

Impact Analysis Statement template

A Summary Impact Analysis Statement (IAS) must be completed for all regulatory proposals. A Full IAS (see Box 1) must also be completed and attached for proposals that have significant impacts. Once completed, the IAS must be published.

Summary IAS

Details

Lead department	Department of Primary Industries
Name of the proposal	East Coast Trawl Fishery Effort Caps for 2025 fishing season
Submission type	Statement IAS
Title of related legislative or regulatory instrument	Fisheries (Effort Caps) Amendment Declaration 2025
Date of issue	3 February 2025

Proposal type	Details
Minor and machinery in nature	The proposal is minor and machinery in nature as it does not involve substantive regulatory or policy change. The change is consistent with the approved decision rules of the <i>Trawl Fishery (northern region) Harvest Strategy: 2021-2026</i> and <i>Trawl Fishery (central region) Harvest Strategy: 2021-2026</i> . Harvest strategies are developed through extensive stakeholder consultation and include key objectives of the fishery, performance indicators and reference points, and decision rules outlining management responses. The management controls in the harvest strategies provide clear instruction across multiple stakeholder interests, ensure the sustainable distribution of fishing effort, and provide for the ongoing evidence-based review and development of the trawl fishery's sustainability. The regional effort caps for the ECT fishery are prescribed under Chapter 2, Part 12 of the Fisheries Declaration 2019 (Fisheries Declaration). The regional effort caps are reviewed at scheduled intervals based on available stock assessment reports for target species to achieve a target biomass of 60 per cent of unfished levels, as per the Queensland harvest strategy policy. Stock assessments provide an evaluation of the abundance (health) of fish stocks in the form of an estimation of the stock's biomass relative to unfished levels. In addition, stock assessment provides information about the potential production of the stock and options for harvest and effort levels. The appropriate management response, after stock assessment, is guided by the decision rules in the harvest strategy. Stock assessments using data from the first year of available catch data to December 2021 were completed in 2023 for the tier 1 target species tiger prawns (<i>Penaeus esculentus</i> and <i>Penaeus semisulcatus</i>), plus endeavour prawns (<i>Metapenaeus endeavour</i> and <i>Metapenaeus ensis</i>), red spot king



prawns (*Melicertus longistylus*) and Moreton Bay bugs (*Thenus australiensis* and *Thenus parindicus*). These species are caught in the northern and central trawl regions. The assessments were published online (https://era.dpi.qld.gov.au/view/subjects/SH201.html).

The prawn and bug stock assessments provide a comprehensive evaluation of the biological stock of multiple species and considered a range of data including mandatory daily commercial logbook data (such as commercial catch and effort), historic voluntary logbook data, the former Queensland Fish Board data, historic commercial catch records, survey and logbook gear data and high-resolution vessel tracking data collected by Fisheries Queensland, lunar data, and licence numbers (for Moreton Bay bugs).

The outputs of the stock assessments indicated that in the period from 1958–1997, tiger prawn and endeavour prawn stocks declined to reach 31 per cent and 34 per cent of unfished biomass respectively. The biomass has been steadily rising since this time, and in 2021 the stock levels for tiger prawn and endeavour prawn were estimated to be 79 per cent and 69 per cent of unfished biomass respectively. The sand bug stock experienced a decline in the period 1968 to 2000 to reach 67 per cent of unfished biomass. The biomass has been generally increasing since, and in 2021 the stock level was estimated to be 78 per cent of the unfished biomass. The status of the mud bug stock is undefined; however, the general trajectory shows the biomass experienced a decline from the period of 1968 until the mid-1980s, then slowly recovered since that time. Under both the Trawl Fishery (northern region) Harvest Strategy: 2021-2026 and Trawl Fishery (central region) Harvest Strategy: 2021-2026, decision rules 1 and 4 apply for the management of tiger prawns (the target species), and secondary species (e.g. endeavour prawns, Moreton Bay bugs) respectively for both regions.

Decision rule 1.1 was triggered when biomass estimates became available from a stock assessment for tiger prawns published in 2023.

Decision rule 4.3 was triggered when stock assessments for endeavour prawns and Moreton Bay bugs became available through publications in 2023.

The decision rules require a review of the effort caps when more information becomes available.

A key issue is that the stock assessments were completed for multiple species, but the effort cap must be a single figure applied at the level of a multi-species fishery. There is no one clear, determined method for converting a biological assessment of multiple species into a single effort cap for a fishery when there is fishing pressure applied to multiple species. The Fisheries Science business unit conducted extensive work to investigate how to calculate multi-species effort caps for trawl regions within the ECT Fishery.

A separate report ("An investigation into methods to calculate effort controls in a multi-species fishery: northern and central Queensland otter trawl case study using data from 2017 to 2021" ('effort controls report') examined how to combine a range of species potential-harvests, with and without stock assessments, into a single management output (effort cap) for the northern and central regions of the ECT fishery. This report was published online (https://era.dpi.qld.gov.au/id/eprint/14415/).



Firstly, the recommended biological catch (RBC) for various species were calculated using outputs from available stock assessments from 2023. Where no stock assessments were available, RBC were calculated as average harvests based on logbook data between 2017 and 2021. Effort caps are based on the number of trawl effort units required to harvest the recommended biological catch for the fishery.

The development of methods to calculate effort controls included feedback from industry representatives and advice from the Sustainable Fisheries Strategy Expert Panel who provided general support. Targeted consultation was conducted with industry members during the multispecies effort calculation work, including through a Trawl Working Group forum. The report detailed eight different calculation methods that were developed and applied to eight different species combination. This resulted in 64 effort unit calculations options for the northern and central region.

Subsequently, an internal review process was conducted to select the most defensible effort unit calculation option based on the robustness of assumptions and scientific merit. Considerations included utilisation of best available stock assessment information for all specifies, not placing undue emphasis on secondary species, the method behaving the same across both regions, and repeatability (i.e. can be utilised in subsequent years). The most defensible calculation option (identified as Base Case 2 in the report) was presented to industry at a harvest strategy workshop and a follow up meeting and industry participants were invited to provide feedback on the selection of the calculation method.

The calculation method recommended to increase the effort caps for the northern and central trawl regions, and this was presented at the combined northern and central harvest strategy workshop.

Participants of the combined harvest strategy workshop and follow-up meeting provided an expected mixed response of support, and some issues were raised, including the how catch reported as mixed prawn was considered. Some members were comfortable with and supported the recommendation while others wanted higher effort caps inconsistent with target biomass levels. Fisheries Queensland is confident in the robust nature of its methodology for determining the recommended effort caps and is confident that the recommended option is the most defensible. In accordance with the decision rules under the harvest strategies, and following consultation with industry representatives, it was recommended to increase the effort caps for the northern and central trawl regions to 258 885 (3.5 per cent increase) and 353 133 (11 per cent increase). Fisheries declarations in response to fishery harvest strategy decision rules

are delegated to the Deputy Director-General, Fisheries and Forestry.

Harvest strategies are developed in consultation with the commercial, recreational and Traditional fishing sectors to promote sustainable management of fishery resources.

The amendments to prescribe future effort caps applying to the Great Barrier Reef World Heritage Area (GBRWHA) maintains existing management arrangements and does not involve substantive regulatory or policy change.

The effort caps applying to the GBRWHA have been declared under Queensland Fisheries Legislation since 2001 and serve to sustainably manage trawl fishing activity.





The amendments to effort caps will only affect the commercial sector and will not impact other sectors such as recreational and traditional fishing.

*Refer to <u>The Queensland Government Better Regulation Policy</u> for regulatory proposals not requiring regulatory impact analysis (for example, public sector management, changes to existing criminal laws, taxation).

Signed

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Department of Primary Industries

Date: 3 February 2025

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