Regia MSS Commercial Fishery Review

9 August 2023

MILLODON CONSULTING

Klarite

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Introduction

This review of commercial fisheries has been prepared for CGG Services (Australia) Pty Ltd (CGG) to identify Commonwealth and State (Victorian, Tasmanian, and South Australian) fisheries that have authority to fish within the Regia Marine Seismic Survey (Regia MSS) Activity Planning Area and/or Environmental Planning Area (Figure 1).

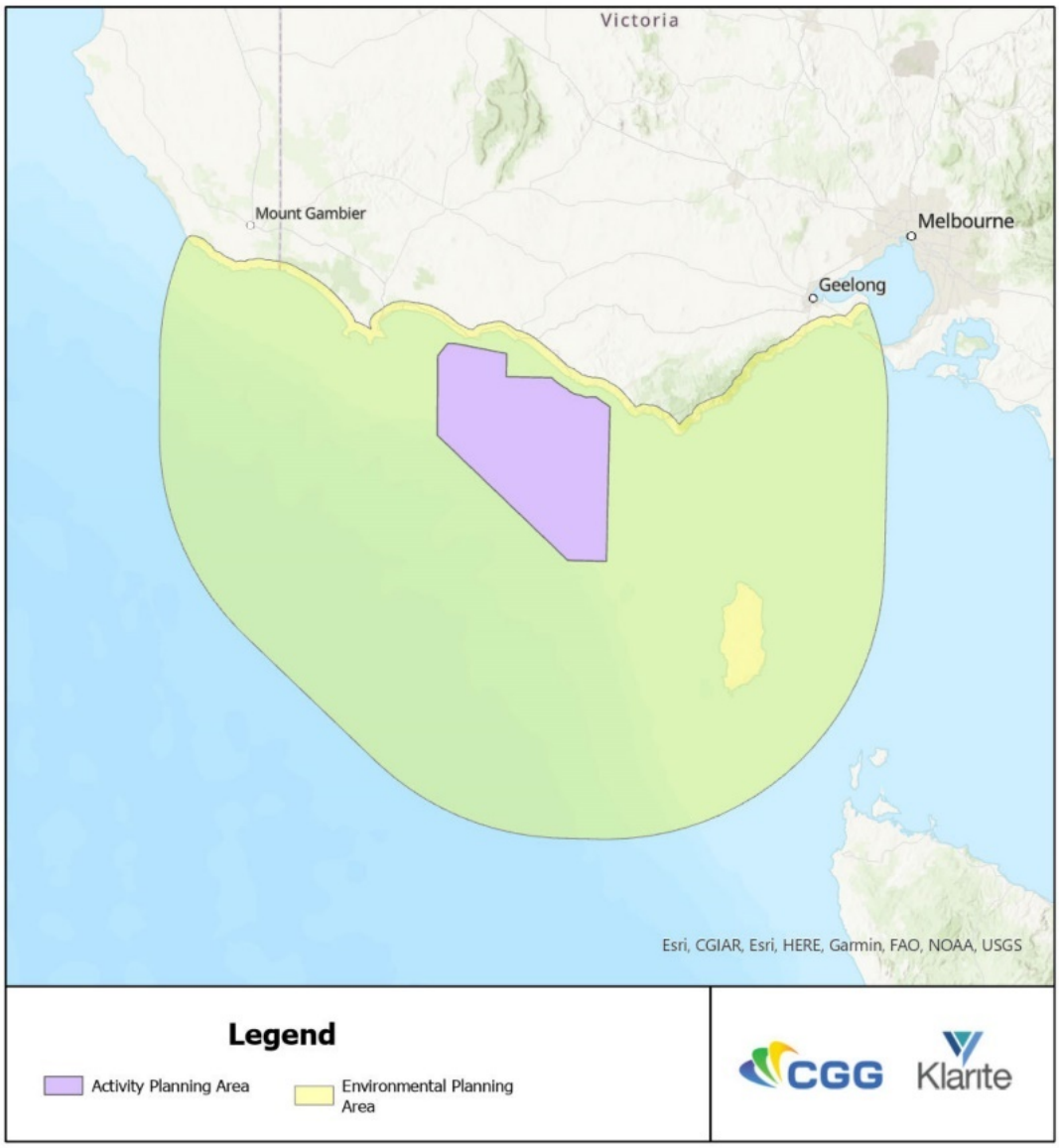


Figure 1: Regia Marine Seismic Survey Activity Planning Area and Environmental Planning Area

Commonwealth Fisheries

Commonwealth fisheries are managed by the Australian Fisheries Management Authority (AFMA) under the *Fisheries Management Act 1991* (Cth). AFMA jurisdiction covers the area of ocean from the coastline (under State-Commonwealth Offshore Constitutional Settlement Arrangements [OCS]) or from 3 nm from the coast out to the 200 nm limit (the Australian Fishing Zone (AFZ)). OCS arrangements are joint management arrangements of marine living resources that are found in waters subject to both Commonwealth and State control. Such arrangements provide for the management of the resources by the Commonwealth or respective State from the shoreline out to 200nm. Commonwealth commercial fisheries with authority to fish within the Activity Planning Area and Environmental Planning Area are:

- Bass Strait Central Zone Scallop Fishery (Bass Strait CZSF)
- Eastern Tuna and Billfish Fishery (ETBF)
- Skipjack Tuna Fishery (Eastern)
- Small Pelagic Fishery (SPF)
- Southern Bluefin Tuna Fishery (SBTF)
- Southern and Eastern Scalefish and Shark Fishery (SESSF)
- Southern Squid Jig Fishery
- Western Tuna and Billfish Fishery (ETBF)

Information relating to the target species, fishing locations, landed catch, value and other relevant aspects of each fishery is included in the following sections. Maps of relative fishing intensity for 2010 – 2020 and the Activity Planning Area and Environmental Planning Area are also provided.

The maps show the maximum area fished and the fishing intensity for each fishery. Fishing intensity (in kilograms of catch per square kilometre) is classified in shades of red, orange, and green to show high, medium, and low intensity classes, respectively. The data attributes include the class, the range of values in the class and the unit of measure. The maximum area fished shows the area fished by all fishers aggregated by 1-degree (111 km × 111 km) grid cells. The data provided by AFMA has been filtered to exclude catch from analysis areas where fewer than 5 boats operated during a given year.

Data sources are from the Commonwealth Fishery Status Report 2022 (Patterson et al. 2022) and AFMA website (AFMA 2023).

Table 1 provides a summary of the Commonwealth fisheries with fishing intensity within the Activity Planning and Environmental Planning Areas.

Table 1: Summary of Commonwealth Fisheries with Fishing Intensity within the Activity Planning and Environmental Planning Areas

Fishery	Fishing activity within the Activity Planning Area	Fishing Activity within the Environmental Planning Area	Note
Bass Strait Central Zone Scallop Fishery	No	Yes	The Activity Planning Area and Environmental Planning Area overlap the fishery maximum fished area but this is due to the size of the grids used for reporting as there have been no active scallop beds within the area of overlap. The Environmental Planning Area overlaps where there has been fishing intensity during 2010 – 2020.
Eastern Tuna and Billfish Fishery	Yes	Yes	The Activity Planning Area and Environmental Planning Area overlap the fishery maximum fished area. The Activity Planning Area and Environmental Planning Area do not overlap where there has been fishing intensity during 2010 – 2020.
Skipjack Tuna Fishery (Eastern)	No	No	Not currently active. There has been no catch effort in the fishery since the 2008 - 2009 season.
Small Pelagic Fishery (Western sub-area)	Yes	Yes	The Activity Planning Area and Environmental Planning Area overlap the fishery maximum fished area. The Activity Planning Area and Environmental Planning Area do not overlap where there has been fishing intensity during 2009 – 2020.
Southern Bluefin Tuna Fishery (SBTF)	No	No	The Activity Planning Area and Environmental Planning Area do not overlap the fishery maximum fished area or were there has been fishing intensity during 2010 – 2020. Between May and October Southern Bluefin Tuna may migrate through the Activity Planning and Environmental Planning Areas.

Fishery	Fishing activity within the Activity Planning Area	Fishing Activity within the Environmental Planning Area	Note
Southern and Eastern Scalefish and Shark Fishery (SESSF) Shark Gillnet and Hook Sector	Yes	Yes	The Activity Planning Area and Environmental Planning Area overlap the Shark Hook Sub-Sector fishery maximum fished area. The Environmental Planning Area overlaps the Shark Hook Sub-Sector where there has been fishing intensity during 2010 – 2020. The Activity Planning Area and Environmental Planning Area overlap the Shark Net Sub-Sector maximum fished area and where there has been fishing intensity during 2010 – 2020.
Southern and Eastern Scalefish and Shark Fishery (SESSF) Commonwealth Trawl Sector and Scalefish Hook Sector	Yes	Yes	The Activity Planning Area and Environmental Planning Area overlap the Commonwealth Trawl Sub-sector maximum fished area and where there has been fishing intensity (otter trawl only not Danish seine) during 2010 – 2020. The Activity Planning Area and Environmental Planning Area overlap the Scalefish Hook Sector maximum fished area and where there has been fishing intensity during 2010 – 2020.
Southern Squid Jig Fishery	Yes	Yes	The Activity Planning Area and Environmental Planning Area overlap the Southern Squid Jig Fishery and Southern and Eastern Scalefish and Shark Fishery Commonwealth Trawl Sector Squid maximum fished area and where there has been fishing intensity during 2010 – 2020.
Western Tuna and Billfish Fishery	Yes	Yes	The Activity Planning Area and Environmental Planning Area overlap the Western Tuna and Billfish Fishery maximum fished area. The Activity Planning Area and Environmental Planning Area do not overlap where there has been fishing intensity during 2010 – 2020.

Bass Strait Central Zone Scallop Fishery

Fishery	Target species	Description	Fishing activity within the Activity Planning Area	Fishing Activity within the Environmental Planning Area
Bass Strait Central Zone Scallop Fishery	Scallops	Fishery operates in the Bass Strait between the Victorian and Tasmanian and starts at 20 nm from their respective coastlines. Commercial scallops in the Bass Strait Central Zone Scallop Fishery are mainly found at depths of 35 - 100 m and are caught using a steel dredge that is towed by the vessel along muddy to coarse sand substrates. Fishing effort is concentrated around King and Flinders Islands which are outside of the Regia Activity Planning Area. Currently there are 10 active boats using towed dredges. Fishing season is 1 April to 31 December. Actual catch in 2021 was 2,344 tonnes. The major landing ports are Beauty Point, Devonport, and Stanley (Tasmania); Apollo Bay, Lakes Entrance, Melbourne, Port Welshpool, Queenscliff and San Remo (Victoria) Total fishery value in 2021 was A$4.7 million. In the 2021 fishing season there were 10 active vessels. The Activity Planning Area and Environmental Planning Area overlap the fishery maximum fished area, though fishing intensity from 2010 – 2020 has been to the east of the Activity Planning Area within the Environmental Planning Area (Figure 2). The area of overlap with the Activity Planning Area is due to the size of the grids used for reporting as there have been no active scallop beds within the area of overlap. Historical and current scallop beds are to the east and north of King Island outside of the Activity Planning Area (Koopman and Knuckey 2023). Fishing mortality: not subject to overfishing. Biomass: Not over fished.	No	Yes

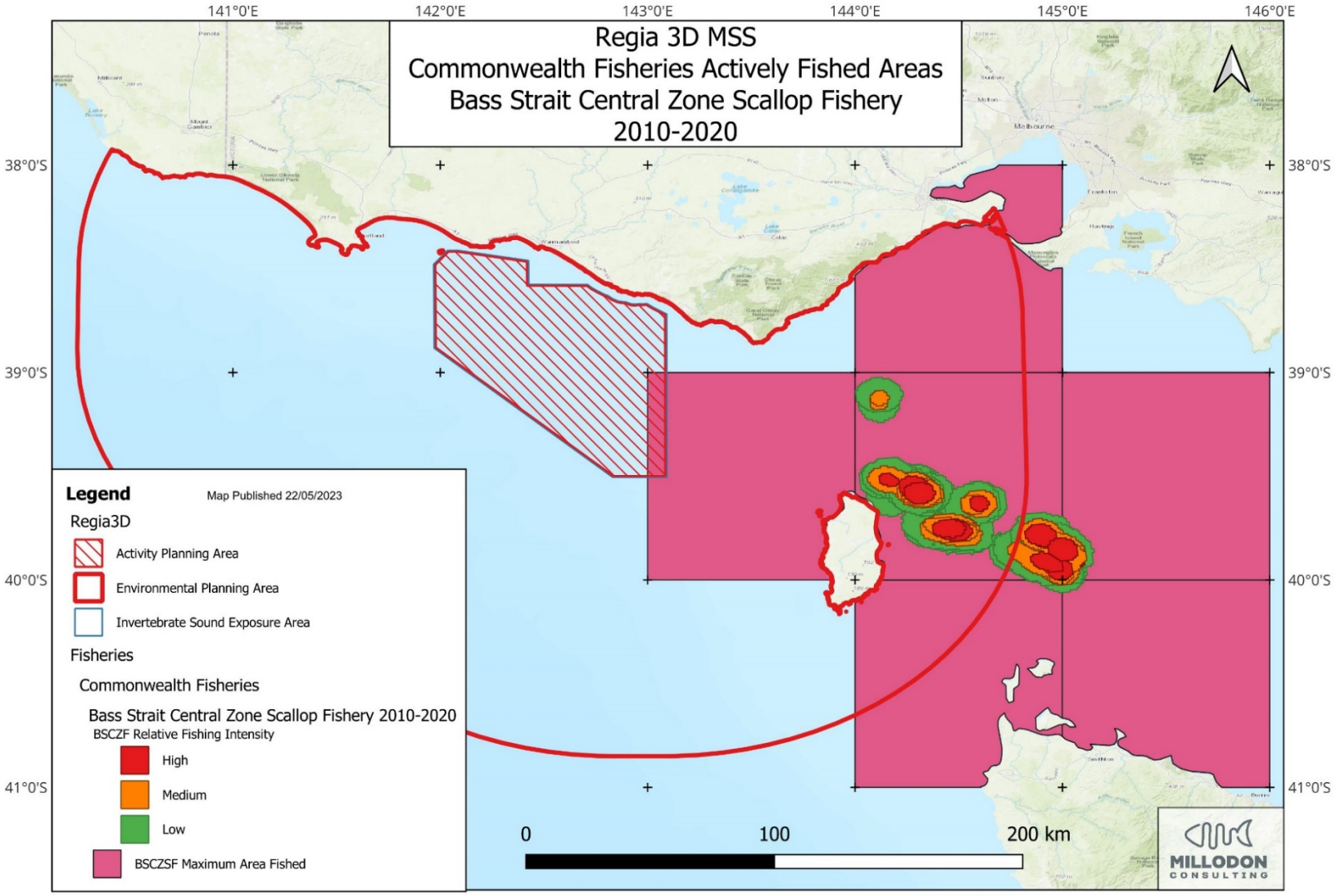


Figure 2: Bass Strait Central Zone Scallop Fishery Fishing Effort within the Activity Planning Area and Environmental Planning Area

Eastern Tuna and Billfish Fishery

Fishery	Target species	Description	Fishing activity within the Activity Planning Area	Fishing Activity within the Environmental Planning Area
Eastern Tuna and Billfish Fishery	Albacore tuna Bigeye tuna Yellowfin tuna Swordfish Striped marlin	A longline and minor line fishery that operates in water depths > 200 m from Cape York to Victoria. Fishery effort is typically concentrated along the NSW coast and southern Queensland coast (Figure 3). No Victorian ports are used. In 2017 there was some fishing effort in Victoria at low levels. The number of active vessels has decreased within the fishery from around 152 in 1999 to 35 in 2021. Actual catch in the 2021 season was 5,148 tonnes. Total fishery value in 2021 was A$35.6 million. The Activity Planning Area and Environmental Planning Area overlap the fishery maximum fished area, though fishing intensity from 2010 – 2020 has been along the NSW coast and southern Queensland coast (Figure 3). Fishing mortality: not subject to overfishing. Biomass: Over fished – striped marlin. All other species not overfished.	Yes	Yes

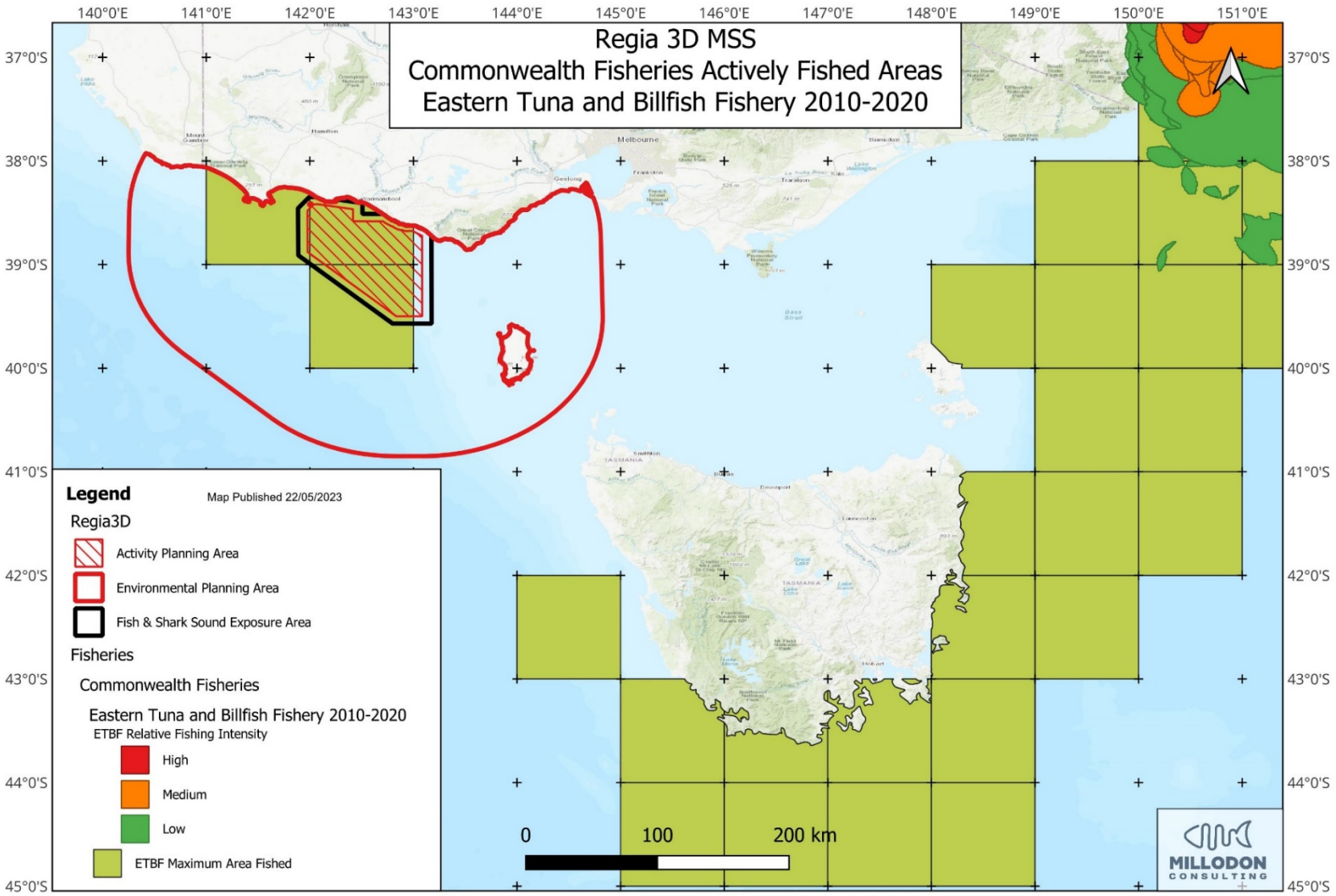


Figure 3: Eastern Tuna and Billfish Fishery Fishing Effort within the Activity Planning Area and Environmental Planning Area

Small Pelagic Fishery (Western sub-area)

Fishery	Target species	Description	Fishing activity within the Activity Planning Area	Fishing Activity within the Environmental Planning Area
Small Pelagic Fishery (Western sub-area)	Australian sardine Blue mackerel Jack mackerel Redbait	The Small Pelagic Fishery extends from the southern Queensland to southern Western Australia. Fishers use midwater trawls and purse seine nets. Geelong is a major landing port. Total retained catch of the four target species was 18,878 tonnes in the 2021-22 season. Fishery effort generally concentrated in the near-shore Great Australian Bight to the west and south of Port Lincoln. The Environmental Planning Area and a small part of the Activity Planning Area overlap the fishery maximum fished area. There has been no ABARES classified fishing intensity from 2009 – 2020 in the Activity Planning Area or Environmental Planning Area (Figure 4). Fishing mortality: not subject to overfishing. Biomass: Not over fished.	Yes	Yes

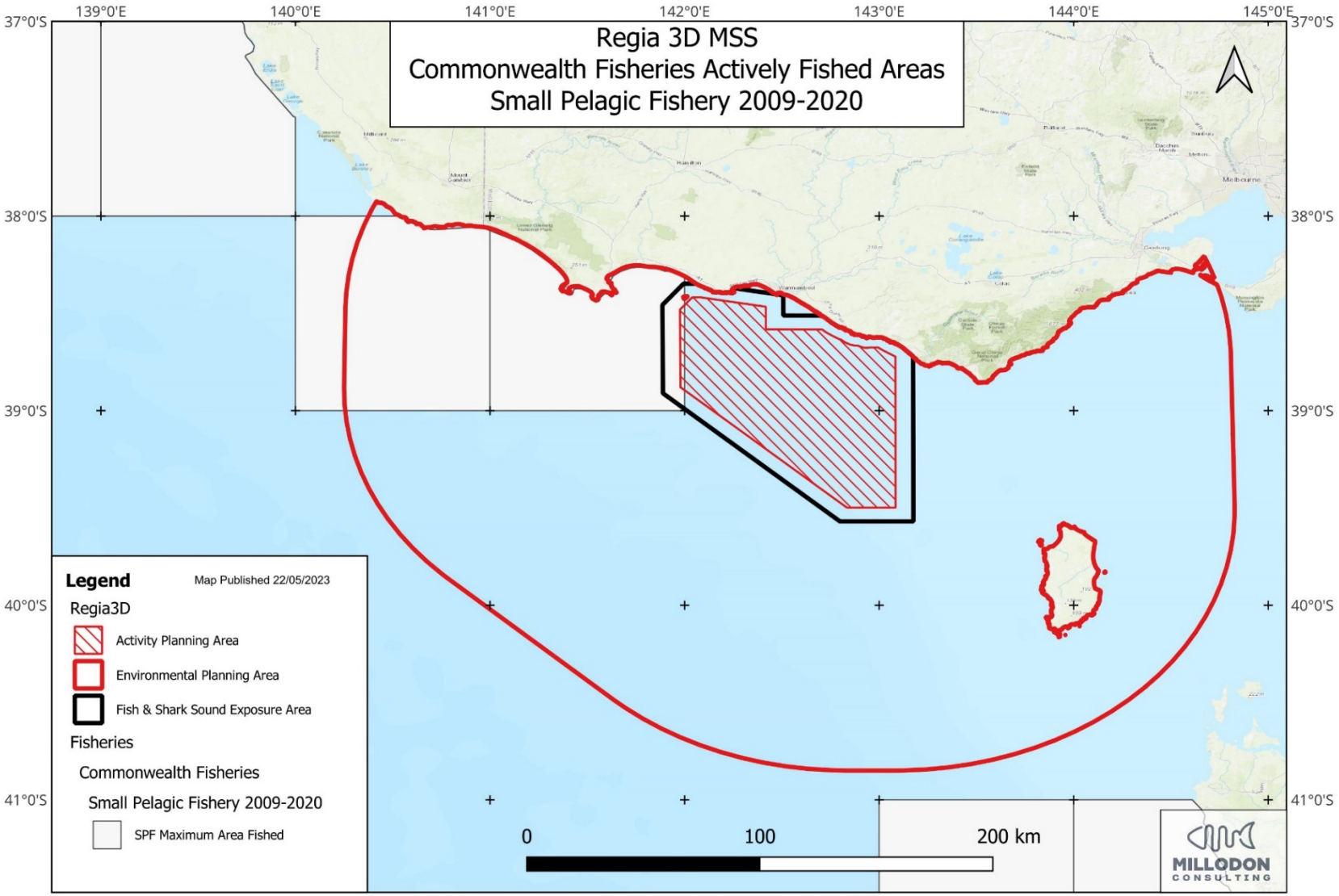


Figure 4: Small Pelagic Fishery (Western sub-area) Fishing Effort within the Activity Planning Area and Environmental Planning Area

Southern Bluefin Tuna Fishery (SBTF)

Fishery	Target species	Description	Fishing activity within the Activity Planning Area	Fishing Activity within the Environmental Planning Area
Southern Bluefin Tuna Fishery (SBTF)	Southern bluefin tuna	The SBTF covers the entire sea area around Australia, out to 200 nm from the coast. Southern bluefin tuna are also commonly caught off the NSW coastline. In this area, fishers catch these fish using the longline fishing method. A pelagic longline and purse seine fishery that was worth $41.39 million in 2020-21 (actual catch was 5,646 tonnes). The fishery operates year-round. Fishery effort is generally concentrated in the Great Australian Bight and off the southern NSW coast. The Activity Planning Area and Environmental Planning Area do not overlap the fishery maximum fished area or where there has been classified fishing intensity from 2010 – 2020 (Figure 5). Between May and October, when the waters off NSW and Victoria are cooler, Southern Bluefin Tuna may migrate through the Activity Planning and Environmental Planning Areas. Fishing mortality: not subject to overfishing. Biomass: Not over fished.	No	No

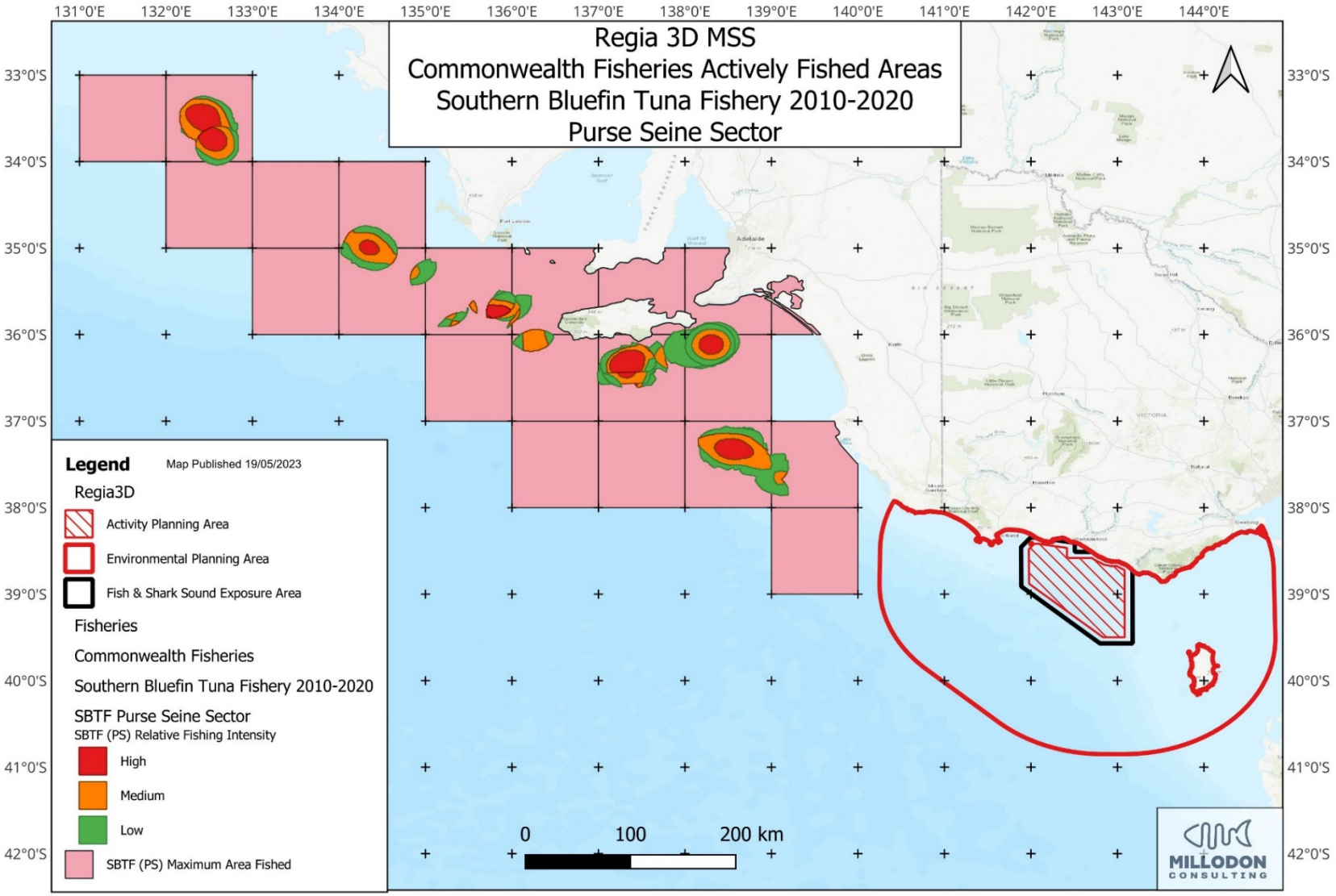


Figure 5: Southern Bluefin Tuna Fishery Fishing Effort within the Activity Planning Area and Environmental Planning Area

Southern and Eastern Scalefish and Shark Fishery (SESSF) - Shark Gillnet and Hook Sector

Fishery	Target species	Description	Fishing activity within the Activity Planning Area	Fishing Activity within the Environmental Planning Area
Southern and Eastern Scalefish and Shark Fishery (SESSF) Shark Gillnet and Hook Sector	Elephantfish Gummy shark Sawsharks School shark	The Southern and Eastern Scalefish and Shark Fishery (SESSF) stretches south from Fraser Island in southern Queensland, around Tasmania, to Cape Leeuwin in southern Western Australia. The shark gillnet and shark hook sectors (SGSHS) are part of the Gillnet, Hook and Trap Sector (GHTS) of the Southern and Eastern Scalefish and Shark Fishery (SESSF). The SGSHS uses demersal gillnet and demersal longline to target gummy shark. Sawsharks and elephantfish are caught as by-products of fishing for gummy sharks. Most fishing in the sector using nets occurs in Bass Strait targeting elephantfish, gummy shark, sawsharks and school shark. Fishing is generally concentrated east of King Island. Most fishing using hooks occurs off South Australia (Figure 7). The Activity Planning Area and Environmental Planning Area overlap the Shark Hook Sub-Sector maximum fished area but there has only been classified fishing intensity from 2010 – 2020 in the Environmental Planning Area (Figure 6). The Activity Planning Area and Environmental Planning Area overlap the Shark Net Sub-Sector maximum fished area and where there has been fishing intensity from 2010 – 2020 (Figure 7). Total retained catch of the target species was 2,150 tonnes in the 2021-22 season. No value is provided for 2021-22 season. In 2020-21, the fishery value was A$28.84 million. In the 2021-2022 fishing season there were 27 active gillnet vessels and 40 active hook vessels. Fishing mortality: school shark is uncertain. Biomass: school shark is over fished.	Yes	Yes

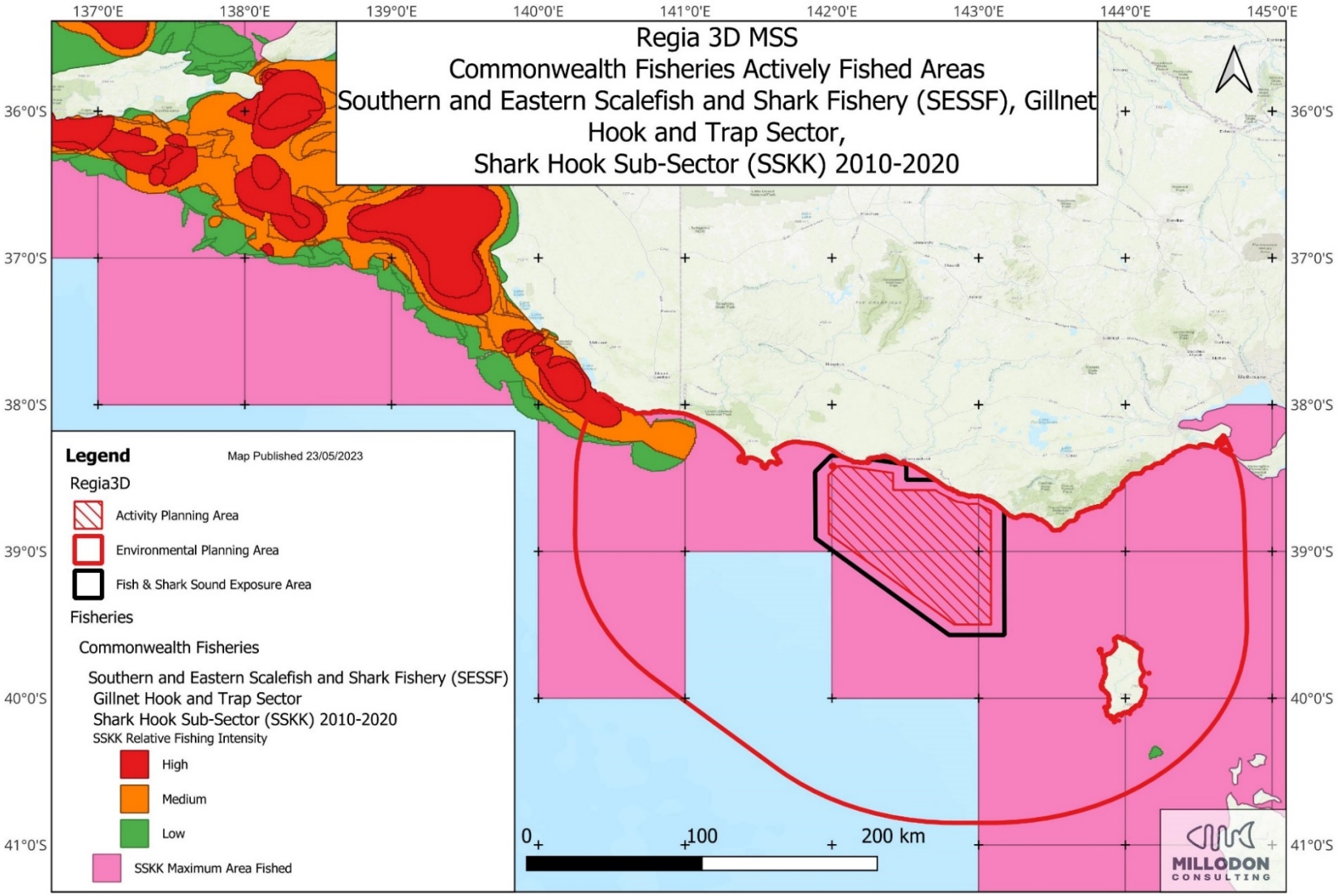


Figure 6: Southern and Eastern Scalefish and Shark Fishery Shark Hook Sub-Sector Fishing Effort within the Activity Planning Area and Environmental Planning Area

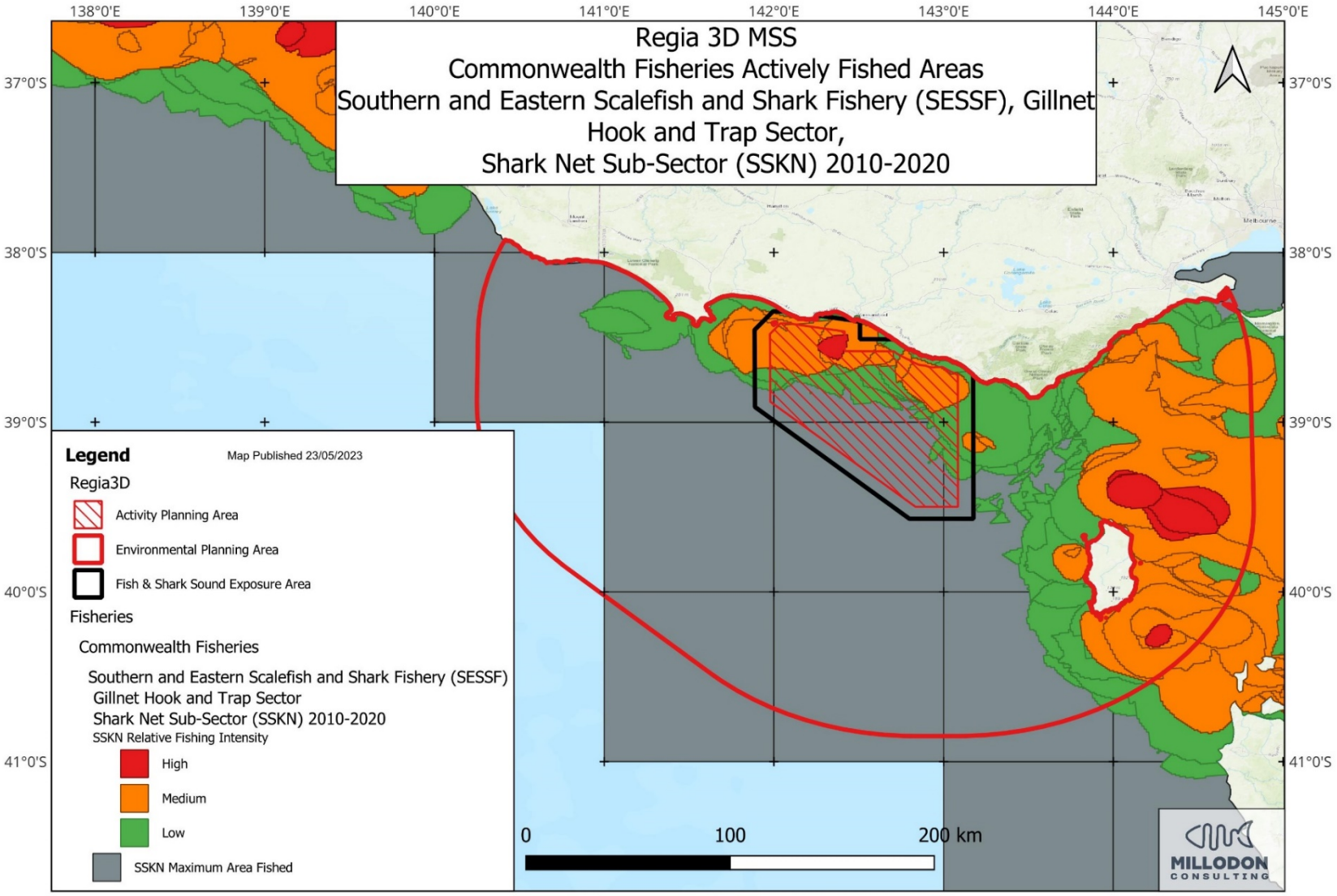


Figure 7: Southern and Eastern Scalefish and Shark Fishery Shark Net Sub-Sector Fishing Effort within the Activity Planning Area and Environmental Planning Area

Southern and Eastern Scalefish and Shark Fishery (SESSF) - Commonwealth Trawl Sector and Scalefish Hook Sector

Fishery	Target species	Description	Fishing activity within the Activity Planning Area	Fishing Activity within the Environmental Planning Area
Southern and Eastern Scalefish and Shark Fishery (SESSF) Commonwealth Trawl Sector Scalefish Hook Sector	Blue-eye trevalla Blue grenadier Eastern school whiting Orange roughy Pink ling Ribaldo Tiger flathead	The Commonwealth Trawl Sector of the SESSF extends south from Barrenjoey Point in northern New South Wales to east of Kangaroo Island off South Australia. The Commonwealth Trawl Sector is a multispecies fisheries, targeting a variety of fish and shark species. The Commonwealth Trawl Sector and Scalefish Hook Sector are reported together as they share many target species. A multi-sector, multi-species fishery that uses a range of gear year-round targeting fish and shark species. Fishing is generally concentrated along the 200 m bathymetric contour. The Commonwealth Trawl Sector predominantly uses demersal otter trawl and Danish-seine fishing methods. The Scalefish Hook Sector uses a variety of longline and dropline hook fishing methods, some of which are automated. The Activity Planning Area and Environmental Planning Area overlap the Commonwealth Trawl Sub-sector maximum fished area and where there has been fishing intensity from 2010 – 2020 (Figure 8). Though the Activity Planning Area and Environmental Planning Area overlap the Danish Seine Sub-sector maximum fished area but not where there has been ABARES classified fishing intensity from 2010 – 2020 in either area (Figure 9). The Activity Planning Area and Environmental Planning Area overlap the Scalefish Hook Sector maximum fished area and where there has been low fishing intensity from 2010 – 2020 (Figure 10). In the 2021 – 2022 season there where 32 trawl, 19 Danish-seine and 21 scalefish hook vessels operating. Total retained catch of the target species was 19,501 tonnes in the 2021-22 season. No value is provided for 2021-22 season. In 2020-21, the fishery value was A$64 million. Fishing mortality: some species subject to overfishing. Biomass: some species over fished.	Yes	Yes

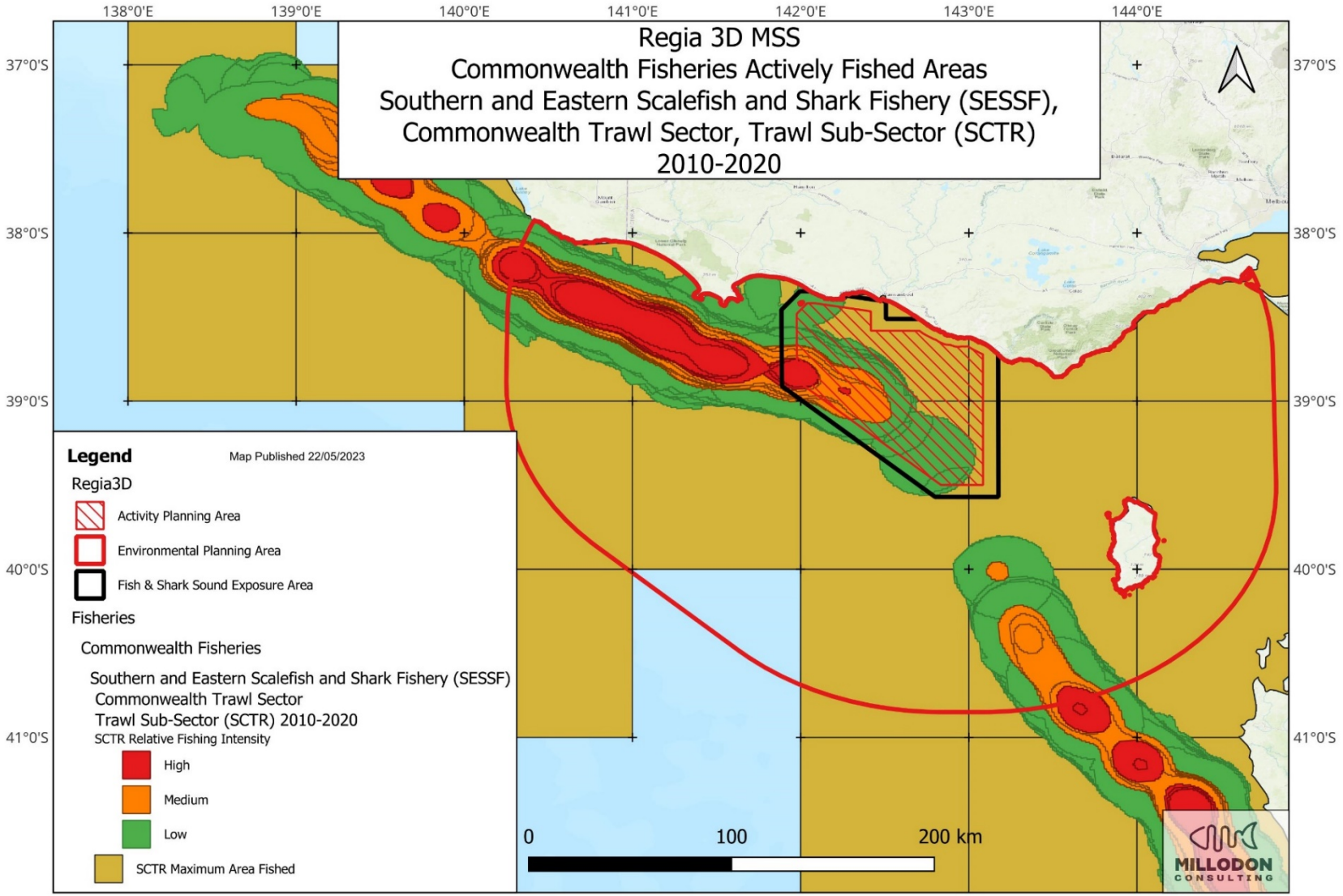


Figure 8: Southern and Eastern Scalefish and Shark Fishery Commonwealth Trawl Sub-Sector Fishing Effort within the Activity Planning Area and Environmental Planning Area

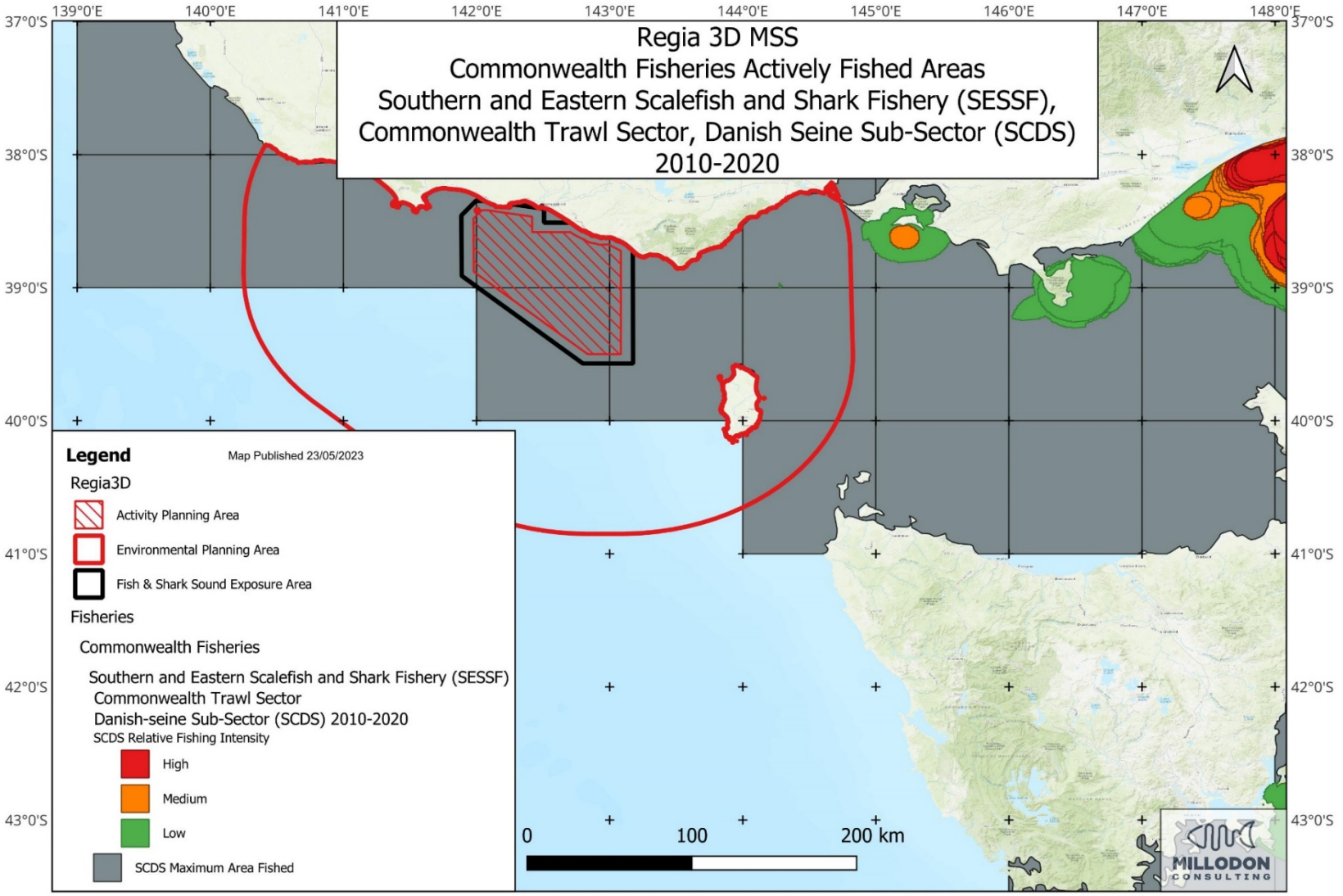


Figure 9: Southern and Eastern Scalefish and Shark Fishery Danish Seine Sub-Sector Fishing Effort within the Activity Planning Area and Environmental Planning Area

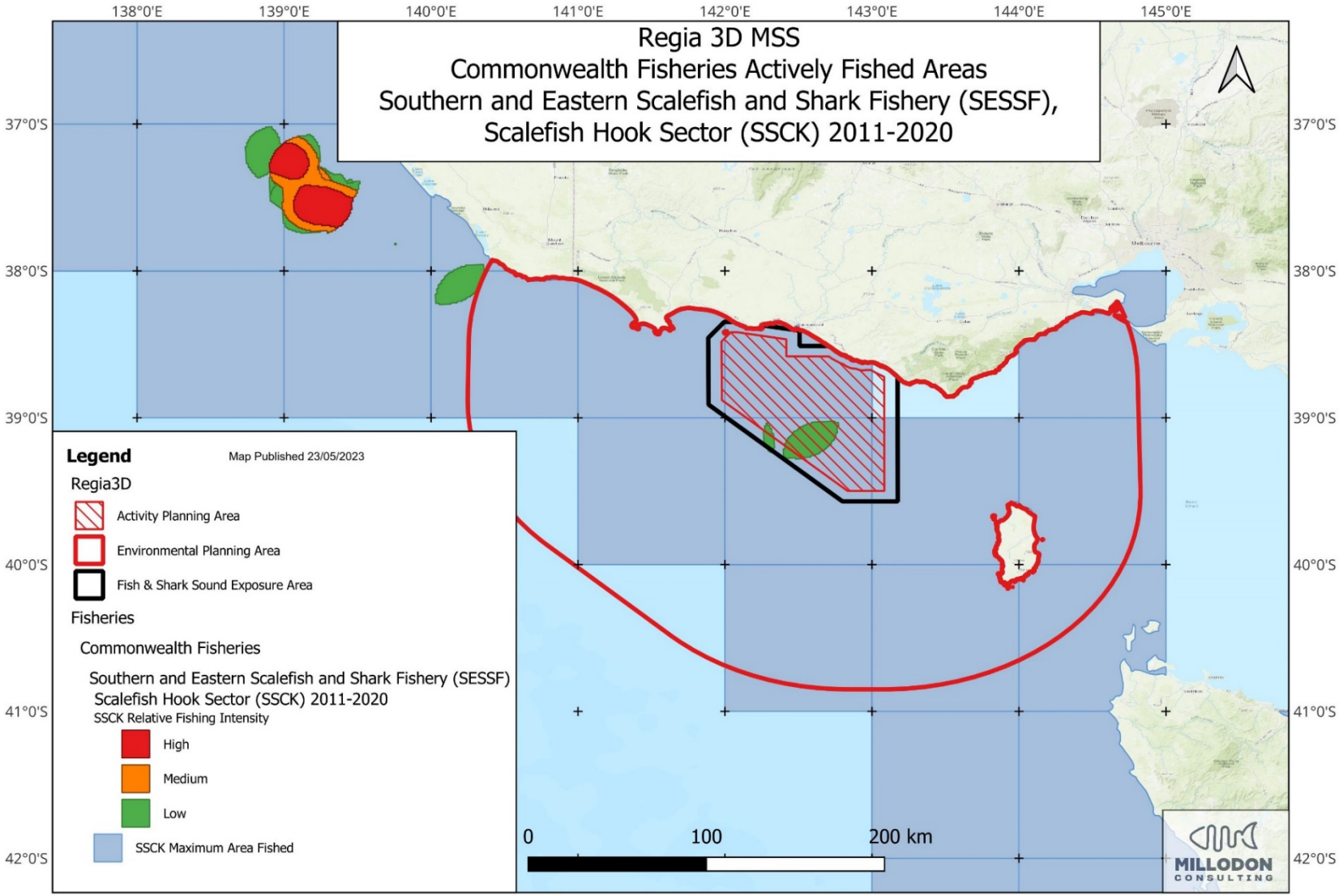


Figure 10: Southern and Eastern Scalefish and Shark Fishery Scalefish Hook Sector Fishing Effort within the Activity Planning Area and Environmental Planning Area

Southern Squid Jig Fishery

Fishery	Target species	Description	Fishing activity within the Activity Planning Area	Fishing Activity within the Environmental Planning Area
Southern Squid Jig Fishery	Gould's squid (arrow squid)	A single species fishery that operates year-round. Portland and Queenscliff are the major Victorian landing ports. Jigging typically occurs midwater at depths between 50 and 100 m at night using large lights that illuminate the waters around a boat. The Commonwealth Trawl Fishery also catches Gould' squid. The Activity Planning Area and Environmental Planning Area overlap the Southern Squid Jig Fishery maximum fished area and where there has been fishing effort from 2010 – 2020 (shown as relative fishing intensity on Figure 11). The Activity Planning Area and Environmental Planning Area overlap the Southern and Eastern Scalefish and Shark Fishery Commonwealth Trawl Sector Squid maximum fished area and where there has been classified fishing intensity from 2010 – 2020 (Figure 12). In 2021, the actual catch of 939 tonnes was worth A$3.30 million. In 2021 there were eight active vessels in the fishery with the landing ports being Triabunna (Tasmania); Queenscliff and Apollo Bay (Victoria). Fishing mortality: not subject to overfishing. Biomass: Not over fished.	Yes	Yes

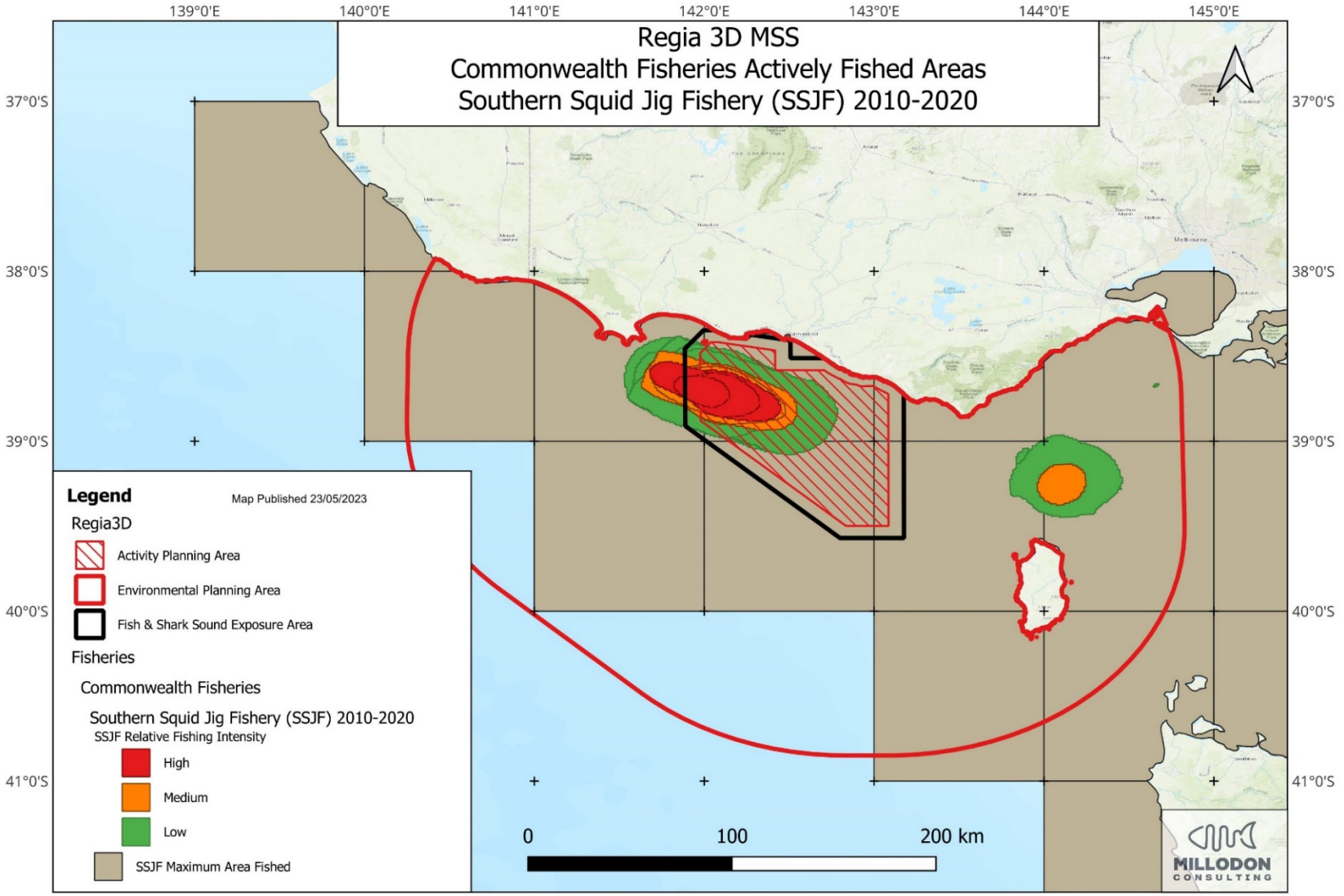


Figure 11: Southern Squid Jig Fishery Fishing Effort within the Activity Planning Area and Environmental Planning Area

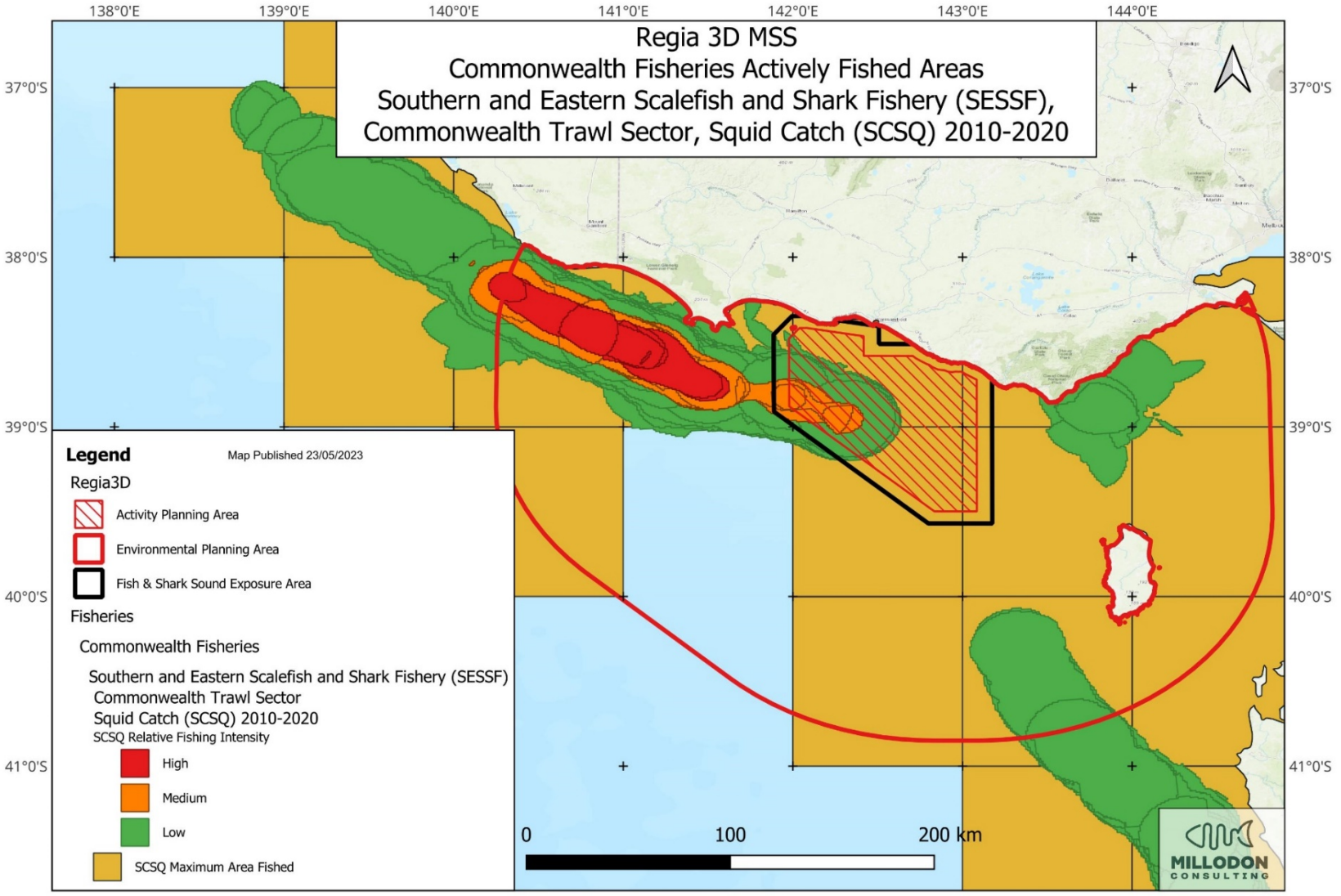


Figure 12: Southern and Eastern Scalefish and Shark Fishery Commonwealth Trawl Sector Squid Fishing Effort within the Activity Planning Area and Environmental Planning Area

Western Tuna and Billfish Fishery

Fishery	Target species	Description	Fishing activity within the Activity Planning Area	Fishing Activity within the Environmental Planning Area
Western Tuna and Billfish Fishery	Albacore tuna Bigeye tuna Yellowfin tuna Broadbill swordfish Striped marlin	The Western Tuna and Billfish Fishery (WTBF) operates in Australia's Exclusive Economic Zone and high seas of the Indian Ocean. In recent years, fishing effort has concentrated off south-west Western Australia, with occasional activity off South Australia. The main fishing gear in the WTBF is pelagic longline, with low levels of minor-line fishing. The Activity Planning Area and Environmental Planning Area overlap the Western Tuna and Billfish Fishery maximum fished area but not where there has been classified fishing intensity from 2010 – 2020 (Figure 12). No Victorian ports are used. Actual catch in the 2021 season was 252 tonnes with the fishery value confidential due to only two active vessels. Fishing mortality: all except swordfish subject to overfishing. Biomass: Over fished – striped marlin. All other species not overfished.	Yes	Yes

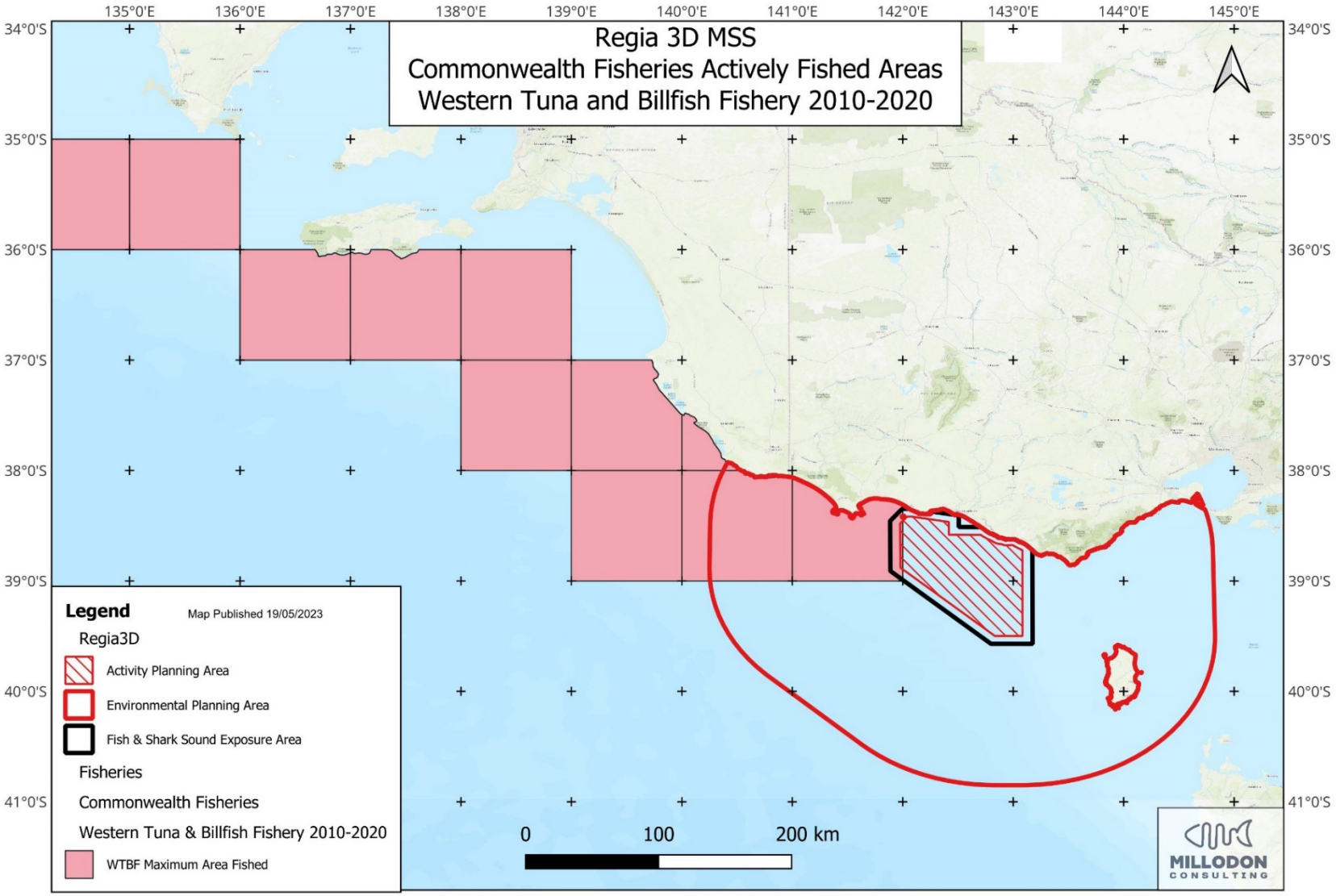


Figure 13: Western tuna and Billfish Fishery Fishing Effort within the Activity Planning Area and Environmental Planning Area

Victorian Fisheries

Victorian fisheries are managed by the Victorian Fisheries Authority (VFA) under the *Fisheries Act 1995* (Cth). VFA has regulatory responsibility for the management of fisheries in Victorian State Waters out to 3 nm and Commonwealth waters where the VFA manage fisheries on behalf of the Commonwealth under the Offshore Constitutional Settlement (OCS) arrangements. OCS arrangements are joint management arrangements of particular marine living resources that are found in waters subject to both Commonwealth and State control. Such arrangements allow for the management of the resources by State authorities, even in waters outside the State 3 nm territorial sea boundary. In Victoria, such arrangements are in place out to 20 nm for key species such as scallop and rock lobster.

Victorian commercial fisheries with jurisdictions to fish within the Activity Planning Area and Environmental Planning Area are:

- Abalone Fishery
- Bays and Inlet Fisheries
- Eel Fishery
- Giant Crab Fishery
- Multi-species Ocean Fisheries
- Octopus Fishery
- Pipi Fishery
- Rock Lobster Fishery
- Scallop (Ocean) Fishery
- Wrasse (Ocean) Fishery

No areas where aquaculture or seaweed harvesting occurs where identified within the Activity Planning Area and Environmental Planning Area.

Information relating to the target species, fishing locations, landed catch, value and other relevant aspects of each fishery is included in the following sections. Maps are also provided showing where catch and effort has been reported in a VFA grid between 2011 – 2022 in relation to the Activity Planning Area and Environmental Planning Area.

Data sources are from the Victorian Fisheries Authority Commercial Fish Production Information Bulletin July 2021 to June 2022 (VFA 2022) and VFA website (VFA 2023).

Table 2 provides a summary of the Victorian fisheries with catch and effort within the Activity Planning and Environmental Planning Areas.

Table 2: Summary of Victorian Fisheries with Fishing Catch and Effort within the Activity Planning and Environmental Planning Areas

Fishery	Fishing activity within the Activity Planning Area	Fishing Activity within the Environmental Planning Area	Note
Abalone Fishery	No	Yes	The Activity Planning Area does not overlap the fishery while the Environmental Planning Area overlaps the Western and Central zones of the fishery.
Bays and Inlet Fisheries	No	No	The fishery is not within the Activity Planning Area or Environmental Planning Area.
Eel Fishery	No	No	As the Activity Planning Area or Environmental Planning Area does not overlap with coastal river basins there is no overlap with this fishery. The Activity Planning Area or Environmental Planning Area may overlap where glass eels migrate.
Giant Crab Fishery	Yes	Yes	The Activity Planning Area and Environmental Planning Area overlap the area actively fished by the Giant Crab Fishery.
Multispecies Ocean Fisheries – Ocean General	Yes	Yes	The Activity Planning Area and Environmental Planning Area overlap the area actively fished by the Ocean General Fishery.
Octopus Fishery	Yes	Yes	The Activity Planning Area and Environmental Planning Area overlap the area actively fished by the Octopus Fishery.
Pipi Fishery	No	Yes	The Environmental Planning Area overlaps the actively fished areas of the Discovery Bay zones of the Pipi Fishery.
Rock Lobster Fishery	Yes	Yes	The Activity Planning Area and Environmental Planning Area overlap the area actively fished by the Rock Lobster Fishery.
Scallop Fishery	No	No	The Scallop Fishery does not operate within the Activity Planning Area or Environmental Planning Area.
Wrasse (Ocean) Fishery	Yes	Yes	The Activity Planning Area and Environmental Planning Area overlap the area actively fished by the Wrasse (Ocean) Fishery.

Abalone Fishery

Fishery	Target species	Description	Fishing activity within the Activity Planning Area	Fishing Activity within the Environmental Planning Area
Abalone Fishery	Blacklip abalone Greenlip abalone	The Abalone Fishery is one of Victoria's most valuable commercial fisheries. It operates along most of the Victorian shoreline, generally to 30 m depth where abalone are harvested by divers. Fishing is only allowed between sunrise and sunset. Abalone catch effort data was not provided by VFA due to confidentiality requirements but based on water depths, the Activity Planning Area does not overlap the fishery, while the Environmental Planning Area overlaps the Western and Central zones of the fishery. As of June 2022, there were 14 licences in the Western Zone and 33 in the Central Zone. Total allowable commercial catch limits of blacklip abalone for the Western Zone are considerably less than the Central Zone (2021-22 season: 66 tonnes compared with 251.2 tonnes, respectively). Greenlip abalone total allowable commercial catch limits are considerably lower than for blacklip abalone with 1.6 tonnes for the Western Zone and 3.46 tonnes for the Central Zone.	No	Yes

Bays and Inlet Fisheries

Fishery	Target species	Description	Fishing activity within the Activity Planning Area	Fishing Activity within the Environmental Planning Area
Bays and Inlet Fisheries	Multi-species	Multi-species, multi gear fishery utilising octopus pot, bay fish trap, commercial hoop net, seine net, mesh net, fishing line (including a longline), mussel rake underwater breathing apparatus and a hand operated bait pump. The larger bay and inlet fisheries include Western Port, Port Phillip Bay, Corner Inlet/Nooramunga and the Gippsland Lakes. These areas are not within the Activity Planning Area or Environmental Planning Area.	No	No

Eel Fishery

Fishery	Target species	Description	Fishing activity within the Activity Planning Area	Fishing Activity within the Environmental Planning Area
Eel Fishery	Short-finned eel Long-finned eel	Eel are harvested in Victorian coastal river basins south of the Great Dividing Range. Short-finned eels are found across the State, while long-finned eels are only found in eastern Victoria. Both species spend the majority of their life cycle in fresh water or estuaries but travel to the ocean to spawn once before dying. Spawning is thought to occur in the vicinity of the Coral Sea, although no precise spawning location for either species has been identified. Eggs are thought to be pelagic and hatch after about two days. Larvae are transported southwards along the east coast of Australia where they metamorphose into glass eels and swim into coastal bays and estuaries. Most short-finned glass eels migrate in the winter and spring, while long-finned glass eels migrate during summer and autumn. Commercial fishers are only permitted to use fyke nets to take eels and the number, dimensions, and mesh size of fyke nets is prescribed by regulation. As the Activity Planning Area or Environmental Planning Area does not overlap with coastal river basins there is no overlap with this fishery. However, the Activity Planning Area or Environmental Planning Area may overlap where glass eels migrate.	No	No

Giant Crab Fishery

Fishery	Target species	Description	Fishing activity within the Activity Planning Area	Fishing Activity within the Environmental Planning Area
Giant Crab Fishery	Giant crab	Giant crabs are fished commercially in western Victoria. The fishery is a small quota managed fishery that is closely linked with the Rock Lobster Fishery. The majority of vessels are used primarily for rock lobster fishing with giant crab taken as by-product. However, a small number of fishers target giant crabs and processors who specialise in exporting giant crab have developed technologies to store and transport live crabs to international markets. The boundaries of the fishery mimic those of the Rock Lobster Fishery, however the fishery is based in the Western Zone. Giant crabs inhabit the continental slope at approximately 200 metres depth and are most abundant along the narrow band of the shelf edge. Closed seasons are: • Male: 15 September to 15 November to protect males during moult. • Female: 1 June to 15 November to protect females while breeding and in berry (with eggs attached). Total landed catch in 2015-16 was 10 tonnes. Data since then is not available due to insufficient data to report because there are less than five licence holders (policy requirement to protect commercial confidentiality of data). The Activity Planning Area and Environmental Planning Area overlap the area actively fished by the Giant Crab Fishery (Figure 14). Data from VFA for the last 5 years (2018 - 2022 shows the number of days fished in a block for that period (Figure 14). Fishing intensity is concentrated along the edge of the shelf with a maximum of 78 days fished in Activity and Environment Planning Area.	Yes	Yes

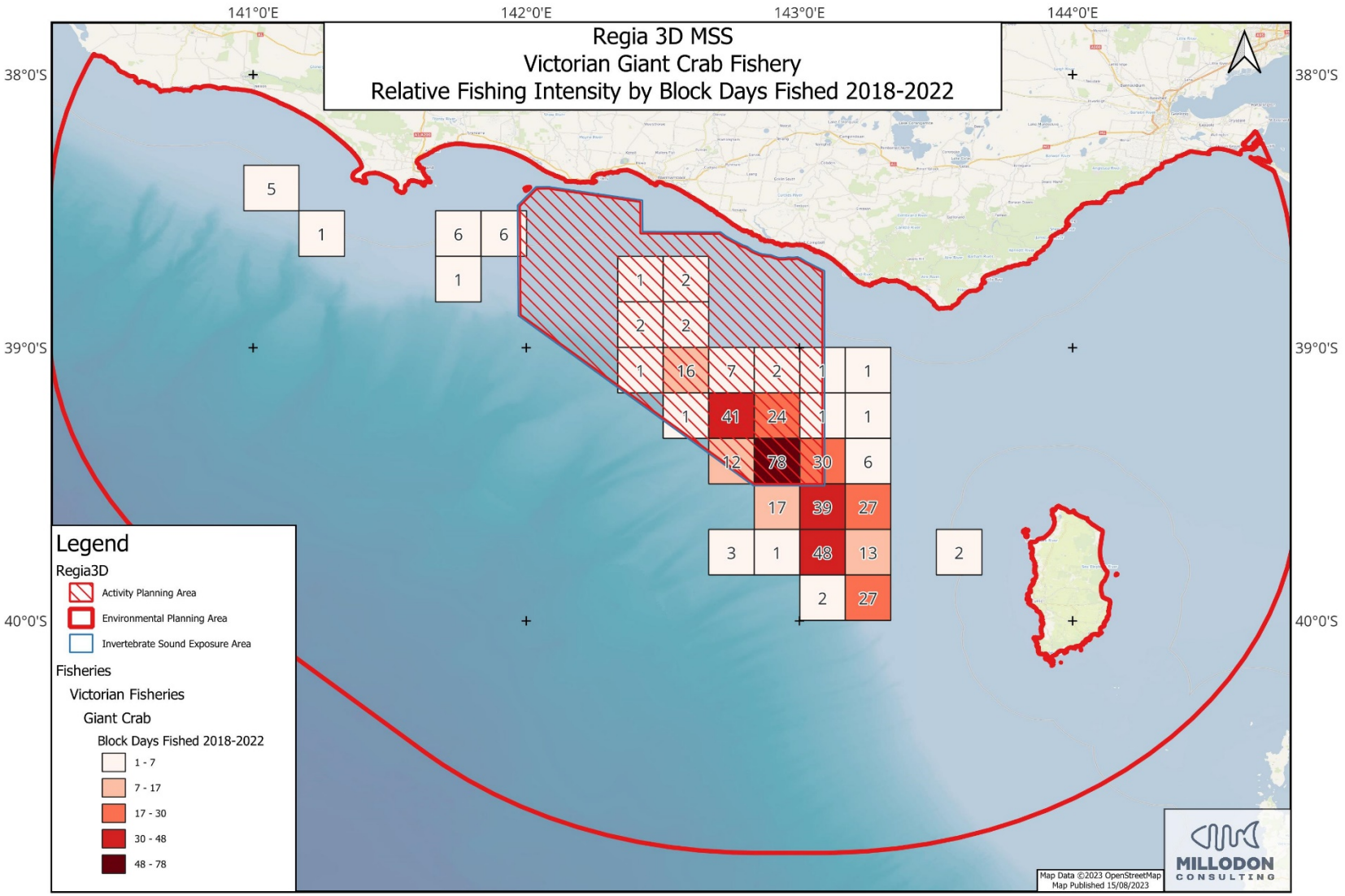


Figure 14: Giant Crab Fishery Relative Fishing Intensity within the Activity Planning Area and Environmental Planning Area

Multispecies Ocean Fisheries

Fishery	Target species	Description	Fishing activity within the Activity Planning Area	Fishing Activity within the Environmental Planning Area
Multispecies Ocean Fisheries – Ocean General	Gummy shark School shark Australian salmon Snapper Small flathead bycatch	The wrasse, inshore trawl, southern rock lobster and giant crab fisheries are able to catch gummy shark and school sharks as part of their fishery. Snapper is caught using lines, nets and haul seine. Over 90% of the catch is from Port Phillip Bay, and around 5% from coastal waters. In 2020/21, 45 tonnes were landed but a value could not be provided as there is insufficient data to report because there are less than five licence holders (policy requirement to protect commercial confidentiality of data). The Activity Planning Area and Environmental Planning Area overlap the area actively fished by the Ocean General Fishery (Figure 15). Data from VFA for the last 5 years (2018 - 2022 shows the number of days fished in a block for that period (Figure 15). Fishing intensity is concentration nearshore with a maximum of 79 days fished in Activity Planning Area and 363 days in the Environment Planning Area.	Yes	Yes

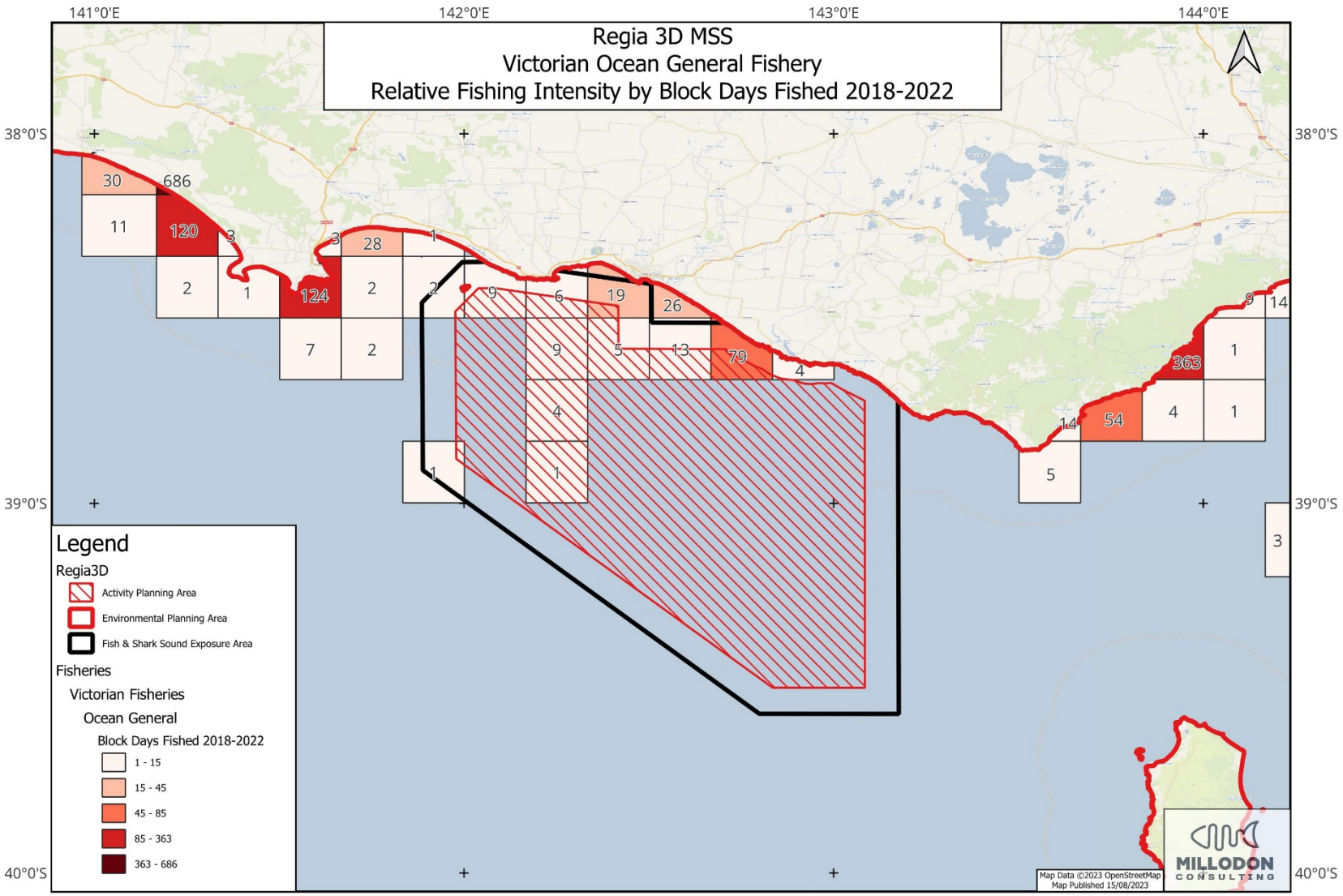


Figure 15: Ocean General Relative Fishing Intensity within the Activity Planning Area and Environmental Planning Area

Octopus Fishery

Fishery	Target species	Description	Fishing activity within the Activity Planning Area	Fishing Activity within the Environmental Planning Area
Octopus Fishery	Pale octopus Maori octopus Gloomy octopus	Victoria's new Octopus (Eastern Zone) Fishery harvests mainly pale octopus in East Gippsland using purpose-built unbaited traps which minimise bycatch. The fishery may also catch Maori octopus and gloomy octopus. The fishery commenced on 1 August 2020. Three zones have been established for the management to commercial octopus fishing in Victoria: Eastern, Central and Western. Octopus Fishery Access Licences authorise commercial take of octopus from the Eastern Octopus Zone. Octopus fishing in the central and western octopus zones is less established and is being managed by the VFA through exploratory, temporary permits. The Activity Planning Area is within the Western Octopus Zone and the Environmental Planning Area is within the Western and Central Octopus Zones. The Activity Planning Area and Environmental Planning Area overlap the area actively fished by the Octopus Fishery (Figure 16). Data from VFA for the last 5 years (2018 - 2022 shows the number of days fished in a block for that period (Figure 16). Fishing intensity is concentration west of the Activity Planning Area with a maximum of 1 day fished in Activity Planning Area and 15 days in the Environment Planning Area.	Yes	Yes

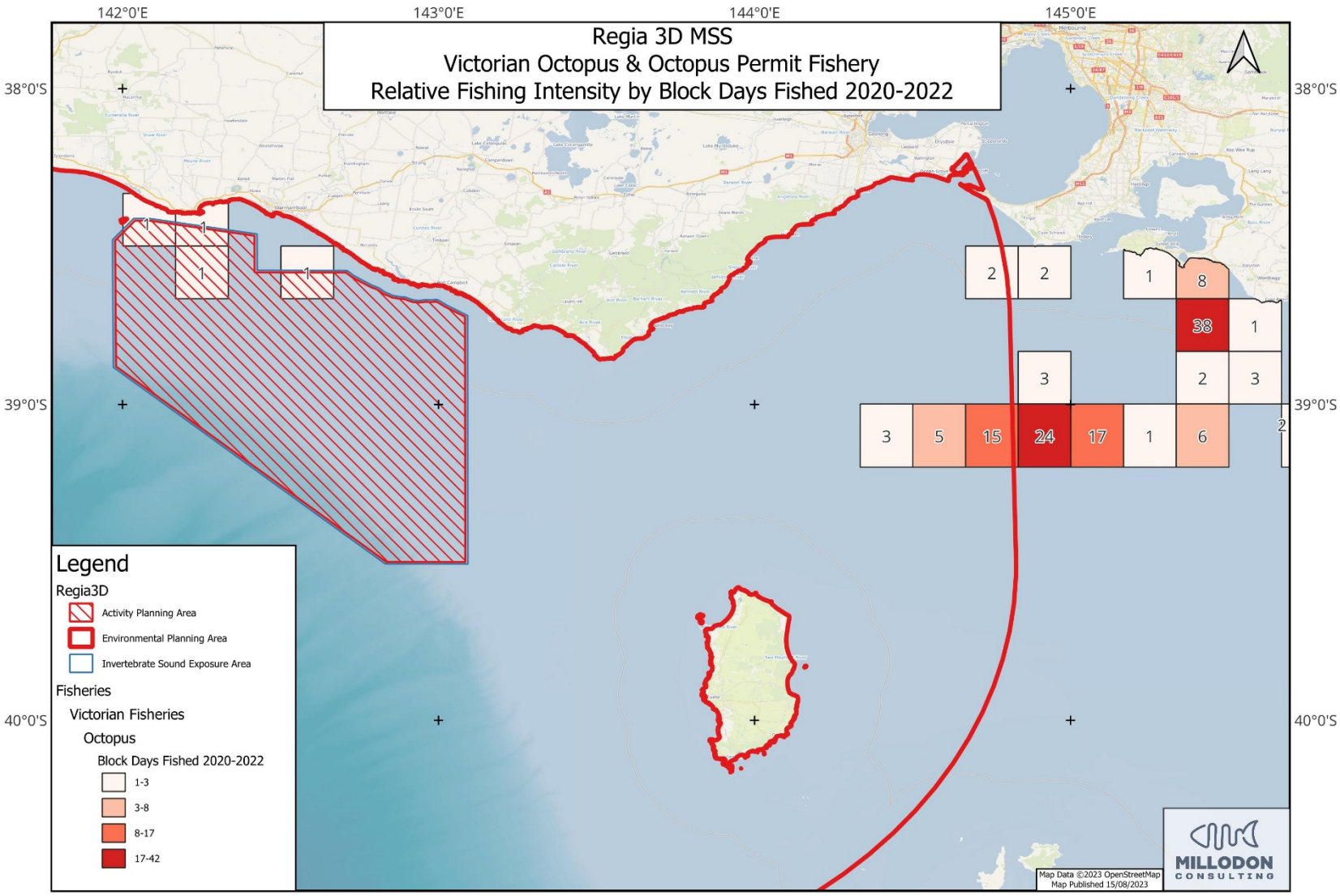


Figure 16: Octopus Fishery Relative Fishing Intensity within the Activity Planning Area and Environmental Planning Area

Pipi Fishery

Fishery	Target species	Description	Fishing activity within the Activity Planning Area	Fishing Activity within the Environmental Planning Area
Pipi Fishery	Pipi	The new Victorian Pipi Fishery commenced on 1 April 2020. Pipi Fishery Access Licences have been issued for the Discovery Bay and Venus Bay commercial management zones. The Total Allowable Catch for the 2020/2021 season has been set at 10 tonne in Discovery Bay Western Zone, 40 tonne in Discovery Bay Eastern Zone and 2 tonne in the Venus Bay Commercial Zone. The Activity Planning Area does not overlap the area actively fished by the Pipi Fishery (Figure 17). The Environmental Planning Area overlaps the Discovery Bay zones (Figure 17).	No	Yes

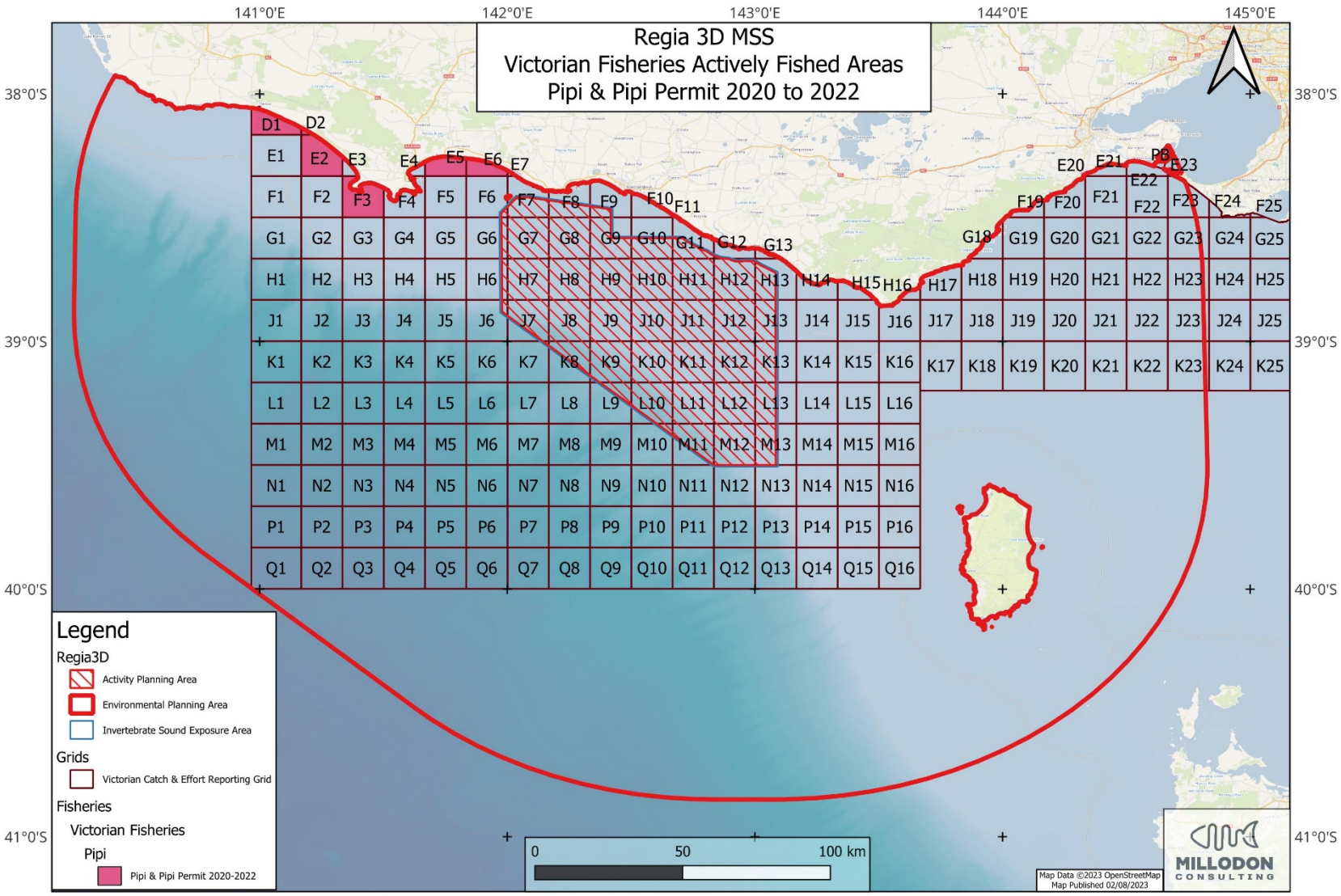


Figure 17: Pipi Fishery Permit Areas within the Activity Planning Area and Environmental Planning Area

Rock Lobster Fishery

Fishery	Target species	Description	Fishing activity within the Activity Planning Area	Fishing Activity within the Environmental Planning Area
Rock Lobster Fishery	Southern rock lobster	The Rock Lobster Fishery is Victoria's most valuable fishery value of A$13.6 million in 2020/21 and is based on the southern rock lobster. The fishery is divided into two separately managed zones: the Eastern Zone and the Western Zone. Southern rock lobsters are found to depths of 150 m, with most of the catch coming from inshore waters less than 100 m deep. Fishing for rock lobsters is prohibited during closed seasons. • The closed season for female rock lobsters is from 1 June to 15 November and is designed to protect females in berry (with eggs attached) during the spawning period. • The closed season for male rock lobsters is from 15 September to 15 November and is designed to protect males during the moulting period when soft shells increase their vulnerability. The Activity Planning Area and Environmental Planning Area overlap the area actively fished by the Rock Lobster Fishery (Figure 18). Since 2009/10, annual quotas for the western zone that overlaps the Activity Planning Area have been set at between 230 and 260 tonnes and have been fully caught each year. In the western zone, most catch is landed through Portland, Port Fairy, Warrnambool, Port Campbell, and Apollo Bay. Data from VFA for the last 5 years (2018 - 2022 shows the number of days fished in a block for that period (Figure 18). Fishing intensity is concentration near with a maximum of 642 day fished in Activity Planning Area and 18.13 days in the Environment Planning Area.	Yes	Yes

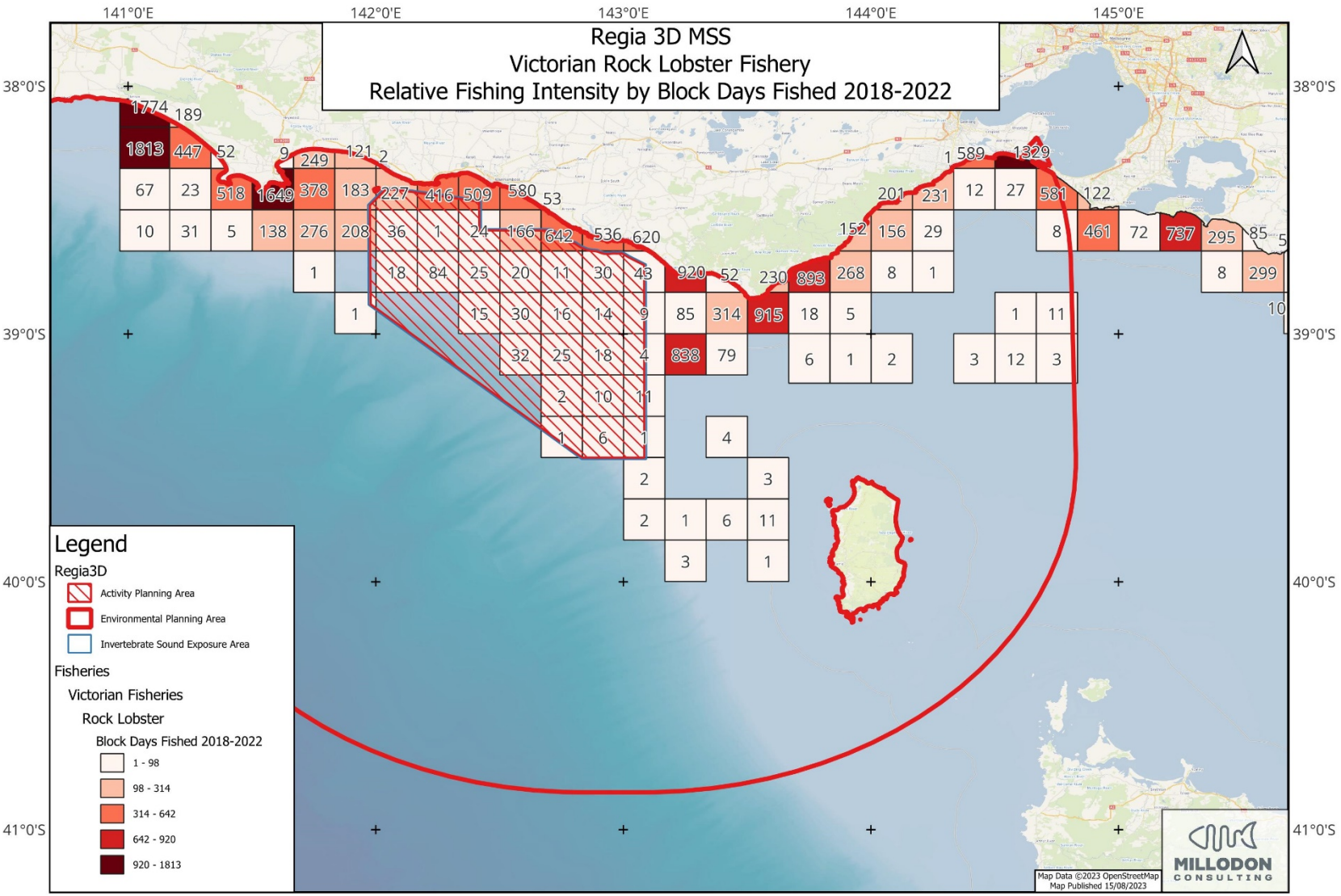


Figure 18: Rock Lobster Relative Fishing Intensity within the Activity Planning Area and Environmental Planning Area

Scallop Fishery

Fishery	Target species	Description	Fishing activity within the Activity Planning Area	Fishing Activity within the Environmental Planning Area
Scallop Fishery	Scallops	The Scallop Fishery is within the waters of the Victorian zone extend out to 20 nm from the high tide water mark but exclude the bays and inlets along the coast where commercial fishing for scallops is prohibited. The Scallop Fishery does not operate within the Activity Planning Area or Environmental Planning Area (Figure 19).	No	No

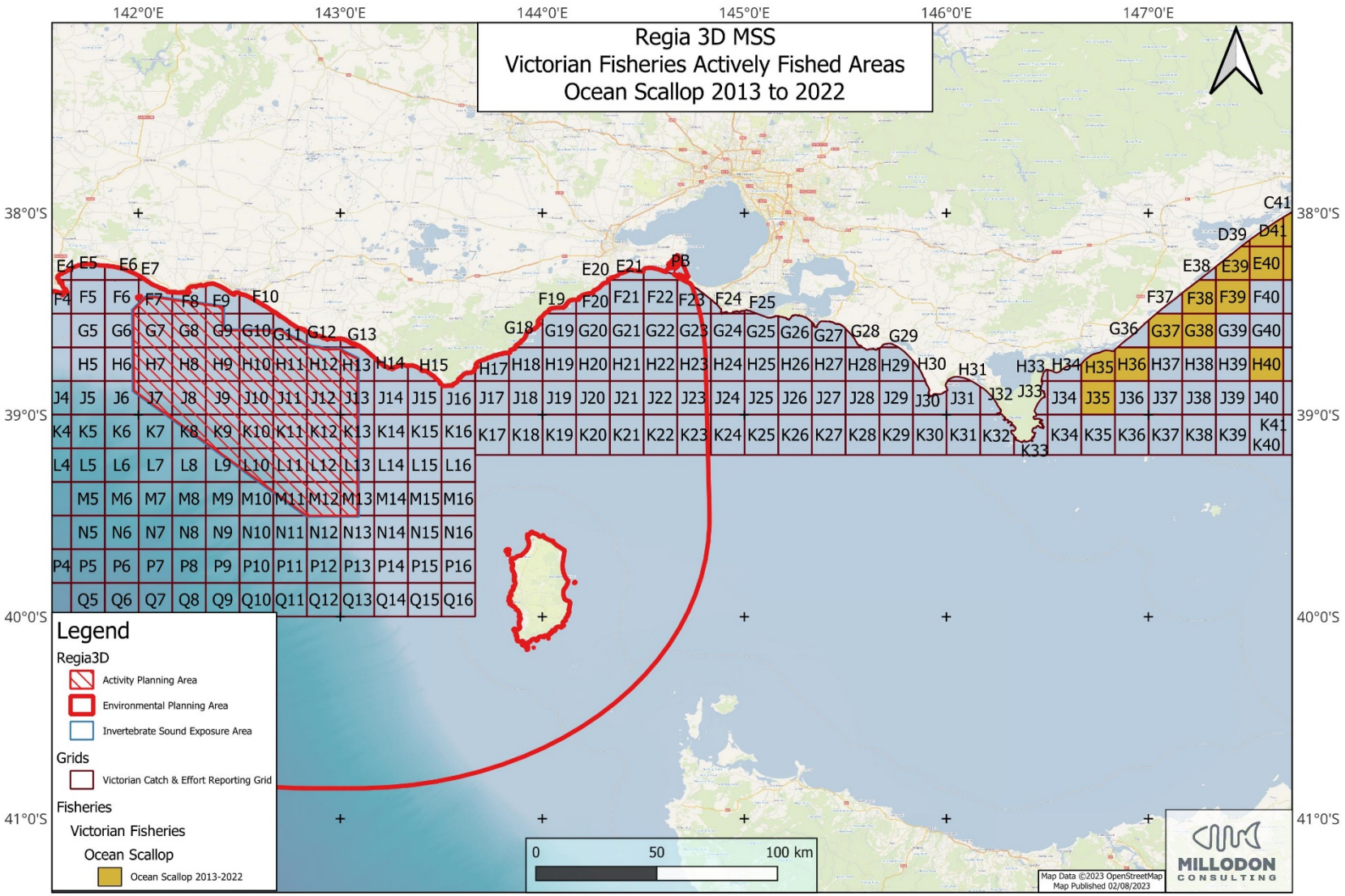


Figure 19: Scallop Fishery Fishing Effort within the Activity Planning Area and Environmental Planning Area

Wrasse (Ocean) Fishery

Fishery	Target species	Description	Fishing activity within the Activity Planning Area	Fishing Activity within the Environmental Planning Area
Wrasse (Ocean) Fishery	Wrasse	The fishery extends along the entire length of the Victorian coastline and out to 20 nm offshore, except for marine reserves. Fishers mostly use hook and line. Limited entry fishery with 23 licences at June 2022. Total annual catch in 2021/22 was 21 tonnes. Most wrasse is harvested by hook and line, although commercial rock lobster fishers who also hold a commercial wrasse licences can keep those fish that they catch in their rock lobster pots. Wrasse inhabit depths up to 160 m, whereas fishers mostly operate in depths shallower than 30 m to reduce their losses due to barotrauma, where the swim bladder expands and damages the fish as it is hauled to the surface. The Activity Planning Area and Environmental Planning Area overlap the area actively fished by the Wrasse (Ocean) Fishery (Figure 20). Data from VFA for 2011 - 2022 shows the maximum number of vessels in grids within the Activity Planning Area was three, with a maximum fishing days of 106.	Yes	Yes

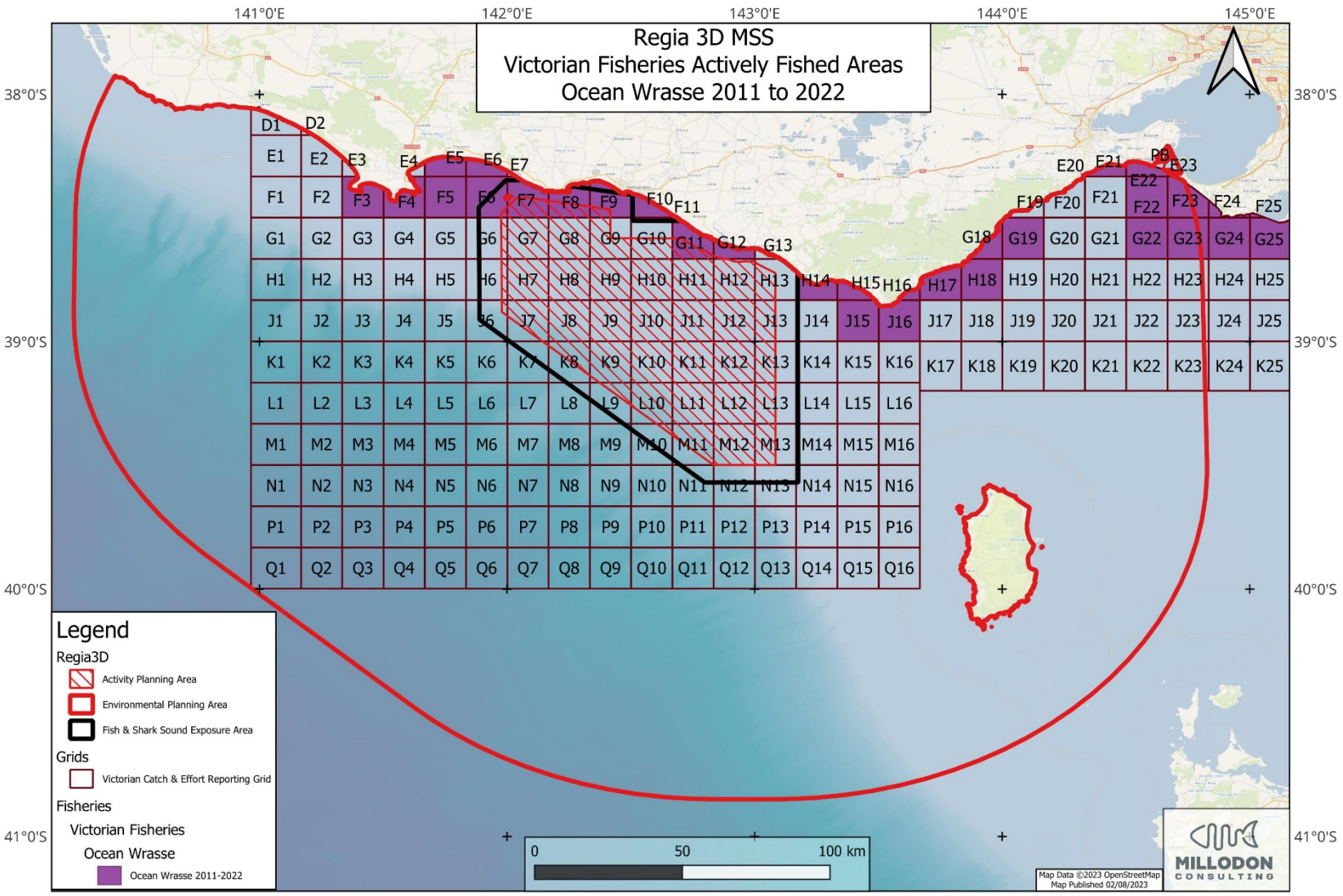


Figure 20: Wrasse (Ocean) Fishery Fishing Effort within the Activity Planning Area and Environmental Planning Area

Tasmanian Fisheries

The Department of Natural Resources and Environment Tasmania (DNRET) manages Tasmania's commercial fisheries under the *Living Marine Resources Management Act 1995*.

All fisheries except for the Giant Crab Fishery and the Rock Lobster Fishery operate within Tasmanian waters. The Giant Crab Fishery and the Rock Lobster Fishery also operate in Commonwealth waters under an Offshore Constitutional Settlement (OCS) between the Australian Government and the Government of Tasmania.

Via stakeholder consultation with DNRET it was confirmed that no Tasmanian fisheries overlap the Activity Planning Area and that the following fisheries may fish within the Environmental Planning Area around King Island.

- Abalone Fishery
- Giant Crab Fishery
- Octopus Fishery
- Rock Lobster Fishery

Information relating to the target species, fishing locations, landed catch, value and other relevant aspects of each fishery is included in the following sections. Data sources are from the Fishing Tasmania (2023) and UTAS (2023) unless noted.

Abalone Fishery

Fishery	Target species	Description	Fishing activity within the Activity Planning Area	Fishing Activity within the Environmental Planning Area
Abalone Fishery	Blacklip abalone Greenlip abalone	The Tasmanian wild abalone industry operates within Tasmanian coastal waters (Figure 21) and is a major contributor to the Tasmanian economy. It is the largest wild abalone fishery in the world, providing around 25% of the annual harvest. Abalone are hand-captured by divers in depths between 5-30 m. Blacklip abalone are collected on rocky substrate around the Tasmanian shoreline and are the main focus of the fishery. Greenlip abalone are distributed along the north coast and around the Bass Strait islands and usually account for around 5% of the total wild harvest. In 2020/21, the gross value of production of the fishery was around $50 million from a total catch of approximately 1,000 tonnes. The Activity Planning Area does not overlap the area actively fished by the Abalone Fishery, while the Environmental Planning Area overlaps the fishery area around King Island (Figure 21).	No	Yes

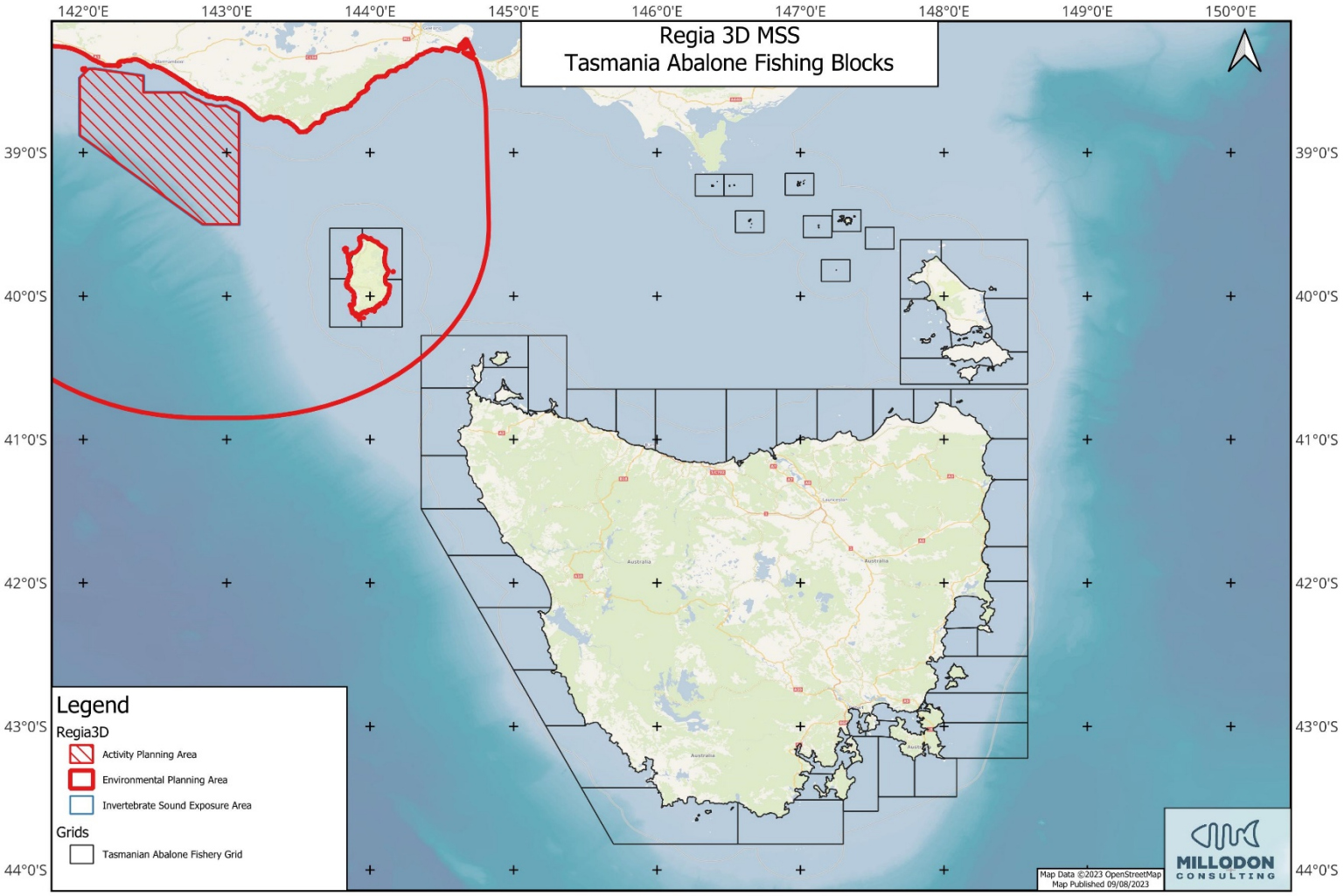


Figure 21: Tasmania Abalone Fishing Block Map

Giant Crab Fishery

Fishery	Target species	Description	Fishing activity within the Activity Planning Area	Fishing Activity within the Environmental Planning Area
Giant Crab Fishery	Giant crab	The Giant Crab Fishery is a comparatively small fishery with the annual harvest set at 20.7 tonnes but with a high landed value of around $2 million. The fishery is managed by Tasmania under an Offshore Constitutional Settlement (OCS) between the Australian Government and the Government of Tasmania despite the majority of catch taken in Commonwealth waters. The Giant Crab Fishery has the following closures: • Females - from 15 November in a year to 31 May the following year inclusive. The Activity Planning Area does not overlap the Giant Crab Fishery, while the Environmental Planning Area overlaps the fishery area around King Island (Figure 22).	No	Yes

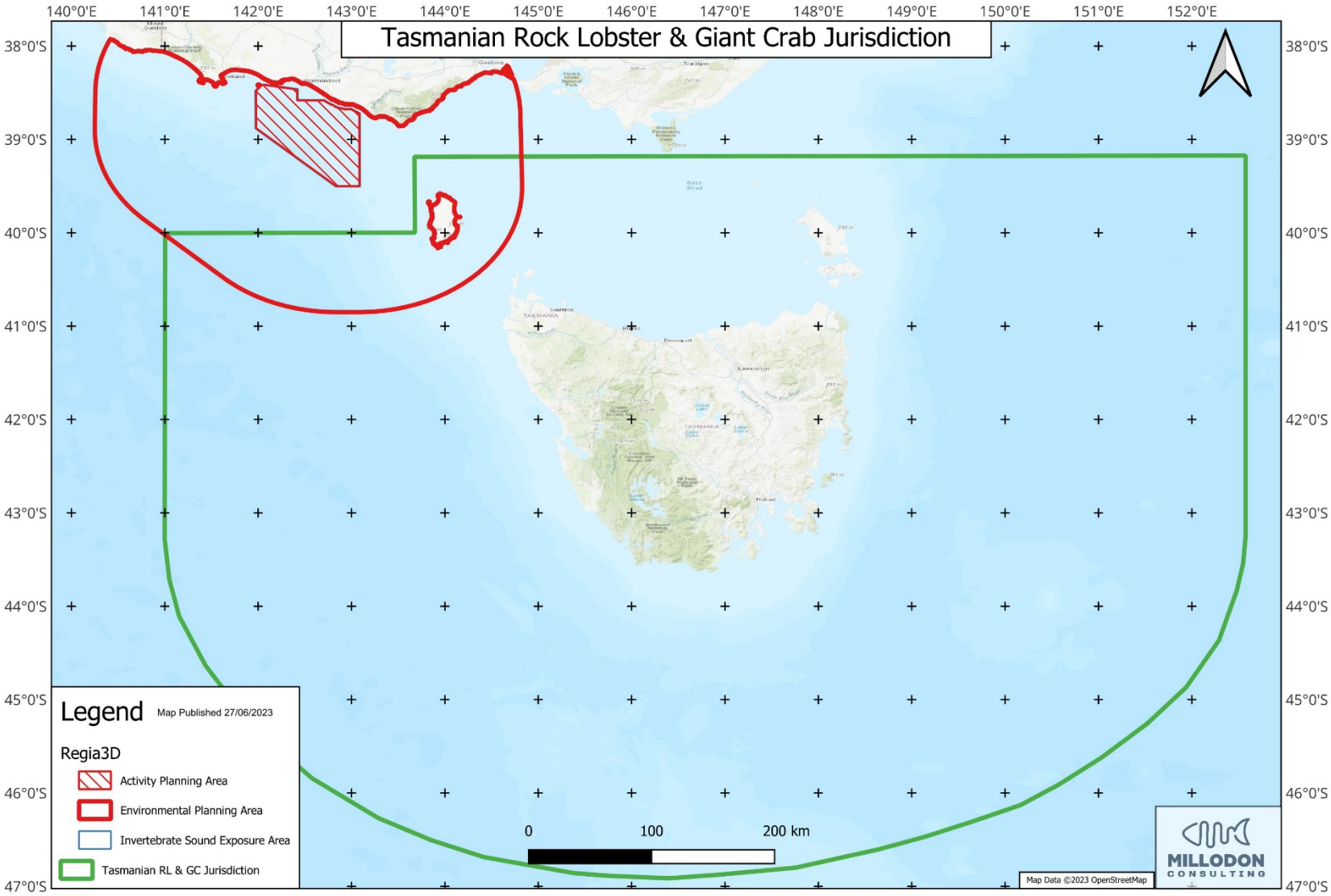


Figure 22: Tasmanian Giant Crab Fishery and Rock Lobster Fishery Jurisdiction

Octopus Fishery

Fishery	Target species	Description	Fishing activity within the Activity Planning Area	Fishing Activity within the Environmental Planning Area
Octopus Fishery	Pale octopus Gloomy octopus Maori octopus	Information in this section is from Fraser et. al (2022). Octopus are caught commercially in Tasmanian waters across multiple fisheries using a range of gear types. Most catch comes from a targeted unbaited trap fishery for pale octopus in northern Tasmania, primarily Bass Strait, by fishers operating under the fishing licence (octopus). Holders of the fishing licence (octopus) also retain low quantities of Māori octopus as by-product and take occasional landings of gloomy octopus in years when the fishery extends towards eastern Bass Strait. The Scalefish and Rock Lobster fisheries take octopus as by-product. The total catch of pale octopus in 2020/21 was 154 t, representing the highest recorded catch. These catches are well above the average of 100 t observed over the last decade. Almost all the catch in 2020/21 (72%) occurred in only three fishing blocks – two east of King Island and one inshore adjacent to Stanley. Two licences have been issued for the operation of two vessels. The Activity Planning Area does not overlap the Octopus Fishery, while the Environmental Planning Area overlaps the fishery area on the west side of King Island (Figure 23).	No	Yes

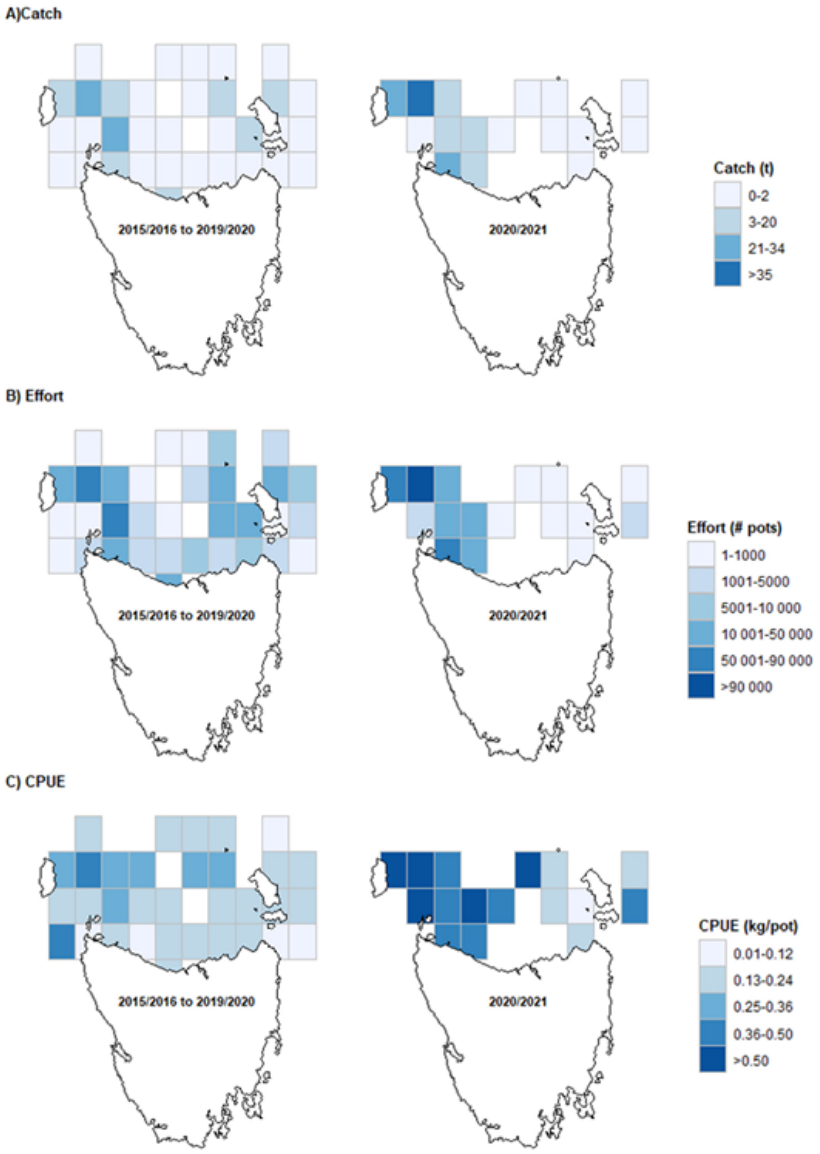


Figure 23: Pale Octopus Catch, effort (pot lifts) and nominal CPUE averaged over the last 5 years (left) and for 2020/21 (right) (Fraser et. al 2022)

Rock Lobster Fishery

Fishery	Target species	Description	Fishing activity within the Activity Planning Area	Fishing Activity within the Environmental Planning Area
Rock Lobster Fishery	Southern rock lobster	The Rock Lobster Fishery primarily targets southern rock lobster, and small amounts of eastern rock lobster (less than 1% of the fishery). The commercial fishery currently catches just over 1,000 tonnes per annum with a landed value of about $90 million. Commercial fishers use baited pots to harvest lobster all around Tasmania, including in waters surrounding major islands. The fishery takes place in Tasmanian and Commonwealth waters (Figure 24). The Rock Lobster Fishery has the following season closures: • Males: 1 October to 15 November for all state waters (except for September closed region which is outside of Environmental Planning Area) to protect males during moulting period. • Females: 1 May to 15 November to protect females in berry (with eggs attached). The Activity Planning Area is not overlapped by the Tasmanian Rock Lobster Fishery, while the Environmental Planning Area overlaps the fishery area around King Island (Figure 24).	No	Yes

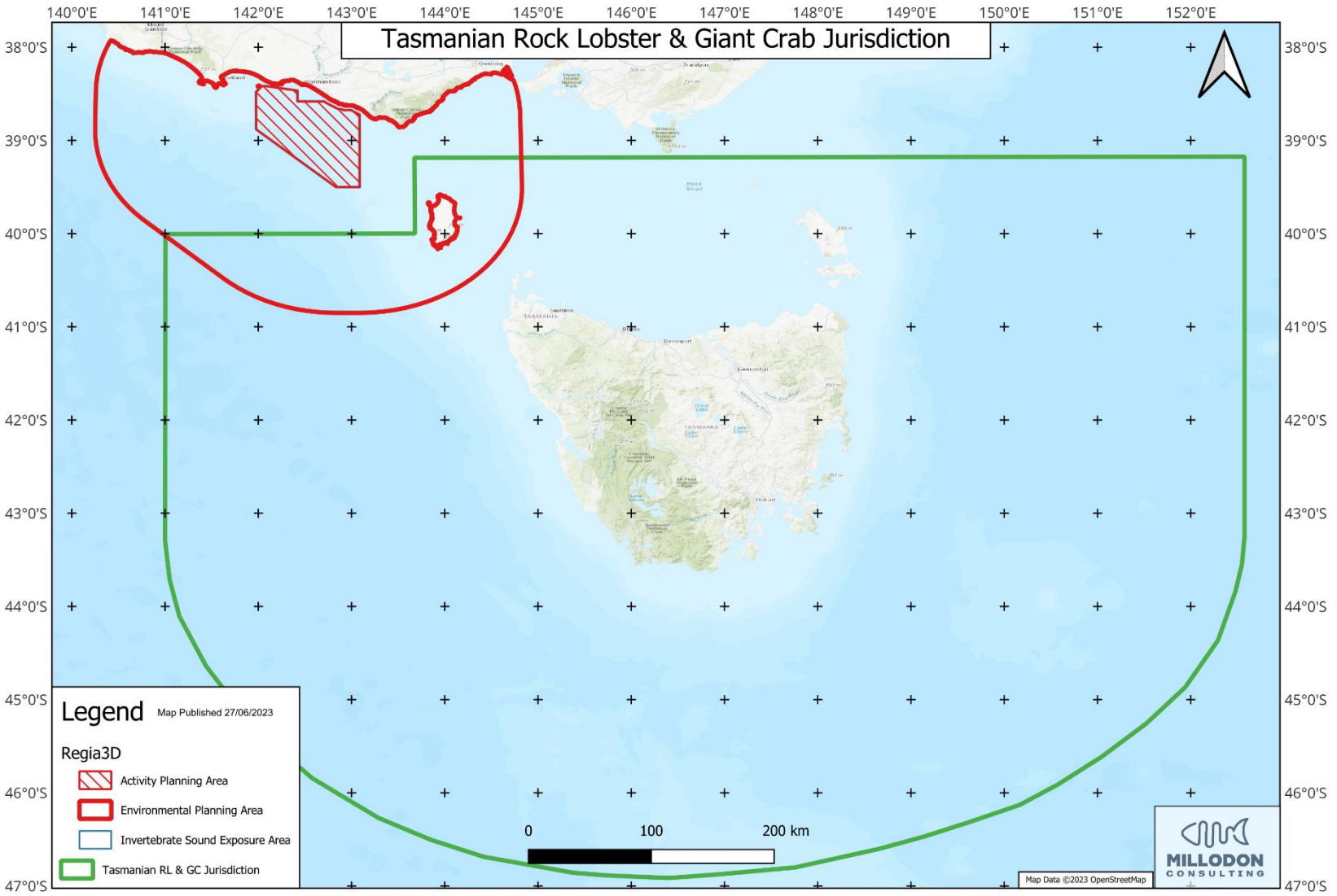


Figure 24: Tasmanian Giant Crab Fishery and Rock Lobster Fishery Jurisdiction

South Australian Fisheries

The *Fisheries Management Act 2007* and its regulations provide the legislative framework, objectives and guiding principles for the management of fisheries in South Australia. Management rules for commercial fisheries are provided in fisheries regulations under the Act.

The Department of Primary Industries and Regions (DPIR) is responsible for the ecologically sustainable development of South Australia's aquatic resources and the administration of the *Fisheries Management Act 2007*.

The Activity Planning Area does not overlap any South Australian Fisheries (Figure 25).

Data from DPIR identified that the Environmental Planning Area overlaps fishing blocks 56 and 58 in the Southern Zone of South Australia's Marine Fishing Areas (MFA) grid (Figure 25) where the following fisheries are active:

- Abalone Fishery
- Charter Boat Fishery
- Giant Crab Fishery
- Marine Scalefish Fishery
- Rock Lobster Fishery

Information relating to the target species, fishing locations, landed catch, value and other relevant aspects of each fishery is included in the following sections. Data sources are from DPIR fishing data from 2012 to 2022 for fishing blocks 56 and 58, which the Environmental Planning Area overlaps, and DPIR (2023), unless noted.

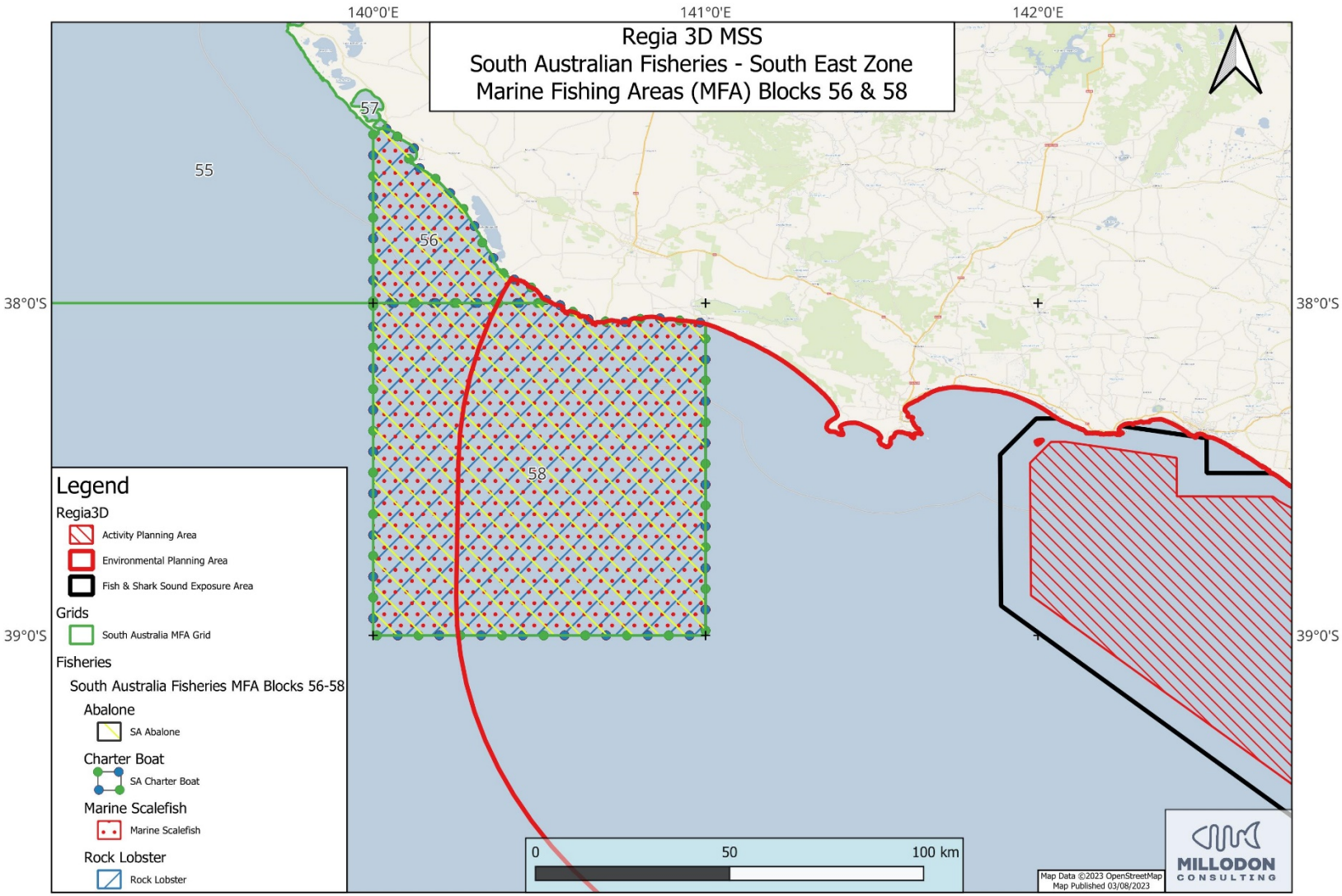


Figure 25: South Australian Fisheries within the Environmental Planning Area

Abalone Fishery

Fishery	Target species	Description	Fishing activity within the Activity Planning Area	Fishing Activity within the Environmental Planning Area
Abalone Fishery	Blacklip abalone Greenlip abalone	The South Australian commercial abalone fishery takes greenlip and blacklip abalone that inhabit subtidal reefs out to approximately 30 m. Commercial abalone divers mostly operate from large, trailered boats. Divers use surface supplied air from the boat and may use motorised cages to mitigate physical interactions with white sharks. The Activity Planning Area does not overlap the fishery. The Environmental Planning Area overlaps the Southern Zone of the fishery where there have been six active licences from 2021 to 2022. Hours dived range from 921 to 1496 per year with annual catch between 101,133 to 153,491 kg.	No	Yes

Charter Boat Fishing

Fishery	Target species	Description	Fishing activity within the Activity Planning Area	Fishing Activity within the Environmental Planning Area
Charter Boat Fishery	Various	The Charter Boat Fishery is a limited entry fishery with 82 licence holders of which 47 were active in 2020/2021. Fishing in inshore regions where water depths are < 50 m is the most frequent activity. Peak periods are between December and April (summer) and October. Seventy-eight species of fish, shark, mollusc, cephalopods, and crustacean are targeted with King George whiting, snapper and Bight redfish recording the highest catches. The above information is from Durante et al. (2022). The Activity Planning Area does not overlap the fishery. The Environmental Planning Area overlaps the fishery where there have been six active licences in 2019/20 but typically five or less than five licenses from 2012 to 2022.	No	Yes

Giant Crab Fishery

Fishery	Target species	Description	Fishing activity within the Activity Planning Area	Fishing Activity within the Environmental Planning Area
Giant Crab Fishery	Giant crab	Information from in this section is from McLeay (2022). Giant Crab (*Pseudocarcinus gigas*), also known as king crab, is endemic to southern Australian waters and distributed from southern Western Australia to central New South Wales. While they occur at depths ranging from 20 to 600 m, the highest population densities are found at the edge of the continental shelf at depths of approximately 140 to 270 m. Fishers use a maximum of 100 steel-framed pots that must comply with pot dimension specifications. Commercial access to the giant crab resource is limited to licence holders in the Miscellaneous Fishery and Rock Lobster Fishery. Total allowable catch in the fishery is 22.1 t per year, consisting of 13.4 t in the Northern Zone and 8.7 t in the Southern Zone, with total catch ranging from 15.4 t in 2020/21 to 18.4 t in 2017/218. The giant crab fishing season is between 1 October 31 May, with the fishing season in the Southern Zone between 1 October and 30 April, and in the Northern Zone between 1 November and 31 May. The Activity Planning Area does not overlap the fishery. The Environmental Planning Area overlaps the southern zone of the fishery. DPIR could not provide data specific for the area overlapping the Environmental Planning Area as all data for the Giant Crab Fishery is confidential.	No	Yes

Marine Scalefish Fishery

Fishery	Target species	Description	Fishing activity within the Activity Planning Area	Fishing Activity within the Environmental Planning Area
Marine Scalefish Fishery	King George Whiting Southern Garfish Southern Calamari	The Marine Scalefish Fishery is a multi-species and multi-gear fishery. Commercial fishing can be undertaken for more than 60 species of scalefish using a range of gear types. The Sardine Fishery is a part of the Marine Scalefish Fishery The Marine Scalefish Fishery operates in all coastal waters of South Australia between the Western Australian and Victorian border. For some species the Offshore Constitutional Settlement extends the fishery area out 200 nm to the Australian Exclusive Economic Zone miles. The fishing area includes gulfs, bays and estuaries, excluding the Coorong. The main species taken are: • King George Whiting • Southern Garfish • Southern Calamari. Those 4 species make up: • 60% of the total fishery production weight • 70% of the total fishery value. Not all species taken by this fishery are scalefish. Other species include squid, worms, and sharks. In 2020 there were >300 licences in the fishery. Total annual catches of primary species decline from 2,089 t in 2001 to 807 t in 2020. The Activity Planning Area does not overlap the fishery. The Environmental Planning Area overlaps the fishery where there have been 15 active licences in 2012/13 to less than 5 in 2021/22.	No	Yes

Rock Lobster Fishery

Fishery	Target species	Description	Fishing activity within the Activity Planning Area	Fishing Activity within the Environmental Planning Area
Rock Lobster Fishery	Rock lobster	The Rock Lobster Fishery is based on the capture of southern rock lobster (*Jasus edwardsii*). Other species are permitted to be landed and sold, including giant crab and octopus. Rock lobsters are commercially harvested with pots that are set overnight. Rock lobster licence holders may also harvest marine scalefish as endorsed on their licence. The Activity Planning Area does not overlap the fishery. The Environmental Planning Area is within the fishery Southern Zone which is closed from 31 May to 1 October. The total reported 2020 logbook catch was 1,275.5 t (99% of TACC). The annual catch within the Planning Area ranged from 331 t to 420 t from 2012 to 2022. During this period licence holders ranged from 43 to 71.	No	Yes

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