to the needs of ecosystems so as to allow them to remain healthy in the face of climate change and other increasing and competing pressures.

Recommendation 1:

The *Scalefish Fishery Rules Review* 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 Tasmania's marine estate.

MANAGING FOR HEALTHY AND RESILIENT ECOSYSTEMS

Beyond individual stock assessments and site-specific monitoring, it is difficult to develop a thorough understanding of the health of Tasmania's living marine resources. The Tasmanian Government has not conducted a state-wide assessment of the condition of Tasmania's marine environment for more than 14 years—despite a statutory requirement to produce a Tasmanian *State of the Environment* Report (SOE Report) every five years.[9] 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.

The 2009 SOE Report explained that it was not possible at that point to describe the status or trends in the conditions of estuarine, coastal and marine ecosystems due to insufficient information being available.[10] However, the report did identify issues associated with a lack of whole-of-government direction in environmental policies, and recommended improved alignment across government. It also recommended the development of a comprehensive environmental policy framework, including a risk assessment based approach and a long-term strategic environmental management plan.

The national *Australia: State of the Environment 2021* report highlighted that Tasmanian coasts were facing multiple significant pressures, and that action was needed to ensure the environment remained healthy and productive.[11] The report described increasing pressures

[9] State Policies and Projects Act 1993, s.29

[10] Tasmanian Planning Commission (2009) *State of the Environment Report: Tasmania 2009*.

[11] Australian Government (2021). *Australia: State of Environment Report 2021* https://soe.dcceew.gov.au

on species threatened with extinction, marine heatwaves, decimated giant kelp forests, range extended species and introduced pests, increasing salinity, overfishing and depleted fish stocks, along with harmful algal blooms and eutrophication (excessive nutrient enrichment leading to oxygen depletion), which are also linked to other ecological disturbances.

There are well-recognised tools for managing fisheries in the context of the changing climate. These include ecosystem-based fishery management, climate modelling, marine protected areas and dynamic stock assessments.[12] However, most broad-scale or ecosystem models are too uncertain for tactical uses such as setting Total Allowable Catches.[13] A 2017 review of integrated modelling to support decision-making for marine social-ecological systems in Australia identified important gaps in available capability.[14] Considerable uncertainty still exists especially where rapid change is underway, and recommended future considerations include the gathering of observational data to inform and test model representations.

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

In 2022, the Australian Marine Sciences Association published recommendations to this effect on ocean management under climate change:[15]

> 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 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

[12] 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.

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

[14] 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.

[15] AMSA (2022) *AMSA Position Statement: Climate Change*

times as much carbon per area as land-based forests[16] and, if undisturbed, can store carbon in sediments over hundreds or thousands of years. However, for their carbon sequestering values to be retained, disturbance from activities such as bottom trawling, dredging and coastal development must be prevented. (Bottom trawling, for instance, releases as much carbon as air travel).[17]

Recommendation 2:

The precautionary principle be applied to all fishery rule changes to support healthy and resilient ecosystems.

HABITAT PROTECTION

Habitat protection in Tasmania's coastal waters remains paltry. Four of Tasmania's nine geographically distinct marine bioregions are not protected at all, and over all, only 1.1% of State waters are fully protected; 2.7% are partially protected.[18] This is inadequate at the most fundamental level.

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.[19] Without such reference areas, there is no way to measure impacts or successes accurately.

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.[20, 21]

Tasmania's failings in habitat protection occurs despite the stated objectives of the LMRM Act, overwhelming evidence in support of the effectiveness of protecting habitat for

[16] International Partnership for Blue Carbon, https://bluecarbonpartnership.org/ viewed 11/11/2021

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

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

[19] Australian Marine Sciences Association (2019) *AMSA Position Statement on Marine Protected Areas (MPAs)*

[20] 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.

[21] Australian Marine Sciences Association (2019) *AMSA Position Statement on Marine Protected Areas (MPAs)*

multiple objectives, governmental commitments past and present (at both state and federal levels), and community support for action to protect Tasmania's coastal waters.[22,23]

There is currently a lack of coherence between Tasmanian and Federal government commitments to habitat protection. In June 2021, Australia became part of the High Level Panel for a Sustainable Ocean Economy, an international coalition of countries committed to conserving 30% of the world's oceans by 2030 in order to halt the loss of biodiversity.[24] 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 that 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; and implement a network of marine protected areas.

Recommendation 3:

The introduction of Tasmania's *Harvest Strategy Policy* and Scalefish Fishery Rule changes be accompanied by:

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

FIRST NATIONS RIGHTS

The LMRM Act defines Aboriginal activities as non-commercial and for cultural purposes. This language and its intent are not appropriate in the 21st Century. First Nations Tasmanians value healthy marine ecosystems as part of a range of associated values, including

[22] 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/

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

[24] Australian Government (2021) *Australia's leadership in sustainable ocean management* https://www.dcceew.gov.au/climate-change/policy/ocean-sustainability

integrated land and sea country access rights, spiritual and cultural practices and economic values.[25]

First Nations Tasmanians have successfully established their right to fish, but also expect to gain an economic benefit from the exploitation of their traditional resources. A comprehensive and modern approach to marine resource management should acknowledge this expectation and provide for its fulfilment. Further, the practices of First Nations Tasmanians provide relevant management strategies, which have not been adequately considered or incorporated into management approaches.[26]

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.[27]

Tasmanian Aboriginal communities are best placed to respond to fishery rules changes 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 4:

Appropriate recognition of the Traditional Owners of Tasmania and co-management of resources with First Nations Tasmanians be implemented in the development of all fishery rule changes.

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

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

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

Depleted and depleting marine life

Of the 22 species assessed in the 2020–21 *Scalefish Fishery Assessment*, six have been classified as depleted and one as depleting. The depleted species are the Sand flathead, Striped trumpeter, Bastard trumpeter, Southern garfish, Blue warehou, and Jackass morwong; the depleting species is the Southern calamari.

Table 1: Stock status, trends, importance, sector, and management responsibility for depleted and depleting scalefish.

Species	Status	Trend	Importance	Sector	Management
Sand flathead	**Depleted**	Depleting since 2014–15	Key	98% recreational	State (TAS)
Striped trumpeter	**Depleted**	Depleted between 2002–03 and 2009–10; recovering and undefined between 2010–12 and 2018–19; depleted since 2019–20	Key	Commercial & recreational	State (TAS)
Bastard trumpeter	**Depleted**	Depleted or depleting since 2002–03[a]	Key	Commercial & recreational	State (TAS)
Southern garfish	**Depleted**	Depleting between 2006–07 and 2009–10, and 2014–15 and 2016–17; depleted since 2017–18	Key	Mostly commercial	State (TAS)
Blue warehou	**Depleted**	Depleted since 2002–03	Key	>90% commercial; <10% recreational	Commonwealth
Jackass morwong	**Depleted** [b]	Overfished in late 2000s; classified as "not overfished nor subject to overfishing" since 2011	Minor	60-70% recreational	Commonwealth
Southern calamari	**Depleting**	Depleting since 2017/18	Key	Commercial & recreational	State (TAS)

Source: IMAS Scalefish Fishery Assessment 2020/21 and Tasmanian Scalefish Fishery Review – Public Consultation Paper 2023

[a] In 2010/2012 the species was not considered in the assessment report

[b] This assessment is assumed to have been derived from CSIRO research which revised biomass and recruitment estimates and found a continuing decline in productivity, although the Consultation Paper does not explain the classification.[28]

Fish stocks are commonly considered "depleted" if their biomass is 20% or less than unfished levels. This is the level at which stocks are unable to replenish themselves through reproductive output and are unlikely to recover to more productive levels.[29]

Most of the depleted scalefish stocks have been classified as either depleted or depleting for more than a decade, while two—the Bastard trumpeter and Blue warehou—have been so since 2002–03. Management strategies to date have not been working. To return to sustainable fisheries, fishing mortality must be reduced.

As Tasmania's *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.

Recommendation 5:

Fishery Rules be set in accordance with a Harvest Strategy Policy that commits to close targeted fisheries when species are classified as depleted, that is, when biomass estimates reach 20% or less of unfished biomass, 10% or more of the time.

DEPLETED AND DEPLETING SPECIES POLICY

It is concerning that there is no clear commitment from the Tasmanian Government to close fisheries when their biomass reaches 20% or below of unfished levels. Of further concern is that no timeframes for recovery have been articulated in the Department's *Depleted and Depleting Species Policy*. This contrasts with the advice of the Institute for Marine and Antarctic Studies (IMAS), which recommends management actions that aim to recover Sand flathead biomass to at least 40% of unfished levels in the next four to six years in order to see a rapid recovery trajectory, rather than implementing a moderate, long-term strategy.[30]

The Department's *Depleted and Depleting Species Policy* is policy on the fly. It is being developed in the absence of a finalised *Harvest Strategy Policy* for Tasmania. While the Australia Institute commends the commitment to recovering all depleted and depleting

[28] Day, Jemery; Bessell-Browne, Pia. 2021. Eastern Jackass Morwong (*Nemadactylus macropterus*) stock assessment based on data up to 2020 – development of a preliminary base case. CSIRO. http://hdl.handle.net/102.100.100/435823?index=1

[29] 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

[30] Correspondence from Sean Tracey, IMAS to Ian Dutton, NRE Tas, 1 March, 2023, *Scientific Advice on Sand Flathead Management Scenarios* https://fishing.tas.gov.au/Documents/Scientific-Advice-on-Sand-Flathead-Management-Scenarios.pdf

species to a sustainable status, for the benefit of all Tasmanians, the *Depleted and Depleting Species Policy* includes reference point settings that fall short of best practice standards used in other Australian jurisdictions.

The Department's short-term objective is to rebuild depleted stocks to at least 20% of unfished biomass, with a goal of 40% thereafter. However, several Australian jurisdictions have more ambitious goals, as the following sections explain.

Reference point settings

Harvest strategy policies can provide improved fisheries management if they set a target reference point to be achieved, as well as a limit reference point to be avoided.

The Commonwealth *Harvest Strategy Policy* (HSP) sets a target stock biomass at 48% of unfished biomass.[31] Critically, the policy requires that all targeted fish stocks remain above 20% of their unfished biomass for at least 90% of the time. If not, the stock is classified as depleted.

The Commonwealth HSP stipulates that if a stock is depleted, "[the Australian Fisheries Management Authority] must cease targeted fishing and develop a rebuilding strategy to rebuild the stock above its limit reference point... A rebuilding strategy will be required until the stock is above the limit reference point with a reasonable level of certainty".[32] As well as managing Commonwealth fisheries in line with best practice methods, this HSP serves as a guide for the development of state HSPs.

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.[33] 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.[34]

In the Southern Ocean, the rules applied to toothfish fisheries in which Australia participates include remaining above 50% of pre-exploitation biomass. This allows for the needs of dependent species and is part of an ecosystem based management approach. The Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR) has

[31] Department of Agriculture and Water Resource (2018) *Commonwealth Fisheries Harvest Strategy Policy*, https://www.agriculture.gov.au/sites/default/files/sitecollectiondocuments/fisheries/domestic/hsp.pdf

[32] Ibid, p13.

[33] 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.

[34] Ibid.

ecosystem based management at the core of the international agreement it implements. CCAMLR's harvesting principles can be summarised as:[35]

a) Maintain productivity of stocks;
b) Maintain ecological relationships and restore depleted populations; and
c) Ensuring that any negative effects be reversible within two to three decades, taking into account direct and indirect impacts, alien species, associated activities, environmental changes and the aim of biodiversity conservation.

STATE FISHERIES POLICIES

Most states in Australia have developed harvest strategy policies that have guided the development of harvest strategies for several fisheries in state waters.

Queensland

Queensland's *Harvest Strategy Policy* provides another example of clearly defined objectives with specified timeframes. This policy introduced new target reference points for all Queensland fisheries in 2021. These targets aim 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.[36]

New South Wales

The NSW *Harvest Strategy Policy* does not require targeted fishing to cease in response to stock depletion, but it does encourage rebuilding strategies to be developed before a stock is classified as depleted.[37] The policy recommends that two limit reference points be included in harvest strategies: one to define depleted status, which requires serious corrective action, and one to define the point at which the fishery must be closed completely, to protect the remaining biomass.[38] For example, in the *NSW Trawl Whiting Harvest Strategy*, the trigger to develop a rebuilding strategy is a stock being at or below

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

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

[37] Department of Primary Industries (2021) *NSW Harvest Strategy Policy,* https://www.dpi.nsw.gov.au/__data/assets/pdf_file/0018/1331532/Policy_June_2021_DPI-Template_26_August_Final.pdf

[38] Ibid p12.

25% of its unfished biomass.[39] Should the stock fall to less than 20%, no targeted fishing is permitted.

South Australia

The South Australian *Harvest Strategy Policy* does not define a specific management intervention if a stock becomes depleted. Instead, it recognises that if a stock becomes depleted, current management is not adequate and changes must be made immediately to enable the stock to rebuild towards a sustainable biomass within a specified timeframe. It also specifies that a higher level of uncertainty in the assessment of biological stock status requires more precautionary setting of reference points in order to maximise stock sustainability.[40]

Victoria

Victoria does not have an overarching harvest strategy policy, but management plans have been developed for key commercial and recreational fisheries in the state.[41] Harvest strategies have also been developed for certain fisheries, but there is no overarching policy to guide management rules for these fisheries.

Western Australia

The Western Australian *Harvest Strategy Policy* requires "immediate significant management action" if fishery stocks become depleted but does not require targeted fishing to cease.[42] The depletion of key indicator species in the West Coast Demersal Scalefish Resource (WCDSR) provides a case study for long term recovery strategies. In 2007, a stock assessment of WCDSR indicator species concluded that overfishing was occurring, and stocks were at risk of collapse.[43] The ensuing management intervention was the 2010–2030 recovery plan, which requires a 50% reduction in both commercial and recreational catch, as well as an annual two-month closure of the fishery.

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[39] Department of Primary Industries (2022) *NSW Trawl Whiting Harvest Strategy,* https://www.dpi.nsw.gov.au/__data/assets/pdf_file/0003/1355457/OUT20-10485-NSW-Trawl-Whiting-Harvest-Strategy.pdf

[40] Government of South Australia (2015) *South Australian Fisheries Harvest Strategy Policy,* https://pir.sa.gov.au/__data/assets/pdf_file/0020/267230/Harvest_strategy_policy_DECEMBER_2015.pdf

[41] Victorian Fisheries Authority (2022) *Fisheries Management Plans,* https://vfa.vic.gov.au/operational-policy/fisheries-management-plans

[42] Department of Fisheries (2015) *Harvest Strategy Policy and Operational Guidelines for the Aquatic Resources of Western Australia*, https://www.fish.wa.gov.au/Documents/management_papers/fmp271.pdf .

[43] Department of Primary Industries and Regional Development (2021) *West Coast Demersal Scalefish Resource Harvest Strategy 2021-2025* https://www.fish.wa.gov.au/Documents/management_papers/fmp305.pdf

The most recent stock assessment in 2021 showed that a 50% reduction in fishing mortality has successfully halted the decline of indicator species, but stock recovery has been limited.[44] Of particular concern was the lack of mature breeding individuals in key indicator species. These individuals are critical for replenishing populations under fishing pressure, and the lack of them indicates that while fishing mortality is below the 50% benchmark defined in the recovery plan, stock have not adequately recovered. As such, key indicator species have continued to be at high risk of depletion, and further management intervention required.[45]

A five-year harvest strategy for the WCDSR was implemented in 2021. The objective of the harvest strategy was to support the recovery of all indicator species by 2030 by restricting fishing mortality and providing targeted protection for key spawning aggregations.[46] A total ban on recreational fishing of demersal scalefish has now been implemented for a total of six months a year (discontinuous), and reduced catch limits have been imposed outside of the closures.[47]

Reference point settings in Tasmania's Harvest Policy should be in accordance with best practice Commonwealth and other jurisdictions' settings. Both Commonwealth and Southern Ocean examples have been demonstrated to work well across a range of species over the long term.

Recommendation 6:

Fishery Rules be set in accordance with a Harvest Strategy Policy that applies to all Tasmanian fish stocks and commits to:

(i) Set a precautionary stock biomass target of at least 48% of unfished biomass, in accordance with CSIRO research, to be achieved within specified timeframes
(ii) Require all targeted fish stocks remain above 20% of the unfished biomass for at least 90% of the time.

[44] Fairclough et al (2021) *2021 assessment of the status of the West Coast Demersal Scalefish Resource* https://www.fish.wa.gov.au/Documents/research_reports/frr316.pdf

[45] Ibid.

[46] Department of Primary Industries and Regional Development (2021) *West Coast Demersal Scalefish Resource Harvest Strategy 2021-2025* https://www.fish.wa.gov.au/Documents/management_papers/fmp305.pdf

[47] Department of Primary Industries and Regional Development (2023) *Management measures for the recreational, charter and commercial sectors*, https://www.fish.wa.gov.au/Fishing-and-Aquaculture/demersal/Pages/default.aspx

Proposed rule changes

END RECREATIONAL GILLNETTING

Recreational gillnetting negatively impacts target and non-target fish species, threatened species and other wildlife including marine mammals and seabirds.[48]

Scientists from IMAS have called for urgent and immediate action to address the plight of the endangered Maugean skate,[49] and called for an immediate curb on activities that could affect the skate. These activities include fish farming, recreational gillnet fishing, and changes in river flow from upstream dams.

Recent research conducted by The Australia Institute found that over 40% of Tasmanians supported an immediate ban on recreational gillnetting, while over 80% supported one or more of the key management actions proposed to strengthen protection of marine life.[50]

Recommendation 7:

The Tasmanian Government bring forward its commitment to phase out recreational gillnetting by 2030 and immediately end it, without exception.

OTHER PROPOSED CHANGES

The Australia Institute Tasmania supports in principle the proposed rule changes, including changes to size limits, as well as to bag, possession and boat limits for all depleted and depleting species. We also support other proposed changes, but our research finds that the Tasmanian Government could go further to address the long-term depletion of several of Tasmania's key scalefish stocks with measures that would be in line with other Australian jurisdictions.

Recommendation 8:

The proposed changes to scalefish fishing rules be implemented as the minimum response required, including changes to species size, bag, possession and boat limits.

[48] Clark G, Fischer M, Hunter C (2021). *Australia state of the environment 2021: coasts, independent report to the Australian Government Minister for the Environment*, Commonwealth of Australia, Canberra.

[49] Moreno & Semmens (2023) *Interim report - Macquarie Harbour Maugean skate population status and monitoring*, IMAS https://imas.utas.edu.au/__data/assets/pdf_file/0007/1655611/Maugean-skate-2021-interim-report-FINAL.pdf

[50] 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/

Recommendation 9:

Mandatory requirements be implemented for:

(i) Vessel Monitoring Systems (VMS) for all commercial vessels operating in Tasmanian waters; and
(ii) Registration and catch reporting for charter vessel operators and passengers.

Introduce recreational fishing licenses

Recreational licences are required to catch scalefish in Victoria, New South Wales, and Western Australia. Tasmania, South Australia, Northern Territory and Queensland are yet to introduce recreational licences for scalefish.

Recreational fishing licences are used to improve fisheries management. Licences help with catch reporting to improve data used to inform fisheries management. The funds raised from licence fees contribute to the cost of managing fisheries and associated infrastructure.

Recommendation 10:

A recreational fishing licence for scalefish fishing be introduced in Tasmania, in line with Victoria, NSW and WA's requirements.

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.

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

Tasmanians want to protect their marine life, and the Tasmanian government should take seriously the fact that Tasmanians appear to have lost faith in its ability to undertake meaningful reform to protect the environment. The message from The Australia Institute's recent research is clear: public opinion backs the science, and an overwhelming number of Tasmanians support what the scientific evidence is telling the government that it needs to do.

The Australia Institute Tasmania commends the proposed rule changes as the minimum response required. However, without strengthening key aspects of the Fishery Rules, improvements may be limited, and the opportunity may be missed to end overfishing and move Tasmania towards a more integrated approach to marine management.

To this effect, The Australia Institute Tasmania recommends that:

1. The Scalefish Fishery Rules Review and related initiatives be introduced as part of a Tasmanian Government commitment to establish an overarching legal and policy framework for integrated ecosystem based management for Tasmania's marine estate.

2. The precautionary principle be applied to all fishery rule changes to support healthy and resilient ecosystems.

3. The introduction of Tasmania's Harvest Strategy Policy and Scalefish Fishery Rule changes be accompanied by:

(i) A Direction to recover overfished stocks and prevent future overfishing within specified timeframes, based on best available science.

(ii) A structural adjustment package which aims to:

a) reduce excess effort and improve profitability for the remaining fleet through a government buy-out; and

b) assists in implementing a network of marine protected areas in Tasmania.

4. Appropriate recognition of the Traditional Owners of Tasmania and co-management of resources with First Nations Tasmanians be implemented in the development of all fishery rule changes.

5. Fishery Rules be set in accordance with a Harvest Strategy Policy that commits to close targeted fisheries when species are classified as depleted, that is, when biomass estimates reach 20% or less of unfished biomass, 10% or more of the time.

6. Fishery Rules be set in accordance with a Harvest Strategy Policy that applies to all Tasmanian fish stocks and commits to:

(i) Set a precautionary stock biomass target of at least 48% of unfished biomass, in accordance with CSIRO research, to be achieved within specified timeframes
(ii) Require all targeted fish stocks remain above 20% of the unfished biomass for at least 90% of the time. If not, the stock is classified as depleted.

7. The Tasmanian Government bring forward its commitment to phase out recreational gillnetting by 2030 and immediately end it, without exception.

8. The proposed changes to scalefish fishing rules be implemented as the minimum response required, including changes to species size, bag, possession and boat limits.

9. Mandatory requirements be implemented for:

(i) Vessel Monitoring Systems (VMS) for all commercial vessels operating in Tasmanian waters; and
(ii) Registration and catch reporting for charter vessel operators and passengers.

10. A recreational fishing licence be introduced for scalefish fishing in Tasmania, in line with Victoria, NSW and WA's requirements.