



Appendix: Risk to AFMA's capacity to meeting policy and legislative objectives and international obligations

September 2020

Initial assessment of the risk posed by climate change to AFMA's capacity to meet policy and legislative objectives and international obligations

This appendix summarises the ways in which climate change exposes the Australian Fisheries Management Authority (AFMA) to the risk of failing to meet objectives laid out in federal policy, legislation (e.g. Fisheries Act or Environmental Protection and Biodiversity Conservation Act) and international obligations (due to international treaties and agreements).

The details per point are summarised in Table A-1. This assessment shows a number of points of potential failure. Fundamentally the abundance, distribution or behaviour of key Australia species and habitats is very likely to change in the short to medium term. This poses a number of risks to AFMA's capacity to meet its current objectives. Some of the recurrent potential failure points include:

- The potential for shifts (even regime shifts) in fished ecosystems to change what would represent a reference point for a sustainable use of those harvested stocks. Even where a regulatory scheme was on target for delivering a sustainable and profitable fishery in the past it could be under/over what is suitable now and go unnoticed because (a) the assessment and decision-making process does not yet take climate effects into account and (b) unavoidable delays in the fishery management process (at best data from last year is used this year to set rules for next year, less frequent or statistically powerful data collection would exacerbate issue). This means overfishing (and IUU) could unknowingly occur.
- There is the strong possibility that (at least in some fisheries) traditional assessment processes will be insufficient for evaluating and managing climate effected ecosystems and stocks or to take all sectors (commercial, recreational and indigenous) into account. This is not just for single species (or current multispecies) assessments but ecological risk assessments (ERAs) too; such assessments may become out of date quickly (in terms of the species to be considered but also the productivity and other parameters used in the assessments)
- Increasing pressure on systems and the shifting nature of systems requires coordinated action, without which there is a significant risk that cross jurisdictional dynamics and cumulative effects are being overlooked
- Changes in ecosystems could also see discards, bycatch and TEPS interactions change; any increases could erode public perception of the sustainability and performance of fisheries in Australia and also potentially undermine compliance with international obligations/agreements
- TEPS (but also other species) that are strongly increasing or decreasing due to climate can create a number of issues. For example, such species can create a bottleneck restricting catch to a level that some areas become unfishable or TACs cannot be caught. Changing abundance and/or distribution of TEPs, target species and fisheries will likely lead to new interactions in locations not seen before. Moreover, fisheries can be caught in the middle as conservation managers trade off pressures on different TEPs (Chasco et al. 2017).
- Australian ecosystems may be changing rapidly as a result of climate induced environmental shifts and extreme events (Babcock et al. 2019). However, estimates of the magnitude of the change are uncertain as there is a lack of relevant/suitable data. For fisheries management processes to account for climate effects to the standard set by past management strategy and fisheries

standards (or even to a standard where it can be said decisions are evidence based) requires monitoring not only to be maintained, but in some instances expanded.

- The resources required to manage through the increased uncertainty, may see costs of management become disproportionate with respect to the value of some individual fisheries with levies unable to be paid and government agencies unable to bridge the gap within the current budgetary arrangements. Technological advancements may make large scale monitoring feasible in future, though it would likely still require government investment (such an investment would deliver to needs across regulatory agencies and benefit industry, who are globally turning to digital data services and analytics to improve fishing efficiency).
- There is the potential for management surveillance and enforcement to have ever increasing demands on it. Shifts in ecosystems across Australia's EEZs and beyond could see activities and need for attention increase in many regions simultaneously, and at a time when operating conditions may become more hazardous (due to heavier sea states), stretching surveillance and enforcement (and putting Australia in a position where it may not be able to meet agreements or obligations). This means that data/information sharing across sectors and jurisdictions is crucial for delivering sustainable resource use and management.
- Management arrangements - such as specific national and international regulations (e.g. static zoning and the quota system) - may restrict industry adaptive capacity (such as changing species or locations); and while co-management remains the best practice for inclusive approaches to tackling resource management questions, it is unclear whether the co-management structure can cope with rapid change across member objectives and jurisdictions
- The increased uncertainty may lead to management inefficiencies; either through a perception that management is inadequate (even when it is not) or due to real inefficiencies resulting from reactive layering of additional regulatory requirements/rule setting rather than more proactive and structured set of responses.
- Apparent management accountability may also be eroded by climate change. Changed resource levels and distribution is likely to lead to resource sharing issues and potentially conflict between and within sectors. There could be flow-on effects for levels of confidence in management performance and public (or other sector) perception of the acceptability of fisheries activities, including interactions with habitats/bycatch/TEPS or changes in what is considered acceptable ownership of Australian resources.

Table A-1: AFMA’s legislative and policy objectives and a description of how these may be affected by climate change.

Legislation/ Act	AFMA/PZIA Objective	Bycatch Policy Objective	Harvest Strategy Policy Objective	Social Consideration	AFMA Risk Policy Corporate Goal	Climate Change Risk areas - Indicators	Potential outcomes resulting from climate change
Fisheries Management Act 1991	1. Implementing efficient and cost-effective fisheries management on behalf of the Commonwealth.	While not referencing cost effectiveness explicitly in its objectives, the CFBP 2018 talks extensively about ensuring cost effective management of bycatch (p(iii), 6, 12 s3.2.3, 13, 14, 21) including consideration of risk cost catch principles. The ERA framework is designed to meet risk-catch-cost principles	While not referencing cost effectiveness explicitly in its objectives, the CHSP 2018 talks extensively about ensuring cost effective management of commercial species (s3.5 on p9,10,11,12) principally through the application of risk cost catch principles	Theme 1: AFMA manages Commonwealth fisheries resources for the benefit of all Australians both now and into the future.	Deliver effective, cost efficient and transparent management and regulator arrangements	<ul style="list-style-type: none"> • Shift in balance of risk-cost-catch • Regulatory Burden • Efficiency of management • Perception of management adequacy • Degree of tension within the Co-Management process • Business uncertainty • Change in rate of workplace health and safety (WHS) issues due to climate change impact on safety at sea 	<ul style="list-style-type: none"> • Management may become less efficient due to greater uncertainty • Costs of management disproportionate to value of fishery • Uncertainty resulting from change makes management appear inadequate • Management regulations may restrict industry adaptation (such as changing species or locations) • Unclear whether the Co-Management structure can cope with rapid change across member objectives (and due to interactions with other jurisdictions) • Safety and labour conditions potentially affected by management restrictions on seasons • Increased research costs • Potential for additional administrative and regulatory control in piecemeal response to observed changes
	2. Ensuring that the exploitation of fisheries resources and the carrying on of any related activities are conducted in a manner consistent with the principles of ecologically sustainable development (which include the exercise of the precautionary principle), in particular the need to have regard to the impact of fishing activities on non-target species and the long-term sustainability of the marine environment.	The Bycatch Policy aims to minimise fishing-related impacts on general bycatch species in a manner consistent with the principles of ecologically sustainable development and with regard to the structure, productivity, function and biological diversity of the ecosystem.	The objective of the Harvest Strategy Policy is the ecologically sustainable and profitable use of Australia’s Commonwealth commercial fisheries resources (where ecological sustainability takes priority)—through implementation of harvest strategies.	Theme 1: AFMA manages Commonwealth fisheries resources for the benefit of all Australians both now and into the future. Theme 2: AFMA takes into account the interests of commercial, recreational and Indigenous fishers and other relevant stakeholders in our evidence-based decision-making. We work in partnership with our stakeholders and encourage them to share responsibility Theme 3: AFMA respects the values, culture and diversity	Ensure the ecological sustainability of Commonwealth fisheries for the benefit of present and future generations of Australians.	<ul style="list-style-type: none"> • Species identified as of importance to commercial, recreational and indigenous fishers • Fish stock levels • Degree of variability (e.g. in catch composition or CPUE) • Probability of overfishing increases • Changes in discards • Changes in bycatch • TEPS interactions • Increased uncertainty and risk 	<ul style="list-style-type: none"> • Regime shifts • Reference points change • Uncertainty regarding unfished biomass (reference point) • Overfishing is occurring, undetected and unregulated (because of non-stationarity that is not reflected in the assessment process and because fisheries dependent metrics can be confounded by other things). This means that pressure that was on target in the past could be under/over what is suitable now and go unnoticed (due to model assumption mismatch and inherent lags in management cycle)

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Fisheries Management Act 1991				of stakeholders for fisheries management where appropriate.			<ul style="list-style-type: none"> • Missing cross jurisdictional cumulative impacts • IUU fishing could increase • Discards and bycatch could increase • TEPS interactions could increase • Risk and uncertainty could prevent decision making • Perception by recreational fishers that stocks are unsustainably fished by commercial fishers • Unclear whether the Co-Management structure can cope with rapid change across member objectives (and due to interactions with other jurisdictions) • Changes may affect AFMA's ability to take recreational or traditional fishing into account • AFMA may be unable to identify and monitor species of importance to recreational and indigenous fishers
						Habitat/community effects <ul style="list-style-type: none"> • Changes in distribution of habitats • Changes in health of habitats • Changes in species distributions • Changes in phenology 	<ul style="list-style-type: none"> • Loss of important fisheries related habitat or habitats shift location • Regime shifts may occur within habitat types • Spawning locations change or are lost • Migration patterns change • Temporal changes in use of habitats • Uncertainty prevents decision making
						Ecological Risk Assessments <ul style="list-style-type: none"> • Degree of disagreement between initial ERA and on-water observations (discussed at RAG review of ERA preliminary results) 	<ul style="list-style-type: none"> • ERAs become out of date quickly (uncertainty over changing species to be considered by the ERA and in the population productivity of species being assessed) • Lack of relevant/suitable data

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Fisheries Management Act 1991						<ul style="list-style-type: none"> • Completing ERAs becoming more difficult 	<ul style="list-style-type: none"> • Byproduct and bycatch species may become uncertain very quickly since far less studied • ERAs may need to be replaced by regular cumulative effects assessments
						Wildlife Trade Operations (WTO) permitting	<ul style="list-style-type: none"> • Difficulty meeting permitting conditions of WTO • WTOs get out of date quickly
						Social issues: <ul style="list-style-type: none"> • Public acceptance of fisheries • Recreational interests • First Nations interests • Inequity (e.g. one sector/fishery/vessel type is more heavily impacted than other sectors/ fisheries/ vessel types) 	<ul style="list-style-type: none"> • Change in perceived value of public resources by Australians • Public acceptability of commercial fishing changes • Public perception of the level and acceptability of TEPS/Bycatch changes • Changes in what is considered acceptable ownership of Australian resources • Perceived inequity among stakeholders • Resource sharing issues with recreational fishers or indigenous fishers • Unclear whether the Co-Management structure can cope with rapid change across member objectives (and due to interactions with other jurisdictions) • Changes may affect AFMA's ability to take recreational or traditional fishing into account
Fisheries Management Act 1991	3. Maximising net economic returns to the Australian community from the management of Australian fisheries.		The objective of the Harvest Strategy Policy is the ecologically sustainable and profitable use of Australia's Commonwealth commercial fisheries resources (where ecological sustainability takes priority)—through	Theme 1: AFMA manages Commonwealth fisheries resources for the benefit of all Australians both now and into the future.	Improve the net economic returns of Commonwealth fisheries to the Australian community.	Social issues: <ul style="list-style-type: none"> • Public acceptance of fisheries • Recreational interests • First Nations interests • Inequity (e.g. one sector/fishery/vessel type is more heavily impacted 	<ul style="list-style-type: none"> • Net economic return (NER) decreases at fishery level • Changes to public opinion regarding fisheries and what constitutes NER • Perceived inequity among stakeholders

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			<p>implementation of harvest strategies.</p> <p>Also, key strategy is to maintain key commercial fish stocks, on average, at the required target biomass to produce maximum economic yield from the fishery</p>			than other sectors/ fisheries/ vessel types)	<p>* Fishers unable to take advantage of opportunities (caused by climate change) due to inflexible regulations.</p> <ul style="list-style-type: none"> • Single species management cannot deliver system level maximum sustainable take (and simultaneously achieving a single reference point across all species is impossible due to system dynamics), this will lead to the perception of a continuous inability to catch TACs of many species (climate could exacerbate this by changing reference points and attainable catch still further)
Fisheries Management Act 1991	4. Ensuring accountability to the fishing industry and to the Australian community in AFMA's management of fisheries resources.			Theme 4: AFMA pursues transparency and accountability to the Australian community in managing fisheries.	Deliver effective, cost efficient and transparent management and regulator arrangements		<ul style="list-style-type: none"> • Climate may make it look like the fishery is acting sub-optimally when it is not, this could impact trust in whether AFMA is being transparent/effective (even when it is)
Fisheries Management Act 1991	5. Achieving government targets in relation to the recovery of AFMA's costs.				Deliver effective, cost efficient and transparent management and regulator arrangements	<ul style="list-style-type: none"> • Regulatory Burden • Difficulty in recovering levies • Decreased government funding of non-recoverable costs 	<ul style="list-style-type: none"> • Fishers unable to pay levies • Expenses increase in non-recoverable areas of management
Fisheries Management Act 1991	6. Ensuring, through proper conservation and management measures, that the living resources of the Australian Fishing Zone (AFZ) are not endangered by over-exploitation.	The Bycatch Policy aims to minimise fishing-related impacts on general bycatch species in a manner consistent with the principles of ecologically sustainable development and with regard to the structure, productivity, function and biological diversity of the ecosystem.	The objective of the Harvest Strategy Policy is the ecologically sustainable and profitable use of Australia's Commonwealth commercial fisheries resources (where ecological sustainability takes priority)—through implementation of harvest strategies.	Theme 1: AFMA manages Commonwealth fisheries resources for the benefit of all Australians both now and into the future.	Ensure the ecological sustainability of Commonwealth fisheries for the benefit of present and future generations of Australians.	<ul style="list-style-type: none"> • Species identified as of importance to commercial, recreational and indigenous fishers • Fish stock levels • Degree of variability (e.g. in catch composition or CPUE) • Probability of overfishing increases • Changes in discards • Changes in bycatch • TEPS interactions 	<ul style="list-style-type: none"> • Regime shifts • Reference points change • Uncertainty regarding levels of unfished biomass (reference point) • Overfishing is occurring, undetected and unregulated • IUU fishing increases • Discards and bycatch increase • TEPS interactions increase • Uncertainty prevents decision making

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						<ul style="list-style-type: none"> Increased uncertainty 	<ul style="list-style-type: none"> Perception by recreational fishers that stocks are unsustainably fished by commercial fishers Unclear whether the Co-Management structure can cope with rapid change across member objectives (and due to interactions with other jurisdictions) Changes may affect AFMA's ability to take recreational fishing into account AFMA not be able to identify and monitor species of importance to recreational and indigenous fishers
Fisheries Management Act 1991	7. Achieving the optimum utilisation of the living resources of the AFZ.		The objective of the Harvest Strategy Policy is the ecologically sustainable and profitable use of Australia's Commonwealth commercial fisheries resources (where ecological sustainability takes priority)—through implementation of harvest strategies.	Theme 1: AFMA manages Commonwealth fisheries resources for the benefit of all Australians both now and into the future.	Improve the net economic returns of Commonwealth fisheries to the Australian community.	<ul style="list-style-type: none"> Sectoral differences in what is "optimum" and what is fair Method of calculating "optimum" usage will change with environment and stocks Public perception of what constitutes intergenerational equity 	<ul style="list-style-type: none"> Perception of "optimum" changes as conditions change Different perspectives of "optimum" may cause feelings of inequity Method for calculating "optimum" usage will change with environment and stocks Timeframe for "optimum" may change - path dependency may mean if do/don't take certain actions now reaching "optimum" in the future may be precluded
Fisheries Management Act 1991	8. Ensuring that conservation and management measures in the AFZ and the high seas implement Australia's obligations under international agreements that deal with fish stocks.				Deliver effective, cost efficient and transparent management and regulator arrangements	<ul style="list-style-type: none"> Content of international agreements Changes to Territorial Baseline 	<ul style="list-style-type: none"> Unable to meet international agreements or obligations Unable to guarantee enforcement of vessel days at sea agreements International agreements may restrict adaptation (e.g. if inflexible boundaries, seasons, closures) <ul style="list-style-type: none"> Conservation and Management Measures restrict adaptation (e.g. via immovable closed areas) Changes to Territorial baseline could affect boundaries of EEZ and territorial waters Movements of animals/people and changing productivity may

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<i>Fisheries Management Act 1991</i>	9. To the extent that Australia has obligations: i) under international law; or ii) under the Compliance Agreement or any other international agreement; in relation to fishing activities by Australian-flagged boats on the high seas that are additional to the obligations referred to in paragraph (c) – ensuring that Australia implements those first-mentioned obligations.				Deliver effective, cost efficient and transparent management and regulator arrangements	<ul style="list-style-type: none"> Content of international agreements Changes to Territorial Baseline 	<p>preclude delivery (vs expectations based on past performance)</p> <ul style="list-style-type: none"> Unable to meet international agreements or obligations Unable to guarantee enforcement of vessel days at sea agreements International agreements may restrict adaptation (e.g. if inflexible boundaries, seasons, closures) <ul style="list-style-type: none"> Conservation and Management Measures restrict adaptation (e.g. via immovable closed areas) Changes to Territorial baseline could affect boundaries of EEZ and territorial waters
<i>Fisheries Management Act 1991</i>	10. To have regard to the interests of commercial, recreational and Indigenous fishers			<p>Theme 1: AFMA manages Commonwealth fisheries resources for the benefit of all Australians both now and into the future.</p> <p>Theme 2: AFMA takes into account the interests of commercial, recreational and Indigenous fishers and other relevant stakeholders in our evidence-based decision-making. We work in partnership with our stakeholders and encourage them to share responsibility</p> <p>Theme 3: AFMA respects the values, culture and diversity of stakeholders for fisheries management where appropriate.</p>			<ul style="list-style-type: none"> Perception by recreational fishers that stocks are unsustainably fished by commercial fishers Unclear whether the Co-Management structure can cope with rapid change across member objectives (and due to interactions with other jurisdictions) Changes may affect AFMA's ability to take recreational fishing into account AFMA may be able to identify and monitor species of importance to recreational and indigenous fishers If change is seen, it is unclear AFMA can do anything, without modification to current arrangements, about addressing changes in species important to recreational or indigenous fishers (especially if in other jurisdictions)
<i>Fisheries Administration Act 1991</i>	Ensuring that the exploitation in the Australian fishing zone (as defined in the Fisheries Management Act 1991) and the high seas of fish stocks in relation to which Australia has obligations under			Theme 4: AFMA pursues transparency and accountability to the Australian community in managing fisheries.	Deliver effective, cost efficient and transparent management and regulator arrangements	<ul style="list-style-type: none"> Content of international agreements Changes to Territorial Baseline 	<ul style="list-style-type: none"> Unable to meet international agreements or obligations Unable to guarantee enforcement of vessel days at sea agreements

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	international agreements and related activities are carried on consistently with those obligations.						<ul style="list-style-type: none"> • International agreements may restrict adaptation (e.g. if inflexible boundaries, seasons, closures) • Conservation and Management Measures restrict adaptation (e.g. via immovable closed areas) • Changes to Territorial baseline could affect boundaries of EEZ and territorial waters
Environment Protection and Biodiversity Conservation Act 1999	<p>The EPBC Act (1999) requires ecological sustainability in Australia’s fisheries by providing for independent assessment of the environmental performance of fisheries management arrangements, through:</p> <ol style="list-style-type: none"> 1. Strategic assessments of Commonwealth managed fisheries (Part 10) prior to new management arrangements being brought into effect. 2. Environmental assessment for international trade in wildlife (Part 13A). 3. Environmental assessment of fisheries operating in Commonwealth waters for impacts on protected species (Part 13). <p>The EPBC Act 1999 requires that AFMA ensures its fisheries take all reasonable steps to ensure that EPBC listed species (other than conservation dependent species) are not killed or injured as a result of fishing.</p>	The Bycatch Policy aims to minimise fishing-related impacts on general bycatch species in a manner consistent with the principles of ecologically sustainable development and with regard to the structure, productivity, function and biological diversity of the ecosystem.	The objective of the Harvest Strategy Policy is the ecologically sustainable and profitable use of Australia’s Commonwealth commercial fisheries resources (where ecological sustainability takes priority)—through implementation of harvest strategies.			<p>Ecological Risk Assessments</p> <ul style="list-style-type: none"> • Degree of disagreement between initial ERA and on-water observations (discussed at RAG review of ERA preliminary results) • Completing ERAs becoming more difficult 	<ul style="list-style-type: none"> • ERAs become out of date quickly (uncertainty over changing species to be considered by the ERA and in the population productivity of species being assessed) • Lack of relevant/suitable data • Byproduct and bycatch species may become uncertain very quickly since far less studied
Environment Protection and Biodiversity Conservation Act 1999						<ul style="list-style-type: none"> • Threatened species interactions • Condition (population level and individual) of TEPS 	<ul style="list-style-type: none"> • TEPS interactions increase or decrease as a result of changes in the ecosystem, their behaviour or abundance • May require new technologies (whose knock-on effects need to be considered) or changes TEPS triggers (if possible and if appropriate given conservation needs) • TEPS (and other species) may create a bottleneck restricting catching the TAC (economic implications and trade-off) • Public perception of the level and acceptability of TEPS/Bycatch changes • New interactions in locations not seen before (further constraints on activities; further sources of stress on TEP populations) • TEPS interact with each other (e.g. fur seal increase and expanding predation pressure on another TEP) and fisheries caught in the middle as

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							try to release pressure on "losing" TEPS
						Wildlife Trade Operations (WTO) permitting	<ul style="list-style-type: none"> • Difficulty meeting permitting conditions of WTO • WTOs get out of date quickly • Not just WTO, there will be other policies/agreements to consider too (e.g. US Marine Mammal Act considerations too)
						<ul style="list-style-type: none"> • Species identified as of importance to commercial, recreational and indigenous fishers • Fish stock levels • Degree of variability (e.g. in catch composition or CPUE) • Probability of overfishing increases • Changes in discards • Changes in bycatch • TEPS interactions • Increased uncertainty and risk 	<ul style="list-style-type: none"> • Regime shifts • Reference points change • Uncertainty regarding unfished biomass (reference point) and risk of overexploitation • Overfishing is occurring, undetected and unregulated (because of non-stationarity that is not reflected in the assessment process and because fisheries dependent metrics can be confounded by other things). This means that pressure that was on target in the past could be under/over what is suitable now and go unnoticed (due to model assumption mismatch and inherent lags in management cycle) • Byproduct and bycatch species may become uncertain very quickly since far less studied • Missing cross jurisdictional cumulative impacts • IUU fishing could increase • Discards and bycatch could increase • TEPS interactions could increase • Uncertainty and risk prevents decision making
Environment Protection and Biodiversity Conservation Act 1999							

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							<ul style="list-style-type: none"> • Perception by recreational fishers that stocks are unsustainably fished by commercial fishers • Unclear whether the Co-Management structure can cope with rapid change across member objectives (and due to interactions with other jurisdictions) • Changes may affect AFMA's ability to take recreational fishing into account • AFMA may be unable to identify and monitor species of importance to recreational and indigenous fishers
Torres Strait Fisheries Act 1984	1. To acknowledge and protect the traditional way of life and livelihood of traditional inhabitants, including their rights in relation to traditional fishing;					<ul style="list-style-type: none"> • Habitat/community impacts (cover and health) • Changing levels of conflict between fishing sectors – commercial and traditional fishing • Increased need for, and frequency of, community consultation • Local changes to stocks, among island areas 	<ul style="list-style-type: none"> • Rapid climate change driven shifts to environment • Traditional fishing habitats degrade • Local changes in distribution of target stocks leads to conflict • Increased conflict for shared resources • Perception that commercial fishers are impacting way of life and livelihood of traditional fishers • Consultation with communities needs to increase
Torres Strait Fisheries Act 1984	2. to protect and preserve the marine environment and indigenous fauna and flora in and in the vicinity of the Protected Zone;	The Bycatch Policy aims to minimise fishing-related impacts on general bycatch species in a manner consistent with the principles of ecologically sustainable development and with	The objective of the Harvest Strategy Policy is the ecologically sustainable and profitable use of Australia's Commonwealth commercial fisheries resources (where ecological sustainability takes priority)—through			<ul style="list-style-type: none"> • Fish stock levels • Number and extent of PZIA driven protected areas and closures - habitats, spawning areas, other 	<ul style="list-style-type: none"> • Uncertainty regarding environmental changes • Uncertainty of status of flora/fauna • Marine habitats and native flora/fauna change

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		regard to the structure, productivity, function and biological diversity of the ecosystem.	implementation of harvest strategies.				<ul style="list-style-type: none"> Increased monitoring needs (including frequency and extent) Perception that commercial fishers taking too much artisanal catch
Torres Strait Fisheries Act 1984	3. to adopt conservation measures necessary for the conservation of a species in such a way as to minimise any restrictive effects of the measures on traditional fishing;					<ul style="list-style-type: none"> Relative take by different sectors Location and extent of Indigenous Protected Areas (IPAs) Effort distribution - Shifting or expanding? 	<ul style="list-style-type: none"> Traditional take of seafood is reduced or restricted by catch by other stakeholders Key fishing areas may shift into protected areas such as IPAs
Torres Strait Fisheries Act 1984	4. to administer the provisions of Part 5 of the Torres Strait Treaty (relating to commercial fisheries) so as not to prejudice the achievement of the purposes of Part 4 of the Torres Strait Treaty in regard to traditional fishing;					<ul style="list-style-type: none"> Habitat/community state and extent Relative take by different sectors 	<ul style="list-style-type: none"> Traditional take of seafood is reduced or restricted by catch by other stakeholders Management changes for commercial fisheries may negatively affect traditional fisheries
Torres Strait Fisheries Act 1984	5. to manage commercial fisheries for optimum utilisation;		The objective of the Harvest Strategy Policy is the ecologically sustainable and profitable use of Australia's Commonwealth commercial fisheries resources (where ecological sustainability takes priority)—through implementation of harvest strategies.			<ul style="list-style-type: none"> Relative take by different sectors 	<ul style="list-style-type: none"> Traditional take of seafood is reduced or restricted by catch by other stakeholders Perception that commercial fishers taking too much artisanal catch
Torres Strait Fisheries Act 1984	6. to share the allowable catch of relevant Protected Zone commercial fisheries with Papua New Guinea in accordance with the Torres Strait Treaty;					<ul style="list-style-type: none"> Distribution of stocks across different zones / jurisdictions Inequity among zones Changes to Territorial Baseline 	<ul style="list-style-type: none"> Check whether stock share agreements will still function, and will catch still be available equitably, as the proportions of stocks shifts within shared zones Fishing resources shift across jurisdictions (e.g. compared to historical distributions, the stock may be disproportionately within PNG, TI or AUS jurisdictions) Perception of inequity increases


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Torres Strait Fisheries Act 1984	7. to have regard, in developing and implementing licensing policy, to the desirability of promoting economic development in the Torres Strait area and employment opportunities for traditional inhabitants.					<ul style="list-style-type: none"> • Level of activity by different use types 	<ul style="list-style-type: none"> • Will changes to Territorial baseline affect boundaries of EEZ and territorial waters • Opportunities may shift disproportionately to non-traditional use • Perception that commercial fishers taking too much artisanal catch • Changes could result in reduced economic development and reduced employment

Appendix References

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