

South East Fishing Industry Submission:

South-east Marine Parks Network Management Plan 2023-2033

22 May 2023

Contact:
Simon Boag
Executive Officer SETFIA
C/-PO Box 1125
Lakes Entrance Vic 3909
simonboag@setfia.org.au



sustainable
fishing
practices
protect
our future



SUMMARY

This submission is submitted on behalf of two fishing industry associations who combined represent the two largest fisheries (by volume) operating within and around the South-East Marine Park Network. These two fisheries are the Commonwealth Trawl Sector and the Gillnet, Hook, and Trap Sector. These fisheries catch 79% of the for-human-consumption wildcatch seafood production from within and around the network available to Australians (not exported).

The Australian Government has a long-established, complex, and extensive system of fishing rights. Operators in these two fisheries have built businesses and livelihoods upon this system in good faith. The total annual cost levied on these fisheries by the Australian Government is ~\$6.0m (2023/24). The value of the rights in these fisheries is currently ~\$450m. A case study is provided in this submission which shows that when grounds are closed, fishers are forced to move to new less productive areas and as catch costs increase, the value of these Government issued rights decreases.

Australia has met and exceeded its international obligations, including Aichi Target 11, with far more than 10% of coastal and marine areas under protected area status. The total area of Australian marine waters under marine protection is now 45%. The south-East region is also on track to meet and exceed the renewed biodiversity Targets (30x30) with 43% of marine and coastal areas under protection given the inclusion of the new Macquarie Island MPA.

CSIRO research⁸ shows that benthic marine invertebrate life in south-east Australia is healthy with biomass between 82-94% of their pre-fishing levels (and increasing) depending on taxa. This submission contends that this contrasts very well with Australia's record of losing 40% of its forests and half its wetlands. The same research found that the CTS trawl fishery only touches the seafloor in 6% of the fishable grounds available to it (open ground between 3 miles and 1,000m deep not to the extent of the EEZ). This also compares favourably with the farming of 26% of the Australian landmass.

The IUCN red list ranks Australia's extinction record as the 5th worst in the world (noting there have been no marine fish extinctions). This has occurred even though 20% of Australia's landmass is under protection. These extinctions have been caused by introduced predators and changed fire management regimes which are not mitigated by protected status management. Similarly, the south-east marine environment faces growing climate change threat, but this threat is not addressed by more fishing lockouts.

Since 2004 no-fishing zones have exploded with 85% of the CTS trawl fishery and 90% of the GHaT shark (gillnet) fishery now closed to seafood production by marine parks and fishery closures. The south-east fishing industry is eager to support Australia's transition to renewable energy given the climate change threats faced by these fisheries and has written to Ministers Bowen and Watt explaining this and proposing a way forward. However, when windfarm development begins in ~2030 the three new renewable energy zones within the South East Marine Park Network will further displace catch and south-eastern seafood production will fall even further to below 21,000 tonnes. When this occurs, the local seafood *available* (that not exported) to Victorians and Tasmanians will drop to an all-time low of ~15,000 tonnes and 7.2 million south-eastern Australians will have access to only two meals a year.

Conversely, consumer research in Victoria shows a preference for local seafood, belief that the seafood industry contributes to tourism, increasing importance placed on food provenance/experiences and belief that the fishing industry contributes to the appeal of coastal towns.

South-east Windfarm Proponents will report that SETFIA and SSIA were helpful in assisting them to submit *Feasibility Licence* applications in Gippsland recently. The fishing industry did this because the south-east is an identified climate change hotspot, and this is already impacting fisheries. Given plans for three Renewable Energy Zones around the South East Marine Network there is no space for additional marine parks. Further, in the same way that terrestrial protected areas do not mitigate the threat of introduced predators, marine parks

will not mitigate the impact of climate change and the Australian community should not be misled into thinking that less fishing is the solution.

Each of the two fisheries covered by this submission will be impacted differently by additional marine park fishing lockouts:

1. There is understandably no CTS trawl fishing allowed in the South East Marine Parks Network. Marine parks and fishery closures mean that the trawl fishery now only has access to 15% of the ground once available. It is hard to imagine where a new marine park might be placed.
2. The small size and high complexity of regulation in the GHaT shark fishery mean it faces Government levies six times higher per unit of catch than in the trawl fishery and eight times higher per kg than the same fish caught in New Zealand. The fishery has been pressured by long-term below reasonable return financial performance and this is now recognised by the Australian Government (ABARES). Regulatory burden, high levies, trade-exposure, and reduced fishing areas mean that any further impacts on efficiency might see it hit a crash point and collapse economically. This is perverse given its healthy fish stocks, high catch rates and strong demand.

RECOMMENDATIONS:

1. That more be done to promote the healthy status of the south-east's marine benthic habitat and role played by the South East Marine Park Network and limited seafood production areas.
2. That the South East Marine Park Network management plan be maintained¹ without amendment for three primary reasons:
 - A. Marine parks and fishing lockouts do not address the most serious threat facing the marine environment – *climate change*.
 - B. That offshore marine windfarms, which do address climate change, means that there is no space in the south-east for windfarms, additional marine park impacts, and seafood production.
 - C. Once new areas of Macquarie Island become marine parks coverage in the south-east will be 43% (Australia has already exceeded its commitment to CBD Target 3 "30x30").

And secondarily because:

- D. Only three meals per person per annum of local seafood are available for south-eastern Australians. There is nothing to be gained and much to be lost by reducing this.
- E. A preference amongst south-eastern Australians for local seafood with known provenance and their belief in the industry's contribution to tourism and to the appeal of coastal towns.
- F. Any further inefficiency imposed by marine park impacts upon the already pressured GHaT shark fishery might see it collapse economically. This would see imports pass the Australian Government's current estimate that 70% of seafood consumed in Australia is imported.

¹ SETFIA/SSIA understand that some fishing sectors who do not impact the seafloor and catch fish species moving through marine parks may propose some relaxation of zoning – this submission supports their proposals but does not proposed relaxed zoning for trawl or shark fishing methods.

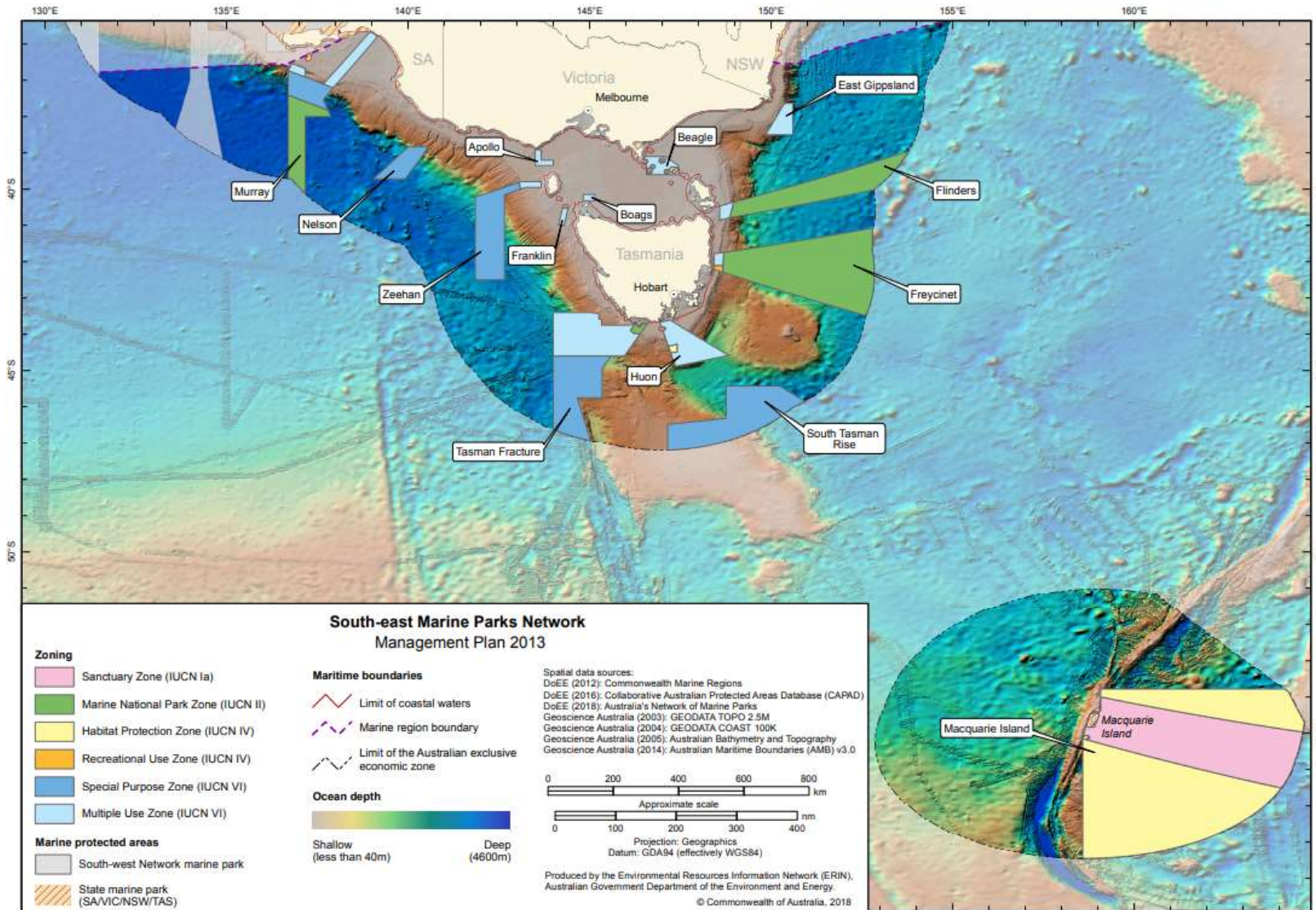


Figure 1 The South East Marine Parks Network

CONTENTS

SUMMARY	ii
RECOMMENDATIONS:	iii
1. BACKGROUND	6
1.1. This submission is on behalf of SETFIA and SSIA	6
2. THE FISHING INDUSTRY HAS STRONG AND ENTRENCHED COMMERCIAL RIGHTS	8
2.1. Commercial rights in the fishing industry.....	8
2.2. The value of rights is driven by many factors.....	8
2.3. Government cost recovery occurs against these property rights.....	8
2.4. CASE STUDY: loss of grounds will impact fishing right asset values.....	8
2.5. Prospectivity	10
3. REVIEW OF SOUTH-EAST MARINE PARKS 16 YEARS AFTER IMPLEMENTATION	11
4. the state of the south-east seafloor	13
5. MARINE PARKS DO NOT ADDRESS CLIMATE CHANGE IN the south east.....	14
6. AUSTRALIA’S COMMITMENT TO INTERNATIONAL AGREEMENTS RELATING TO MARINE PARKS.....	16
7. EXISTING NO-FISHING ZONES are significant & additional exclusions are scheduled	17
8. BENEFITS OF A LOCAL SEAFOOD INDUSTRY	21
9. CRASH POINT: COST RECOVERED LEVIES & trade exposure	22

1. BACKGROUND

1.1. This submission is on behalf of SETFIA and SSIA

This submission is on behalf of two industry associations representing the two largest fisheries operating in the South-East Marine Reserve Network. Both are managed by the Commonwealth Government. Combined these two fisheries catch 79% of the seafood, within the South-East Marine Park Network (Table 1). These two groups are:

1. The South East Trawl Fishing Industry Association (SETFIA) representing the Commonwealth Trawl Fishery (CTS)

A not-for-profit entity representing the interests of trawl fishers, quota owners, wholesalers, and others with a stakeholding in the CTS trawl fishery. Members pay an annual voluntary fee to the Association and elect a board of their peers from within membership. More than 85% of the CTS' quota owners and fishers are SETFIA members. The fishery uses Danish seine and board trawl gear types.

2. The Southern Shark Industry Alliance (SSIA) representing the Gillnet, Hook, and Trap Fishery (GHaT).

Represents those with an interest in the GHaT fishery. The fishery catches the gummy shark, also known as flake, the most popular fish and chip raw material with the Australian consumer. The fishery mostly uses demersal (on the seafloor) gillnets, but also fishes with longlines, droplines (a vertical form of longlining) and traps to target pink ling, blue eye trevalla and gummy shark.

Fishing grounds for each fishery are shown in Figure 2.

These two submitting fisheries are shown embolden in the context of other commercial marine fisheries operating in the South East Marine Park Network in Table 1 below.

Table 1: Fisheries with catch from grounds overlapping and around the South-East Marine Parks Network.

Fishery	Jurisdiction	Approximate annual fishery catches in SE Marine Park Network (Landed tonnes)
Commonwealth Trawl Sector (CTS – SETFIA)	Commonwealth	17,000
Gillnet, Hook, and Trap Fishery (GHaT – SSIA)	Commonwealth	1,400
Scallop Fishery (Central Zone)	Commonwealth	2, 732
Victorian wildcatch fisheries not exported ²	Victoria	2,026 ³
Tasmanian wildcatch fisheries not exported ⁴	Tasmania	2,972
TOTAL		23,398

² Victorian fisheries production 2021/22 less crayfish (export), abalone (export) and sardines (bait)

³ https://vfa.vic.gov.au/data/assets/pdf_file/0003/940143/VFA-Commercial-Fish-Production-Information-Bulletin-2021~22.pdf

⁴ Tasmanian fisheries less crayfish (largely exported) and abalone (export).

Indicative map only

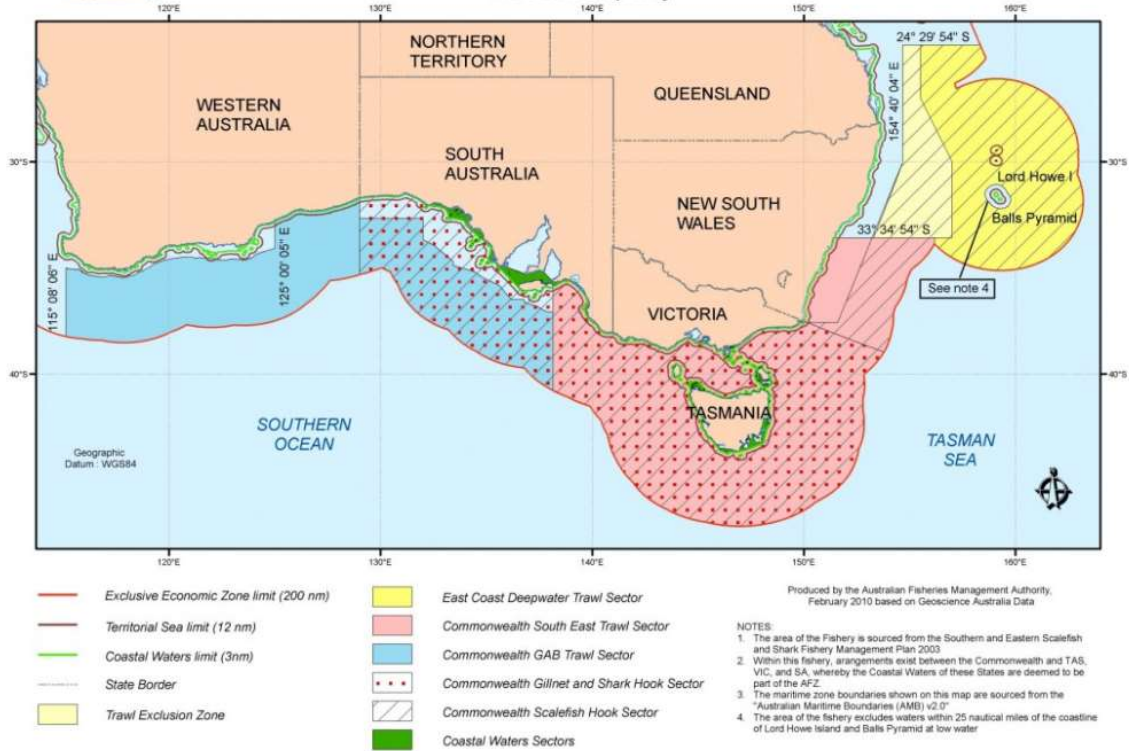


Figure 2: Area of the Commonwealth Government managed GHaT (red dots) and CTS (pink) fisheries

2. THE FISHING INDUSTRY HAS STRONG AND ENTRENCHED COMMERCIAL RIGHTS

2.1. Commercial rights in the fishing industry.

In the CTS and GHaT rights exist as an *Access Right* and a *Quota Right*. The access right is called a vessel statutory fishing right (SFR) and allows access for a fishing vessel in the fishery. A quota SFR allows fishers to catch an annual share of the sustainable take.

Quota and vessel SFRs are sometimes owned by active fishers but is also owned by entities that do not fish. In this case fishers and quota owners reach a commercial agreement where the quota or vessel SFR is leased to the fisher, enabling them to fish.

2.2. The value of rights is driven by many factors.

Fishing right values are determined by many factors (some of which have interwoven relationships) including but not limited to:

- a. Revenue; market price of fish, ease of catch, fish demand, variability of demand;
- b. The cost to catch; distance from port to fishing grounds, availability of fishing grounds, fishing method, degree of stock aggregation, fish abundance;
- c. Profits (a – b);
- d. Biological risk; the likelihood of variation in the sustainable catch that can be taken;
- e. Science; the accuracy of the sustainable catch that can be taken; and,
- f. Environmental issues; social licence and the emergence of 3rd party sustainability accreditations.

The total value of access rights and quota rights in the CTS and GHaT fisheries is approximately \$450m. Thus, any reduction in the value of these rights is a significant impairment to the balance sheets of south-eastern fishing companies.

2.3. Government cost recovery occurs against these property rights

The cost to manage the GHaT and CTS fisheries is largely cost-recovered by the Australian Government from the holders of these two commercial rights.

Table 2: Levies cost recovered via charges on fishing property rights.

Fishery	Approximate annual Total Levy 2023/24	Approximate annual fee paid to the Australian Government per landed tonne of catch
Commonwealth Trawl Sector	\$3.5m	~\$206
Gillnet, Hook, and Trap Fishery	\$2.5m	~\$1,430
TOTAL BOTH FISHERIES	\$6.0m	

2.4. CASE STUDY: loss of grounds will impact fishing right asset values

The clearest example of how reduced access to fishing grounds negatively impacted the value of the commercial fishing right occurred in the GHaT fishery.

Following interactions between gillnet vessels with endangered Australian sea lions, a management decision⁵ was made around 2010/11 to implement a range of area closures totalling 18. This closure prevented gillnets from being set in the areas of key sea lion habitat and near breeding colonies (green shaded area in Figure 3).

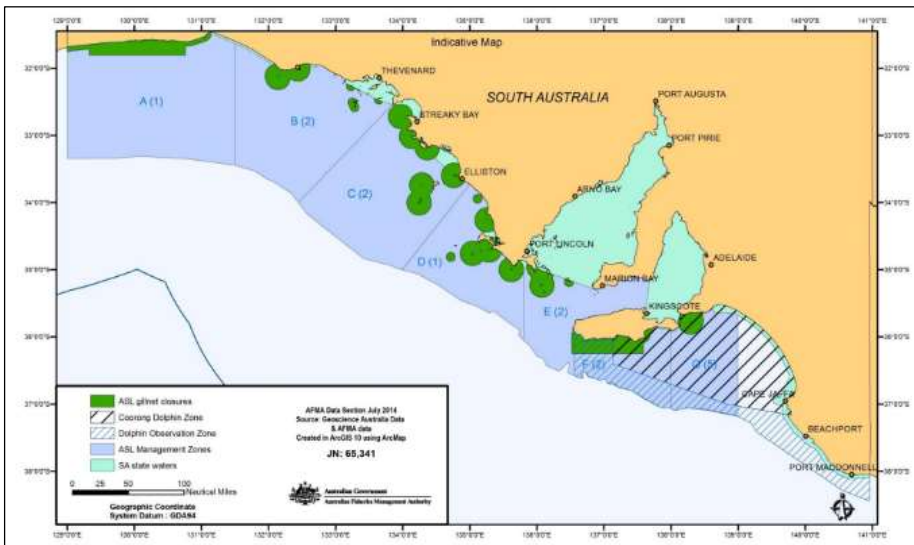


Figure 3: Gillnet closures for the protection on marine mammals in South Australia – Australian sea lion closures shown in green.

When grounds were closed, gummy shark became more difficult to catch and catch costs increased. Vessels deployed into other fisheries and there were less vessels targeting gummy shark. Vessels had a lower willingness to pay for quota and there was lowered demand so therefore the lease price for quota dropped.

As a result, gummy shark quota capital value fell by one quarter from ~\$40,000/tonne to ~\$25,000/tonne. Based on the size of the quota this represented a total capital loss (asset impairment) of ~\$25m (see Figure 3). The same chart also shows that this value drop occurred even through the retail price of gummy shark continued to climb (likely due to reduced supply of gummy shark into the market).

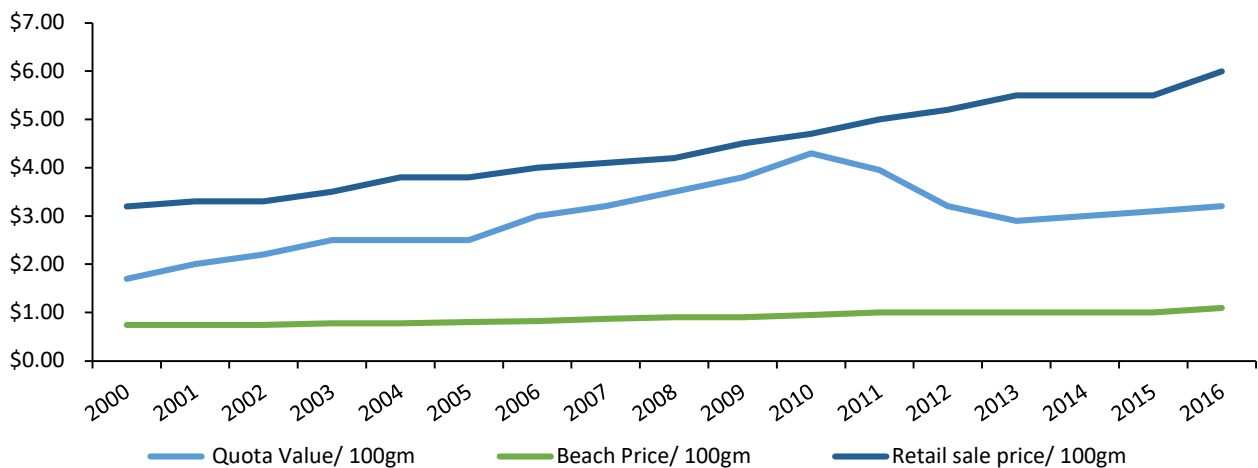


Figure 4: Gummy shark quota value, beach price and retail price – all per 100g.

⁵ Page 20 <https://www.afma.gov.au/sites/default/files/uploads/2014/03/Australian-Sea-Lion-Management-Strategy-2015-v2.0-FINAL.pdf>

2.5. Prospectivity

Prospectivity is a term first used by the mining industry to describe the potential for future discoveries of valuable resources that might one day be extracted. The same phenomenon exists in commercial fishing. Thus, some of the value of the permit SFR is the potential to fish in new areas. Over the last five years new fisheries have developed in the south-east including an octopus trap fishery and a hagfish pot fishery. Reducing the areas open to fishing, even if not used, further reduces the value of these rights.

3. REVIEW OF SOUTH-EAST MARINE PARKS 16 YEARS AFTER IMPLEMENTATION

The South-East Commonwealth Marine Reserves Network Management Plan 2013–23 (the Plan) was implemented in 2013, though the parks were officially proclaimed six years earlier in 2007 and have actually been in place for 16 years.

In 2021 the Director of National Parks engaged *Sustineo* to conduct a review⁶ into the implementation of the Plan. The goal of the Sustineo evaluation was to establish clear recommendations and lessons that could be implemented as Parks Australia developed the next iteration of the SE Management Plan, reporting on implementation effectiveness, lessons learned and a list of recommendations.

A significant finding is that the South East Network is a fulcrum of innovative conservation management activity and in-depth research in an area of previously low knowledge. These combine to generate profound scientific energy and new understanding of a unique region of the Commonwealth Reserves estate. In this respect, the SE Network and the progress made against planned outcomes in its Management Plan are exemplars for Parks Australia’s management approach.

One of the pillars of Parks Australia compliance monitoring in the SE Network is the Vessel Monitoring System (VMS) which ensures compliance.

The South-eastern commercial fishing industry had different hopes for the network. These were:

1. Increased social licence.
2. Reduced need for additional fishery management closures.
3. Reduction in management cost and complexity given risk-catch-cost mantra.

Risk-catch-cost is a widely accepted principle of fishery management and is noted on page 9 in the Commonwealth Fisheries Harvest Strategy Policy Framework⁷. Essentially it is recognition that cost to manage a fishery, catch and risk are all related having influence on each other. As risk reduces, management cost reduces, and catch can increase. However, as catch increases, risk increases and management cost increases. It follows then that given the high level of benthic protection provided by marine parks that management cost should have decreased.

However, the need for fishery closures within the South-east network has accelerated in recent years with three upper-slope dogfish closures in the South East Bioregion, and recently five “rebuilding” closures” also implemented.

The fishing industry would argue that its social licence has not increased with most Australians unaware that there is a long-established network in the south-east.

Further, Figure 5 shows that AFMA levy budgets showed a trend of generally increasing management cost even though during this time much of the grounds available to these two fisheries were closed (i.e., risk was significantly lowered).

⁶ <https://parksaustralia.gov.au/marine/files/south-east/Updates/SE-Network-Evaluation-Report.pdf>

⁷ Commonwealth Fisheries Harvest Strategy Policy Framework for applying an evidence-based approach to setting harvest levels in Commonwealth fisheries Department of Agriculture and Water Resources Second Edition <https://www.agriculture.gov.au/sites/default/files/sitecollectiondocuments/fisheries/domestic/hsp.pdf>

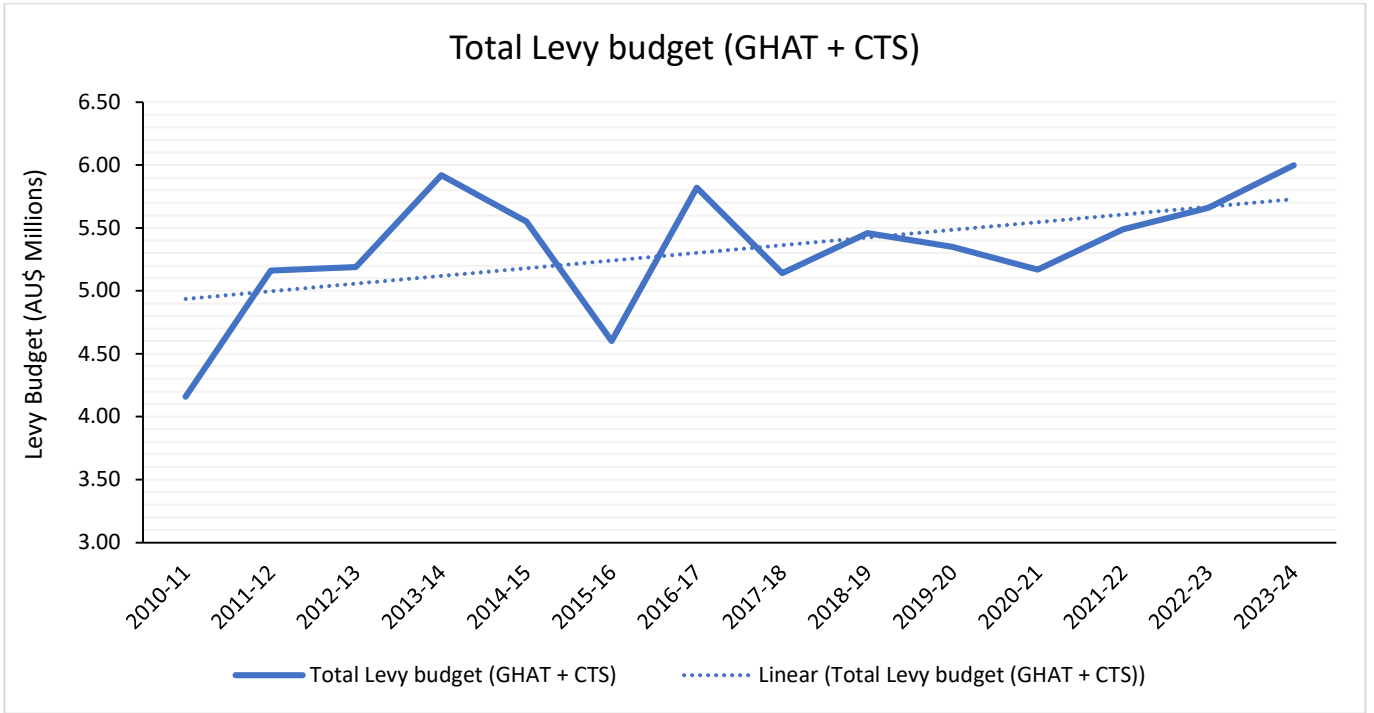


Figure 5: CTS and GHAT levy budgets over time

4. THE STATE OF THE SOUTH-EAST SEAFLOOR

Trawling is potentially damaging to some seafloor habitats. However, the CTS trawl fishing footprint is limited by several factors:

- the permitted grounds (area allowed to be fished),
- unfishable ground that is too rough and too risky to fish,
- fish productivity: some areas are non-productive and have not been historically fished,
- the fishing ground's proximity to ports of domicile, markets and other services,
- fishery closures put in place to manage fish stocks,
- marine parks put in to protect sensitive marine habitats and to provide reference points,
- other closures such as petroleum safety zones to protect potentially fragile oil/gas seabed infrastructure,
- future renewable energy areas where it is not safe to fish and fishing is excluded.

A 2015 study⁸ by the CSIRO found that only the same 6% of the South-East Australian seafloor is currently trawled annually because trawling is aggregated into a small area. The same study found that invertebrate groups were at 82-94% of their un-trawled abundance due to licence buybacks, fishery closures and marine parks and were continuing to increase.

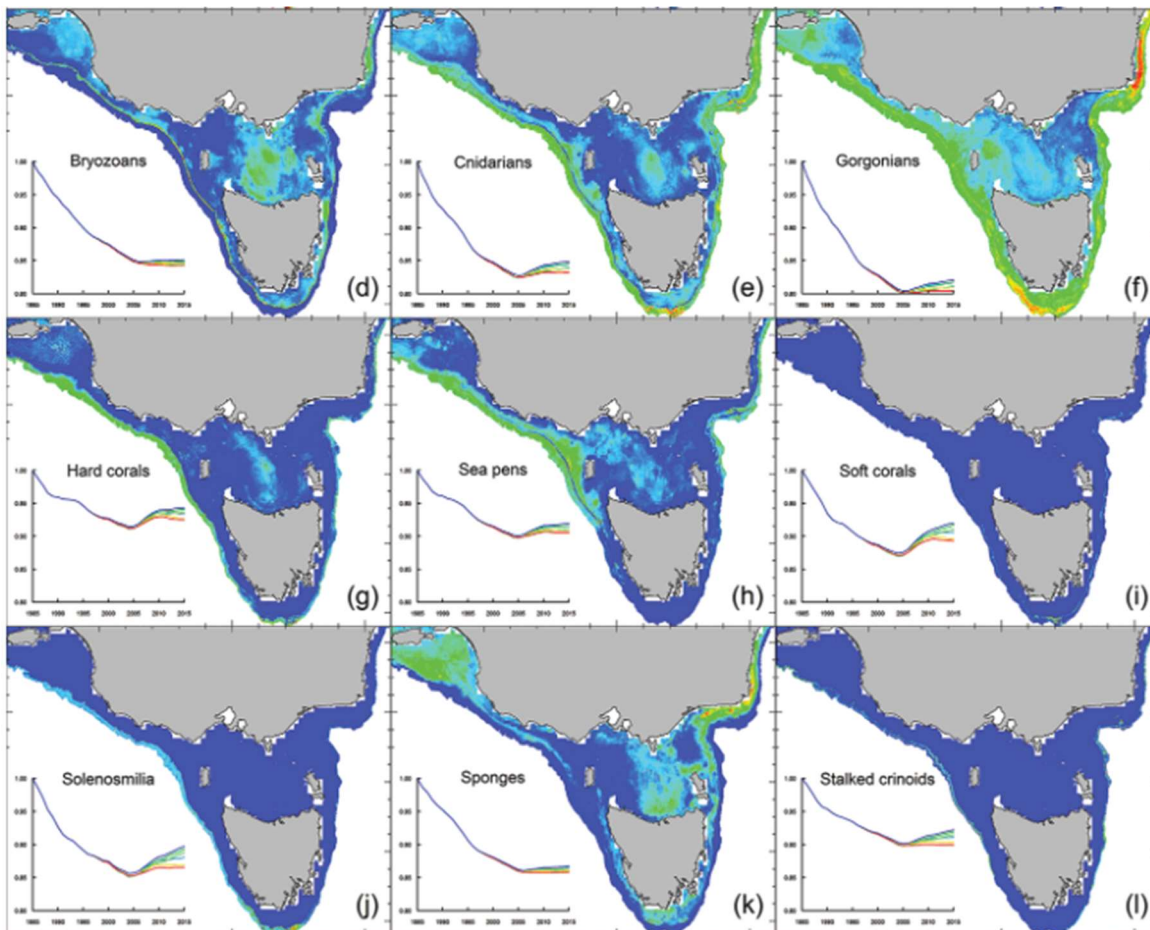


Figure 6 (Pitcher 2015) Images and predicted distributions of 10 major taxa types of habitat forming benthos (relative density: blue=low through to red=high). Each inset plot shows predicted abundance time-series, relative to 1985, from simulation modelling of trawl effort on the taxa type distribution (from no management interventions to all interventions).

⁸ <http://nerpmarinebiodiversity2015.report/predicting-benthic-impacts-and-recovery-to-support-biodiversity-management-in-the-south-east-marine-region/>

5. MARINE PARKS DO NOT ADDRESS CLIMATE CHANGE IN THE SOUTH EAST

One hundred years of the South-East providing healthy trawl caught seafood in relation to the loss of 6-18 per cent of the south-east region's invertebrate abundance (with continued rebuilding) contrasts favourably to the loss of 40% of Australia's forests and half of its wetlands. Furthermore, the annual trawl fishing of 6% of the south-east seafloor compares very favourably with the farming of 26% of the Australian landmass.

Sadly, Australia's terrestrial animal extinction record is poor with 67 species lost. This list includes mammals, birds, frogs, reptiles and one fresh water fish now extinct. In contrast there has not been a single marine fish extinction. This extinction rate of non-marine creatures is evident despite the Australian landmass being 19.75% protected by more than 13,500 protected areas⁹.

The *Proceedings of the National Academy of Sciences* journal published an article in 2015¹⁰ that aimed to understand what was driving Australia's extinction rate finding that it was, "the loss of Australian land mammals is most likely due primarily to predation by introduced species, particularly the feral cat, *Felis catus*, and European red fox, *Vulpes vulpes*, and changed fire regimes". Protected areas do not mitigate the threat presented by introduced predators and this explains the continued high rate of extinction in Australia.

In 2019 the *Nature Journal* published an article titled, *Recent pace of change in human impact on the world's ocean*¹¹. The paper considered the magnitude of human driven threats confronting the world's oceans by considering 14 human stressors (including climate change, fishing, land-based pressures, and other commercial activities) on 21 different marine ecosystems.

Figure 8 plots the annual change across all human stressors considered on 21 different global marine ecosystems. The human stressors are grouped by colour: climate change (pinks), shipping (greens), pollution (oranges), six types of commercial fishing (blues). It is clear from the plot that there is hardly any increasing risk from fishing present for any ecosystem. An examination of Australia's performance (Figure 9) within the same analysis shows the same trend of minimal or no increase in fishing threats but overwhelming growth in the impact of climate change.

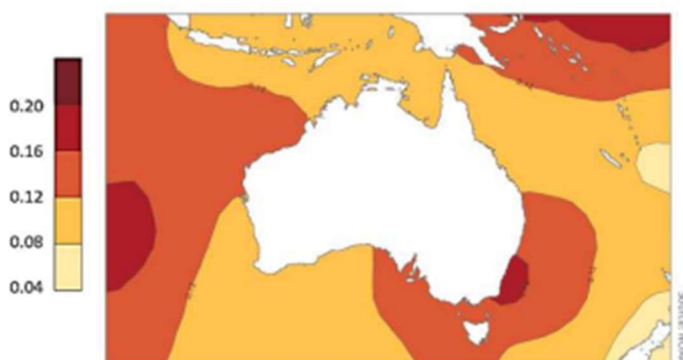


Figure 7 Trend in SST from 1950–2021 (degrees Celsius per decade). Source: CSIRO (via AFMA website¹²)

AFMA¹² report that "South-East Australia is a global hotspot for ocean warming. Sea surface temperatures have increased by 1.2°C since 1950, and a further 0.3-1.2°C increase is expected by 2040".

⁹ <https://www.dceew.gov.au/environment/land/nrs/science/protected-area-locations>

¹⁰ <https://www.pnas.org/doi/10.1073/pnas.1417301112>

¹¹ <https://www.nature.com/articles/s41598-019-47201-9>

¹² <https://www.afma.gov.au/sites/default/files/2023-02/climate-impacts-south-east-fisheries-factsheet.pdf>

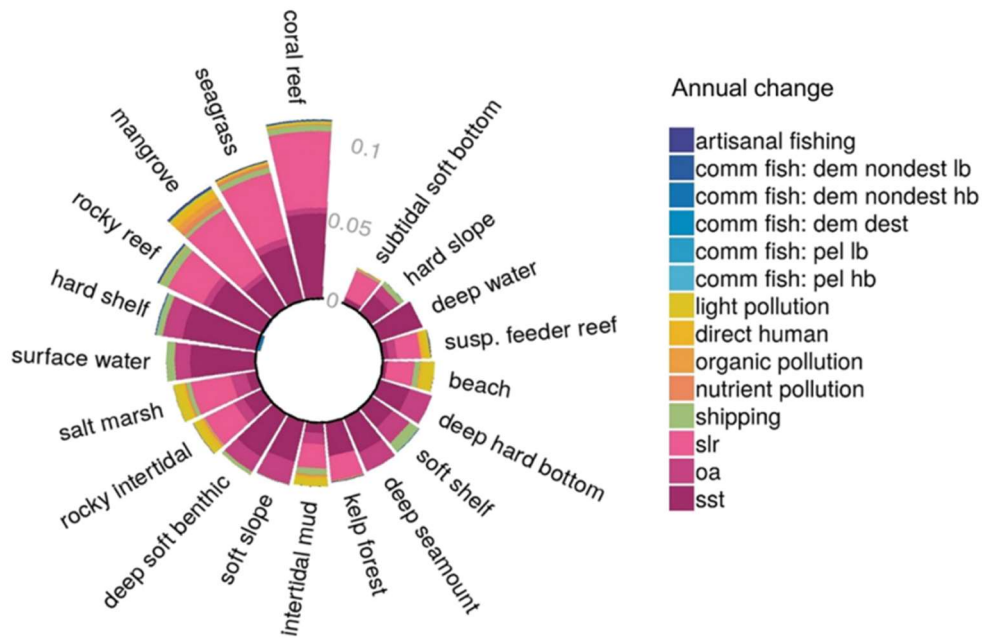


Figure 8 Halpern et al (2019): Cumulative human impacts on marine ecosystems - annual change in all 14 human impacts comprising the cumulative impacts for each marine ecosystem, with outer bars above zero indicating increasing impacts and inner bars below zero indicate decreasing impacts.

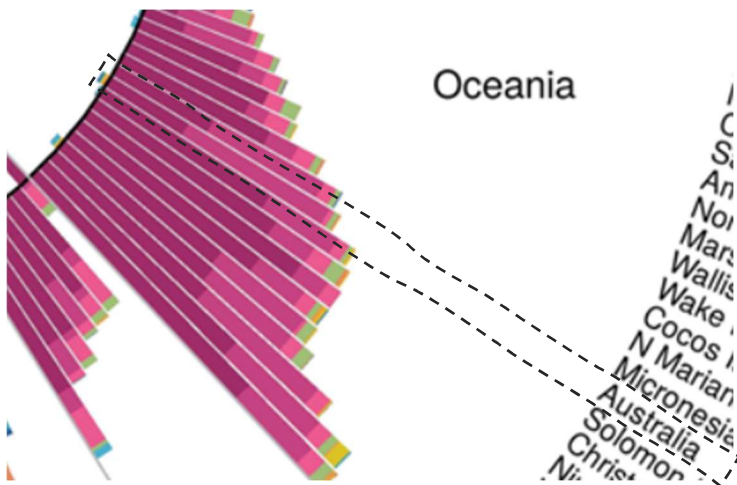


Figure 9 Extract from Halpern et al (2019): Cumulative human impacts on marine ecosystems by country. Partial reproduction and zoom-in on Australia highlighted.

This paper contends that the south-east's marine environment is in increasingly good shape but is confronted by significant climate change threats. Marine parks do not address these threats.

6. AUSTRALIA'S COMMITMENT TO INTERNATIONAL AGREEMENTS RELATING TO MARINE PARKS

Australia is a signatory to several multilateral international conventions and treaties that concern and direct the use of marine resources by nation-states. The *Convention on Biological Diversity* (CBD) is one such convention. In 2010 under CBD the world developed several strategic goals and targets, known as the *Aichi Targets*, with the overarching objective to halting biodiversity loss. One specific target (Target 11) called on nations-state to:

By 2020, at least 17 per cent of terrestrial and inland water, and 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes.

Australia met and exceeded this target as it reached 45% combined Commonwealth, State and Territory marine park estate locked up in marine reserves. However, though Australia reached and exceeded this target, much of the rest of the world did not and arguably the Aichi Targets failed in their objectives to protect biodiversity.

In December 2022, Australia and all other signatory nation-states to the CBD met in Montréal for the *15th Conference of the Parties* (CoP15). Parties agreed upon and settled the *Kunming-Montreal Global Biodiversity Framework*, the overarching objective of which is to halt and reverse nature loss by 2030 from a 2020 baseline. Succeeding the Aichi Targets, the Framework aims to achieve its objective with four global strategic goals to 2050 and 23 global targets to 2030. Target 3, widely known as the *30x30 target*, requires nation-states to:

Ensure and enable that by 2030 at least 30 per cent of terrestrial, inland water, and of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem functions and services, are effectively conserved and managed through ecologically representative, well-connected and equitably governed systems of protected areas and other effective area-based conservation measures, recognizing indigenous and traditional territories, where applicable, and integrated into wider landscapes, seascapes and the ocean, while ensuring that any sustainable use, where appropriate in such areas, is fully consistent with conservation outcomes, recognizing and respecting the rights of indigenous peoples and local communities, including over their traditional territories.

The 30x30 target and its implementation within the marine space is predicated on a view that marine biodiversity is decreasing.

While this is certainly the case in other parts of the world, this is not the case in Australia with the CSIRO⁸ finding the south-east's habitat forming marine invertebrates in good shape and increasing in abundance.

Although the aim of marine parks is not to manage fish stocks, it is well established that almost all fish stocks managed by the Australian Government are harvested sustainably. 96 of 101 fish stocks assessed by ABARES are not subject to overfishing¹³ and those that are, are transitioning through management to not being subject to overfishing.

Further, a high proportion of important marine benthic habitats and ecosystems are already protected throughout Australia's South-east through fishing exclusion zones, and non-target species of conservation concern, including endangered, threatened and protected species, are managed individual fishery Ecological Risk Assessments and Management Plans, State and Territory Environment Legislation, and the EPBC Act.

¹³ https://daff.ent.sirsidynix.net.au/client/en_AU/search/asset/1034121/1 Figure 1.3.

7. EXISTING NO-FISHING ZONES ARE SIGNIFICANT & ADDITIONAL EXCLUSIONS ARE SCHEDULED

Figure 11 and Figure 12 shows that most CTS fishing grounds are now closed and that this has occurred over the last 20 years. CTS Danish seining has access to the Bass Strait trawl closure but only currently catches <10% of the CTS' total catch. Because the closures overlap each other it is hard to see the detail but the largest interventions that removed grounds were, in order of implementation;

- Victorian marine parks (2005),
- South-East Marine Park Network (2007),
- the deepwater closure that closed all grounds deeper than 700m (2007),
- the Bass Strait Trawl Exclusion Zone,
- a series of closures designed to protect Upper-Slope Dogfish (2007 and 2013),
- a series of other smaller ground closures (2007-2013)
- most recently five large closures designed to rebuild several fish stocks that have poor recruitment due to the impact of climate change (2023)

With the assistance of a fisheries mapping consultant SETFIA/SSIA have completed an analysis of the current and future areas available for seafood production for the shark GHaT (gillnetting) and CTS Trawl sectors is detailed below.

Table 3 Current and future area available for seafood production in the shark GHaT gillnet fishery and CTS trawl fishery

	Shark GHaT Fishery (gillnetting) km ²	CTS trawl fishery km ²
Area of Fishery Once Available (within SE Marine Park Network) ^{14, 15}	1,154,000	1,154,000
State & Cwth Marine Parks (that do not allow gear used in fishery) ¹⁶	1,038,084	986,745
Fishery management (AFMA) and other closures ¹⁶		
Current seafood production areas available	116,451 (10.1%)	167,790 (14.5%)
Expected windfarms ¹⁷ within 3 REZs - Gippsland, Tasmania, Portland	~6,000	~6,000
Future seafood production areas available	110,451 (9.6%)	161,790 (14.0%)

¹⁴ Both fisheries extend beyond the South East Marine Park Network (and are subject to closures and marine parks on those areas), only the area within the South East Marine Park Network is shown.

¹⁵ Area excludes Macquarie Island

¹⁶ Areas indicated in red in Figure 10 and Figure 12.

¹⁷ The Victorian Government's windfarm energy targets require 8-9 marine windfarms. Feasibility licences per windfarm allow for areas up to 700km². The estimate of 6,000km² assumes that only part of the Gippsland REZ (~15,000km²) and Portland Tasmanian REZs will be turned over the renewable energy production.

Graphically the extent of the closures is shown in the following three maps (Figure 10, Figure 11, Figure 12).

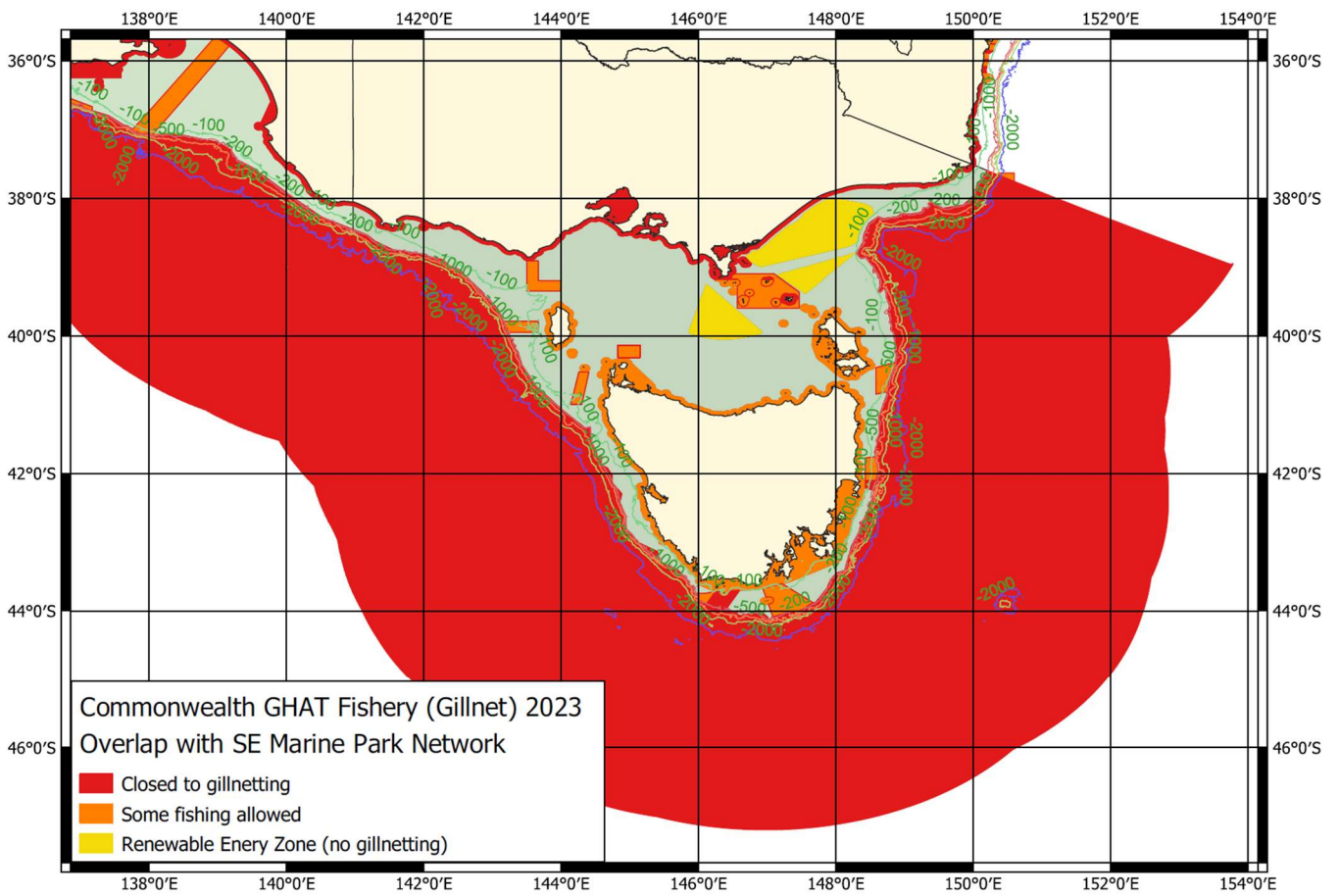


Figure 10 GHaT shark fishery ground closures - 2023

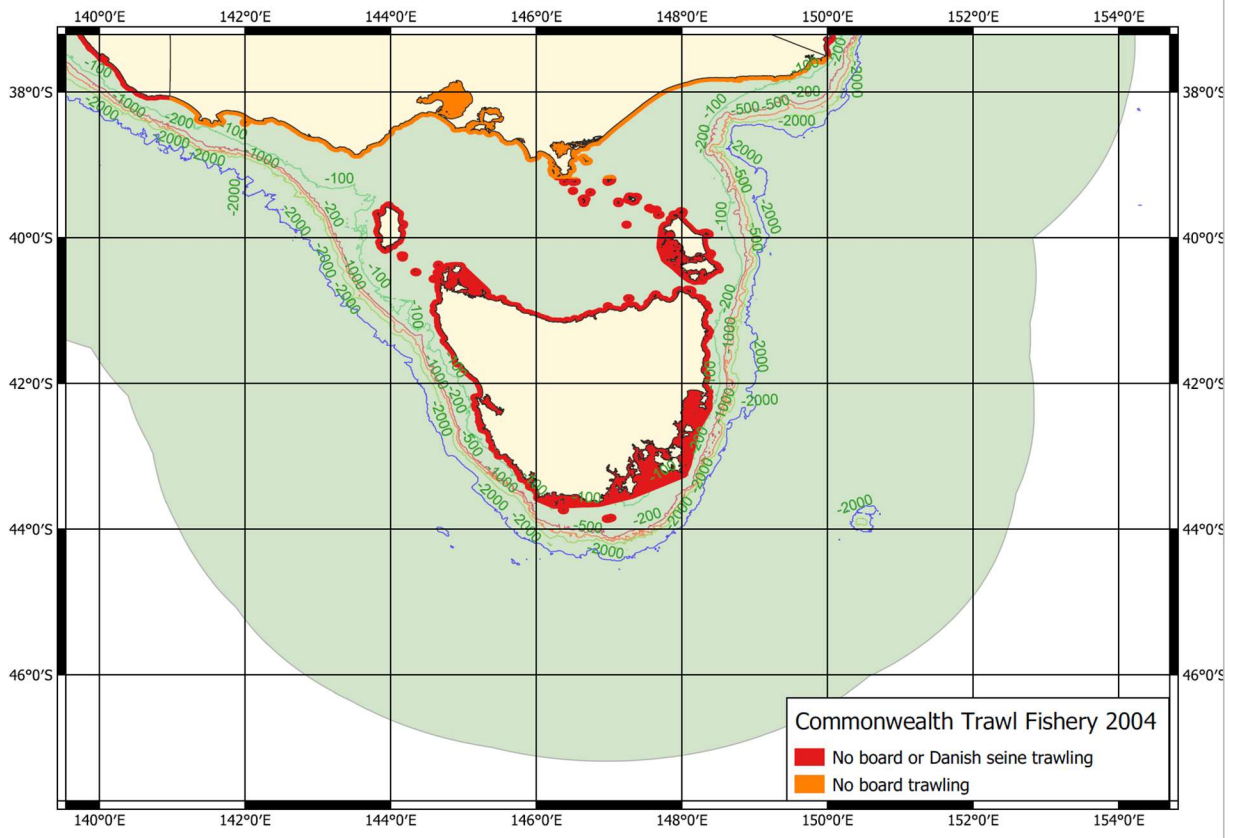


Figure 11 CTS trawl fishery ground closures - 2004

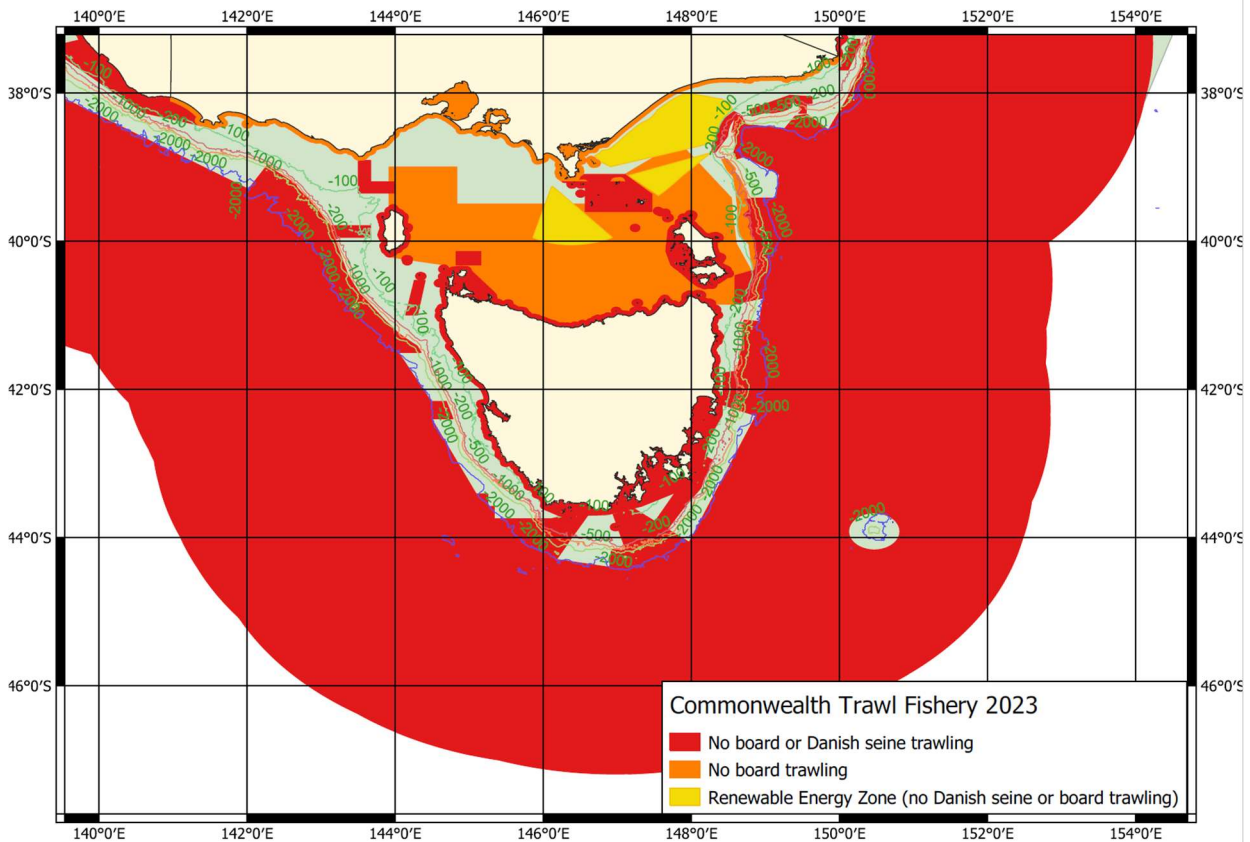


Figure 12 CTS trawl fishery ground closures - 2023

Seafood available to Victorian and Tasmanian consumers is forecast to drop a further 385 tonnes due to areas currently available for wildcatch seafood production set to be transferred to other industries:

- The Gippsland Renewable Energy Zone¹⁸ (shown in yellow Figure 12) will reduce seafood production by ~300 tonnes. Work undertaken under engagement to windfarm developers shows that the most GHaT shark fishery will be the most impacted.
- The Portland REZ by an unknown amount, perhaps ~50 tonnes,
- The Tasmanian REZ also by an unknown amount, perhaps ~25 tonnes,
- New aquaculture areas in Commonwealth waters in Bass Strait by an unknown amount, perhaps ~10 tonnes

Table 4 shows the wildcatch seafood production from the Commonwealth, Victorian and Tasmanian fisheries and how this scheduled ~385 tonne reduction and the ~5,500 tonnes exported (from Commonwealth fisheries which is not available to Australians) means that only ~12,515 tonnes of local wildcaught seafood will be available. After the yield loss incurred when filleting a fish this equates to equates to 570g per person per annum of local wildcatch seafood per annum - about two meals a year.

Table 4 Local wildcatch seafood available to the South-Eastern community: production by jurisdiction less scheduled reductions from windfarms/aquaculture and exports

Fishery	Approximate annual wildcatch production in/around South East Marine Park Network (approx. landed tonnes)
South-east Commonwealth Fisheries (exported catch included)	17,000
Victorian wildcatch production not exported	1,400
Tasmanian wildcatch production not exported	2, 732
Loss to forecast windfarm and ocean aquaculture displacement in SE	(385)
Exports not available to consumers from SE Commonwealth fisheries ¹⁹	(5,500)
WILDCATCH SEAFOOD AVAILABLE TO SOUTH-EAST COMMUNITY	12,515

¹⁸ It is certain that neither CTS gear type nor gillnetting will be safe with this.

¹⁹ Part of the blue grenadier and orange roughy catches. Exports from Tasmanian and Victorian fisheries are already allowed for within their stated production.

8. BENEFITS OF A LOCAL SEAFOOD INDUSTRY

in 2020 the Fisheries Research and Development Corporation funded the University of Technology Sydney to undertake an investigation into the Victorian seafood industry²⁰ finding:

1. Victorians and coastal communities prefer local seafood.

- 85% of Victorians surveyed prefer Australian seafood and 24% prefer Victorian seafood.
- The preference is even stronger in fishing towns, where 40% prefer seafood from their town or region.
- 74% of Victorians surveyed feel it is very or extremely important to know where their seafood comes from.
- They prefer local seafood because they believe it's fresher, safer and higher quality, and they want to support the Australian economy and seafood producers.
- Victorian seafood caters for local consumers' preferred species and price points, and their ethnic diversity.
- People go to great effort to buy Victorian seafood, regularly travelling substantial distances to 'stock up'.

2. The post-harvest sector experiences high demand for local seafood:

- Food localism among consumers is a growing trend benefiting seafood businesses around the state.
- Retailers and wholesalers say having Victorian produce helps project an image of freshness and quality.
- 62% of post-harvest businesses surveyed say the demand for local seafood is growing.
- 80% say demand for Victorian seafood is greater than for imported seafood.
- 58% say demand for Victorian seafood is greater than for interstate seafood.
- 96% of hospitality businesses surveyed say their customers want to know the origin of their seafood.

3. Victorian communities believe the seafood industry contributes to tourism.

- 67% of residents surveyed in Victorian regional towns believe the most important contribution the local seafood industry makes to communities is through the interactions with and benefits flowing to tourism. Consuming seafood is part of the coastal travel experience for international and domestic visitors.

4. Visitors place increasing importance on local food provenance and food production experiences.

- 81% of Victorians surveyed say eating local seafood is an important part of their holiday experience.
- 94% of tourism businesses surveyed say eating local seafood is an important part of the tourism experience.
- International visitors, particularly from Asia, are the tourists most interested in eating local seafood, which includes cultural delicacies such as abalone and rock lobster, from a clean environment.
- There's considerable unmet demand, with 54% of tourism businesses surveyed reporting that regional tourism suffers from a lack of access to locally produced seafood.

5. The seafood industry is important to the character and appeal of coastal towns for visitors.

- 88% of tourism operators surveyed say the fishing industry adds to the character of coastal towns.
- 86% say the history of fishing is an important part of the tourism offering.
- 69% of Victorians surveyed enjoy watching commercial fishers at work while on holiday.

²⁰ <https://www.uts.edu.au/sites/default/files/2020-06/uts-fass-victoria-fisheries-aquaculture-factsheet.pdf>

9. CRASH POINT: COST RECOVERED LEVIES & TRADE EXPOSURE

AFMA cost-recovers most of the cost of managing the GHaT and CTS fisheries. The reality of fisheries management is that management cost is only partially linked to the size of the fishery. Although AFMA and industry have worked in partnership to maintain levies below CPI increases, as the GHaT and CTS fisheries have declined in volume following a series of Government rights buyouts and ground closures, levies have continued to increase to the current \$6.0m across both fisheries (Table 2).

As a small fishery the GHaT is particularly vulnerable with levies six times higher per tonne (\$1,430/tonne) than the CTS trawl fishery. GHaT levies are expected to exceed 10% of fishery turnover in 2023/24. A theoretical reduction to GHaT fishery access that caused seafood production to fall by 10% would increase Australian Government fees to \$1,550/tonne.

The Department of Agriculture estimates that Australia is a net importer of seafood with and that around 70% of seafood consumed by the Australian community is imported²¹. Australian fisheries are therefore highly trade exposed. New Zealand levies on gummy shark (called 'rig' in New Zealand) depend on the area of catch but are on average²² A\$152²³ per tonne²⁴. Australian levies on gummy shark are 8 times higher than that charged on the same fish in New Zealand primarily because the costs to manage New Zealand's fisheries are spread across a much larger catch base than Australia. A 3kg gummy shark has a port value to the fisher of around A\$30 in both Australia and New Zealand but in Australia the fisher pays \$3.75/kg to the Government while in New Zealand the fisher pays just 46c.

The Australian Bureau of Agricultural and Resource Economics and Sciences reports on the economic performance of fisheries. ABARES' most recent investigation shows that the GHaT fishery's returns have been below the benchmark expected for agriculture (called NER) for most of the last decade despite record high catch rates and fish prices.

For these reasons any further lockout of GHaT shark fishing threatens the fishery's economic viability which is perverse given the healthy state of the gummy shark stock and fish price.

New Zealand will fill any gap between supply and demand in Australia if seafood production from south-eastern wildcatch fisheries is reduced due to changes to Australian marine parks.



Figure 13 Net Economic Returns (NER) for the GHaT fishery 2002/3 to 2018/19. Source ABARES²⁵

²¹ <https://www.agriculture.gov.au/agriculture-land/fisheries/aus-seafood-trade#:~:text=It%20has%20been%20estimated%20that,so%20much%20of%20its%20seafood.>

²² Rate averaged across all six rig (SPO) stocks.

²³ Converted at \$1.07

²⁴ <https://www.mpi.govt.nz/fishing-aquaculture/commercial-fishing/operating-as-a-commercial-fisher/fisheries-and-conservation-services-levies/>

²⁵ <https://www.agriculture.gov.au/abares/research-topics/fisheries/fisheries-economics/fisheries-economic-indicators#southern-and-eastern-scalefish-and-shark-fisherygillnet-hook-and-trap-sector>