

MORETON BAY TUNNEL NET FISHERY CODE OF BEST PRACTICE

MAY 2012



PREFACE

South East Queensland is blessed with a unique marine environment with Moreton Bay at its doorstep. The area supports extensive recreational use alongside a broad range of commercial activities, including commercial fishing.

The sustainability of the marine environment is under pressure from a variety of human activities due to modified marine ecosystems. The operators of the Moreton Bay Tunnel Net Fishery have been operating in the area for generations and are committed to the Ecologically Sustainable Development of their industry through the use of responsible and selective fishing gear and techniques. In 2007, as part of industry's commitment to sustainable fishing practices, the fishers of Moreton Bay developed, and adopted, an Environmental Management System (EMS) for professional fisheries in Moreton Bay.

To build on the EMS and with the support of the Australian Government, through the Caring for our Country program, the Moreton Bay Tunnel Net Fishery fishers developed this Code of Best Practice, to highlight the positive things that they as an industry do to minimise their environmental impacts, and that go beyond legislative requirements.

This Code of Best Practice is a living document and provides a reference for interested stakeholder groups, and the wider community, of how the Moreton Bay Tunnel Net Fishery fishers are addressing the environmental issues relating to their fishing operations.

The operation of the Code of Best Practice will be reviewed as part of the annual briefing held between Industry, and Queensland's Department of Agriculture, Fisheries and Forestry, Queensland Parks and Wildlife Service, and other relevant agencies.

GLOSSARY

ACRONYM	DESCRIPTION
Code	Code of Best Practice
DEHP	Queensland Department of Environment and Heritage Protection
DNPRSR	Queensland Department of National Parks, Recreation, Sport and Racing
DNRM	Queensland Department of Natural Resources and Mines
ECIFFF	East Coast Inshore Fin Fish Fishery
EMS	Environmental Management System
EPBC Act	Environment Protection and Biodiversity Conservation Act 1999
MBSIA	Moreton Bay Seafood Industry Association
MBTNF	Moreton Bay Tunnel Net Fishery
DAFF Qld	Queensland Department of Agriculture, Fisheries and Forestry
QPWS	Queensland Parks and Wildlife Service
R&D	Research and Development
SEWPaC	Commonwealth Department of Sustainability, Environment, Water, Population and Communities
SOCI	Species of Conservation Interest
USL	Uniform Shipping Laws
WTO	Wildlife Trade Operation

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FISHERY VISION

The Moreton Bay Tunnel Net Fishery is recognised as a sustainable, profitable and dynamic fishery which, through ethical harvest strategies, commitment to sustainability, and innovative approaches to protecting the environment, is an industry that continues to contribute to the well-being and prosperity of the region.

Moreton Bay Tunnel Net Fishers' Profile

Moreton Bay Tunnel Net fishers will develop and maintain a good public profile at all times, and assist in the promotion of the public's awareness and understanding of the industry's involvement in responsible fishing and sustainable management.

Guiding Principles for the Code of Best Practice

Moreton Bay Tunnel Net fishers were guided by the following principles in developing this Code;

- Ensuring the long term sustainability of the fishery
- Minimising the industry's impact on the environment
- Producing best quality seafood
- Maintaining and improving profitability
- Accepting marine park conservation values
- Working with the community and other user groups
- Providing a safe and healthy work environment
- Continually reviewing and improving all aspects of fishery performance.

Objectives of the Code of Best Practice

This Code aims to guarantee the future of the Moreton Bay Tunnel Net Fishery by;

- Codifying a strategy for sustainable, responsible, innovative and profitable fishing
- Ensuring that the fishery operates under best practice arrangements
- Providing broad standards of conduct for everyone involved in this fishery, including a commitment to complying with laws and regulations governing the fishery and associated activities
- Providing guidelines for critical fishery operations
- Ensuring that the fishery has minimal environmental impact
- Ensuring that fishers take all opportunities to contribute to broader conservation and sustainability outcomes in Moreton Bay
- Engaging with the general public and demonstrating the fishers' responsible outlook and commitment to sustainability
- Ensuring that the wider community understands the importance of this fishery to local consumers and the broader economy
- Detailing the 'side benefits' of this fishery, such as the contribution to research on fish stocks; protected species, and the monitoring of pollution and other threats to the health of Moreton Bay
- Formalising the adoption of the Code of Best Practice through a legislative process.

Responsibilities of Moreton Bay Tunnel Net Fishers

This Code of Best Practice is a guide and doesn't remove Moreton Bay Tunnel Net fishers' obligation to understand and comply with all relevant legislation. The Code of Best Practice provides additional information and measures that the Moreton Bay Tunnel Fishery fishers can follow to improve their environmental performance.

The legislation that governs the management of the fishery is a result of industry and government consultation over many years. It is there to ensure the continuing sustainability of the stocks and to manage the environment that in turn the industry depends upon for continuing viability. Moreton Bay Tunnel Net Fishery members should have copies of the relevant legislation and familiarise themselves with them.

It is the role of experienced Moreton Bay Tunnel Net Fishery fishers to provide guidance to new or inexperienced fishers, so that the Code of Best Practice is understood and applied.

INTRODUCTION

For many generations the Moreton Bay Tunnel Net Fishery (MBTNF) has provided prime quality fresh fish, especially for the South East Queensland market. It is an important fishery for local restaurant and food service industries, and supplies some of Queensland's favourite fish for the retail market.

The fishery operates in Moreton Bay (the Bay) which is a very large estuarine bay separated from the ocean by a series of barrier islands, and the area is generally incorporated into the Moreton Bay Marine Park. The Bay includes a broad range of habitats supporting a great diversity of marine fauna and flora. Tunnel net fishing is limited to a very small number of suitable areas within the Bay.

A major feature of the Bay is its proximity to Brisbane and other areas of urban and industrial development. The Bay supports extensive recreational use alongside a broad range of commercial activities, including the MBTNF and other commercial fishing. The demand for access to these waters is strong and some species targeted by the MBTNF are also sought by recreational fishers.

Fishers operating in the MBTNF have long understood the importance of effective conservation and management of their fishery resource. The MBTNF has consistently been at the forefront of moves to protect the fishery resources and the ecosystem that their industry depends on, and has evolved into an extremely environmentally friendly fishing method. To highlight this commitment, in 2007 the MBTNF adopted the Environmental Management System (EMS) for professional fisheries operating in Moreton Bay.

While commercial fishing effort is easily managed and measurable, the impact of other users is difficult to measure. Commercial fishing provides a vital source of information on the ecological health of the Bay. MBTNF fishers recognise that they have the opportunity to actively contribute to the good management of the fishery by providing detailed information to the management agency and working with all relevant agencies to protect and manage the Bay's ecosystem that their fishery relies on.

This Code of Best Practice (Code) has been developed by the MBTNF fishers in order to document best practice in the fishery. Most aspects of the Code are applied voluntarily and reflect the industry's sustainable fishing practices and relevant legislative requirements. Recently industry sought to include certain provisions as additional conditions on the licence of all MBTNF fishers, to improve the fisheries environmental performance. These have been adopted into the Code. This practice is unique in commercial fisheries and highlights to management agencies and the broader community the responsible practises that are routine for operators in this fishery.

This project was supported by funding from the Australian Government's Caring for our Country program.

INDUSTRY PROFILE

Moreton Bay is one of Australia's most productive commercial fisheries by area. The major Bay fisheries are the crab fishery, prawn trawl fishery and the inshore net fishery. These fisheries operate in and around the Moreton Bay Marine Park, which incorporates extensive conservation and habitat protection zones, but is also surrounded by substantial urban and commercial development.

The Moreton Bay inshore net fishery allows use of both tunnel nets and mesh nets. The use of tunnel nets in Queensland is restricted to Moreton Bay and the Great Sandy Straits, near Fraser Island. Although the MBTNF operates all year round, peak catch and effort occurs in late summer, autumn and early winter.

In generations past, some fishing practices undertaken by the tunnel net industry, although legal, would not be condoned by current fishers, fishery managers, environmental agencies or the general public. In those days nets were staked and often left to dry out and fish were often sorted when they were dead, with unwanted catch left behind, or they were loaded into dinghies for sorting, again with unwanted catch returned to the water dead.

Over the last 20 years however, there have been massive industry driven environmental initiatives, complimented by the major changes to the management of the fishery in recent years. These changes have accompanied the establishment of the Marine Park and the on-going refinement of its management arrangements. Importantly, MBTNF fishers have been prime instigators of change designed to protect the environment and ensure the sustainability of the fishery.

The MBTNF fishers have always been conscious of conserving dugong and turtles, but even more so in later years. Subtle changes to fishing practices and the development of grids, to exclude unwanted species such as turtles and stingrays from the nets, have further improved environmental performance.

Changes to fishery regulations in 2009 had the effect of greatly reducing the amount of tunnel net fishing that could take place in the Bay. Prior to July 2009, licence holders with a Queensland East Coast N1 endorsement could use tunnel nets in defined areas of the Bay or the Great Sandy area, which potentially allowed up to 450 net fishers¹ access to the tunnel net fishery. The 2009 changes restricted access to a small group of licence holders with a history in the fishery. There are now just 21 tunnel net licences in the Bay, and a further 8 in the Great Sandy area.

The MBTNF, as part of the East Coast Inshore Fin Fish Fishery (ECIFFF), was granted a Wildlife Trade Operation (WTO) under the *Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)*. In February 2012 this approval was renewed for a further three years. This means that the fishery has demonstrated that the management arrangements are considered to be ecologically sustainable under the *EPBC Act*.

¹ *Independent review - proposed management arrangements for Queensland's East Coast Inshore Fin Fishery (Gunn, Meere and Stevens 2008)*

The MBTNF is an important part of the local economy. The fishery contributes around \$2 million² directly to the local economy each year, with that being multiplied many times over by the time product reaches the end consumer. This revenue is recirculated through the local economy in the form of wages, fuel and equipment purchases, and a range of other services. The economic impact of this fishery includes direct employment for around 50 people as well as providing many more downstream employment opportunities. Total investment in licences and equipment (e.g. vessels, fishing gear, vehicles) in the fishery is estimated to be in the region of \$5 million.

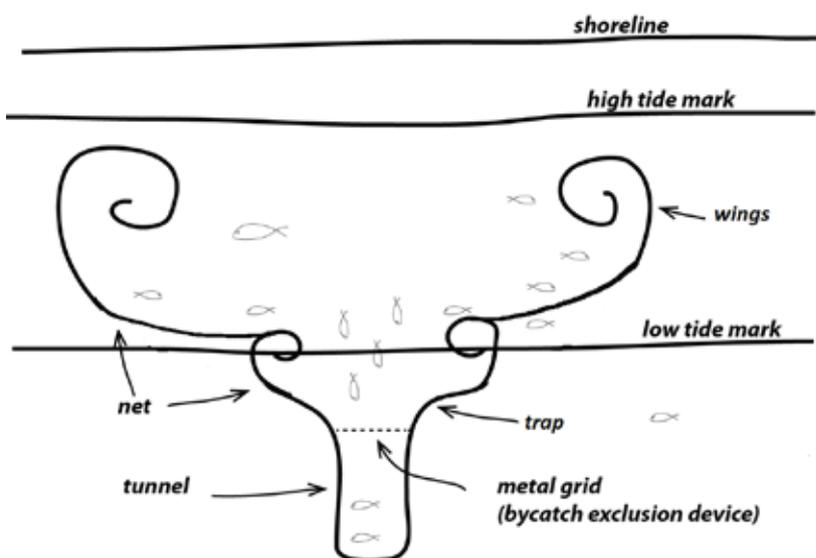
The Moreton Bay Seafood Industry Association (MBSIA) has, as part of its EMS, a commitment to continual improvement in environmental performance. This commitment includes the ongoing reduction of bycatch through the development and use of bycatch reduction devices and refined fishing practices. MBTNF has been successful in substantially reducing bycatch in recent years, particularly in the area of avoiding capture of protected species and the sorting and releasing of unwanted fish species.

The operators in the MBTNF have shown a history of progress and continual improvement in sustainable fishing operations, and the fishery now operates in such a way that it leaves virtually no footprint on the resource and habitat, except for target species.

TUNNEL NET FISHING METHOD

Tunnel netting is a highly efficient, selective and environmentally safe fishing method that produces minimal environmental impact. Fishers' objective is to catch and retain only the fish they can sell with the aim of being sustainable, efficient and profitable.

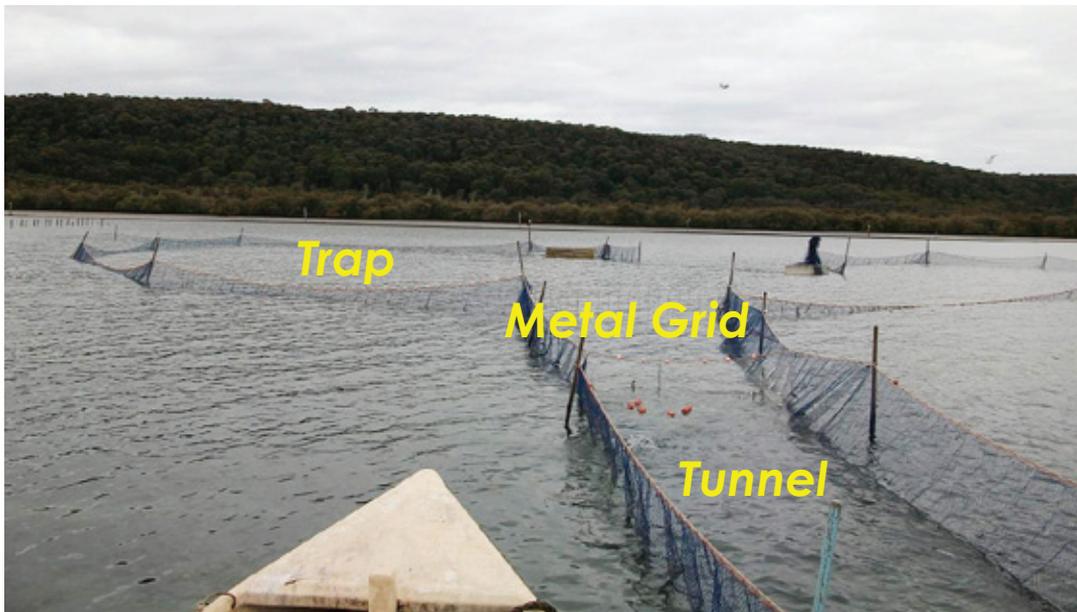
Each tunnel net licence is allowed to use up to 1,800m of net in length, which is used in such a way that it in effect works as a temporary fish trap. Tunnel netting is undertaken close to the shore, where operators set the net on removable wooden stakes extending from shallow waters to deeper waters, on or near high tide.



Stylised layout of a tunnel net

² Data sourced from DEEDI compulsory logbook program 2011

The fish swim towards the deeper water as the tide falls and aggregate in the 'tunnel' which is set below the low tide mark. Larger non-target species are held at a special grid, installed at the mouth to the trap or the tunnel, which reduces bycatch, which are then released at that point. The mesh size of the net and the line thickness means that that fish do not become entangled or gilled.



Tunnel net in Moreton Bay showing trap and tunnel (grid placed at tunnel mouth)

As the tide goes out, fishers slowly lift the wings of the net and the trap (either side of the tunnel) into dinghies until the tunnel is reached (the nets are lifted into dinghies, not dragged or hauled, thereby causing negligible impact on the substrate). This is achieved by the fisher walking alongside the specially made dinghies in the shallow water.



Fishers using scoop net and sorting tray

Once in the tunnel, fish can be easily lifted from the water using a scoop net or by hand, onto a sorting tray, and any unwanted or regulated species can be quickly returned alive to the water outside the net. The tunnel area gives fishers the option to retain or release alive any non-target species as the tunnel area always remains submerged. Harvested target species are placed in an ice slurry on a dinghy.

When fishing is completed the net is entirely removed, leaving little evidence that the area has been used i.e. there is no visible impact on the sea floor, and unwanted catch has been released to swim away unharmed.

Fishing Area

The MBTNF is limited to a very small number of specified areas within the Bay. These areas were defined many years ago based on social and operational parameters. Under legislation approximately 5% of the Bay is open to tunnel net fishing. In addition, due to operational constraints, such as sea bed topography, this is further reduced so that no more than 1% of the Bay is actually fished by the MBTNF.

Within the Bay, tunnel netting is currently restricted under Fisheries legislation to the following areas:

a. mainland foreshores at the following places;

- from Little Rocky Point to 800m south of Point Talburpin
- 800m either side of Moogurrapum Creek, Redland Bay
- from Point Halloran to 700m south of Oyster Point
- from 800m south of the southern bank of Hilliards Creek to 1 km south of Wellington Point
- the eastern shore of Fisherman Island to 800m north of Wynnum Creek;
- from Juno Point to the northern bank of Serpentine Creek
- from the western end of Sunnyside Road, Scarborough, to 100m south of Seaview Parade, Deception Bay; and
- from the boat ramp at the Fisheries Research Laboratory at Deception Bay to the southern bank of the Caboolture River.

b. Moreton Bay island foreshores, other than the western foreshore of Cassim Island and the southern foreshore of King Island, north of the following lines;

- from Little Rocky Point
- to the southern tip of Russell Island; and
- to the nearest point on the western shore of North Stradbroke Island.

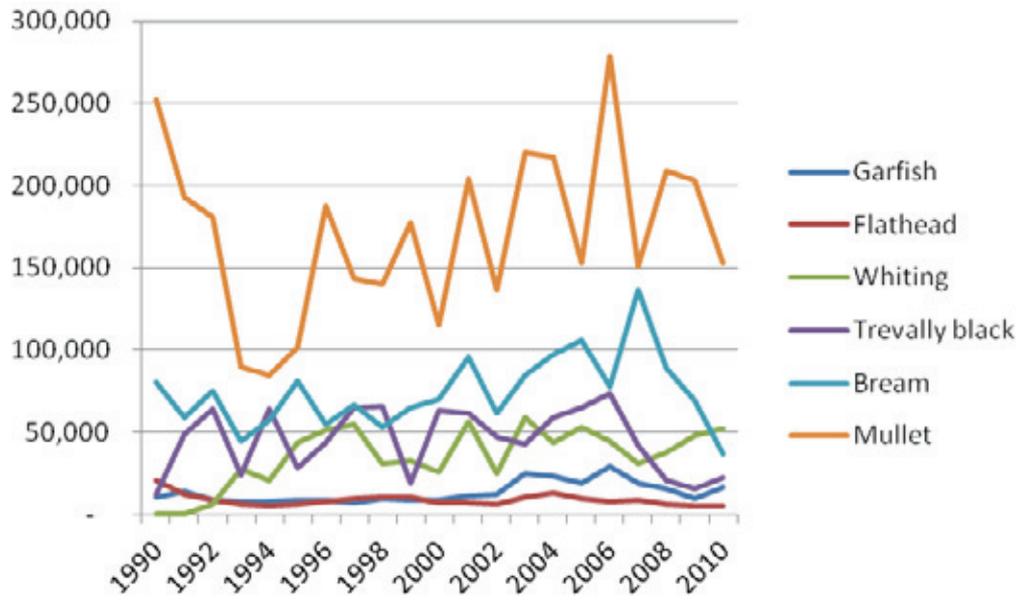
In addition to Fisheries legislative restrictions, tunnel netting is also not permitted in other areas of the Bay, such as within the designated 'green zones' in the Moreton Bay Marine Park.

Target Species

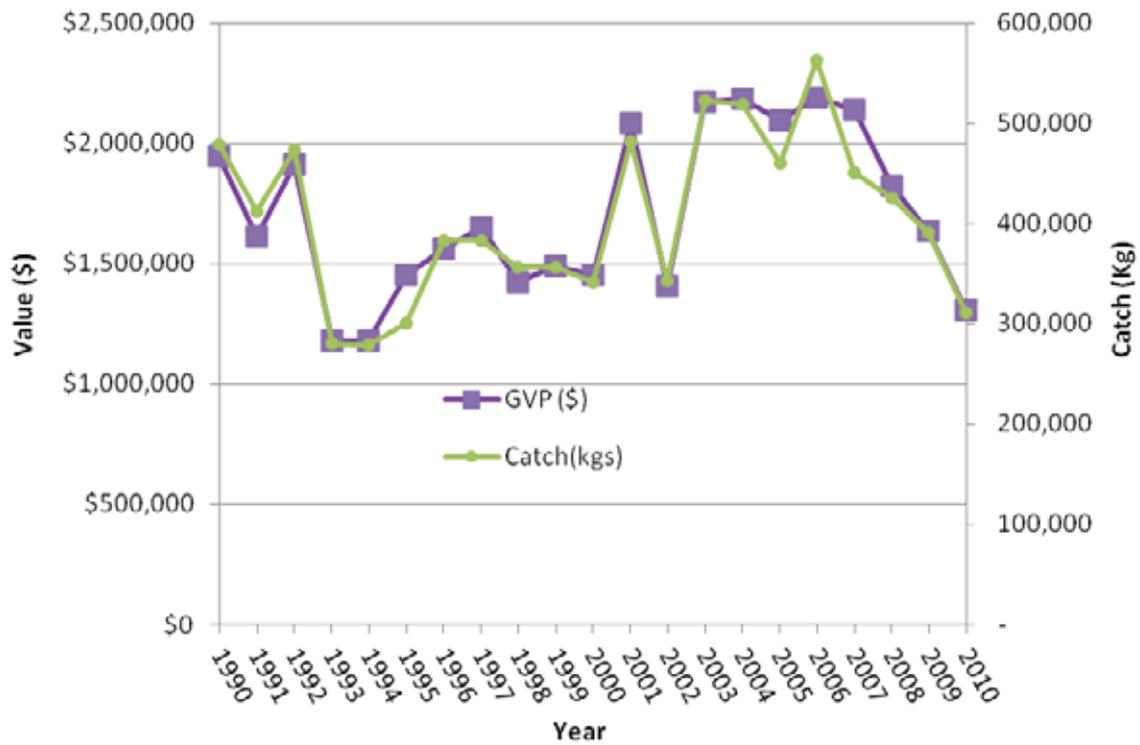
The target species for this fishery includes most of the estuarine fish species found in the Bay. Landings are dominated by six species which account for approximately 80% of the total catch by volume; mullet, bream, garfish, whiting, flathead and trevally. Smaller numbers of about a dozen other species also contribute to and are an important part of the total catch. These species include tailor, butterfish and rabbitfish. The relative abundance of the various target species varies widely from one area to the next, and the makeup of the catch is also subject to wide seasonal fluctuations.



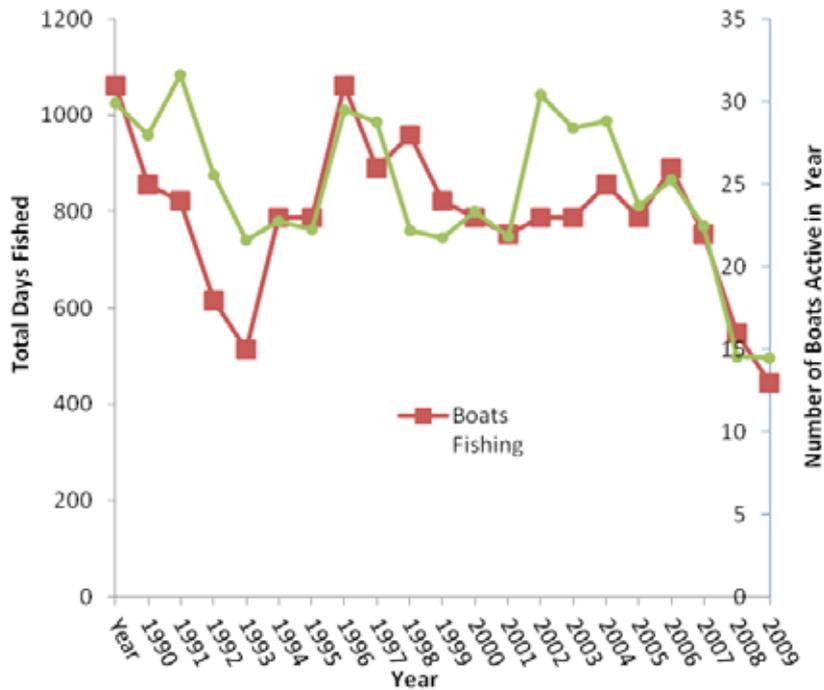
Map Showing Moreton Bay



Annual catch in kilograms by major species



Total annual catch in kilograms and value



Fishing Activity by Days Fished and Active Boats

Product Handling

All retained fish are handled carefully, chilled immediately in an ice slurry, and then stored on ice. Fishers have ice box dories in some form or another to store their retained catch. This handling procedure is known to produce the best possible quality.

Fishers check the ice on a regular basis in line with their Seafood Food Safety Plans, so as to maintain the fish at the approved temperature so as to maximise quality. Fishers ensure that they produce high quality seafood and maximise the return only retain an amount of product that can reasonably be stored at the correct temperature, to ensure food safety and product quality.

Fresh fish maintained on ice is then sold on to a range of wholesalers/distributors, generally within 24 - 48 hours of capture.



Fresh local mullet on ice

MBTNF fishers are committed to maximising the quality of the catch by immediately placing all retained catch in an ice slurry.

Careful handling and temperature control per fish for the fishers. Maximising fishery revenue through maximising quality, rather than quantity, is an important contributor to the sustainability of the fishery.

Bycatch

Bycatch species are those non-target species that interact with a fishing operation but are not retained. A feature of the tunnel net fishing method is the lack of negative impacts on non-target species.

The fishery operates in such a way that all fish are alive and sorted at the point of capture, on a scoop by scoop basis. This is done to reduce the mortality rate of bycatch by allowing unwanted species to be released alive immediately, whilst target species are retained. It is the fisheries' aspiration to ensure there are no bycatch mortalities.

In some instances clean catches of legal target species are made and in those situations the retained catch may be placed directly into an ice slurry. However in most instances the catch is a mix of species or sizes to be either retained or released. The use of sorting trays maximises the efficiency of non-target release procedures and is the method used to sort and grade catch in the MBTNF. The use of sorting trays drastically reduces the time spent out of water for non-target fish and therefore optimises survivability of bycatch.

To optimise survivability of released non-target fish MBTNF fishers are committed to using sorting trays when sorting or grading fish. Sorting trays must have a minimum area of one metre square and sides that are between 15 centimetres and 45 centimetres high.



Unwanted catch being returned to the water alive

Bycatch quantity is also minimised through the use of bycatch exclusion devices such as grids installed in the mouth to the tunnel or the trap (see tunnel net diagram). Larger sharks, stingrays and turtles are unable to pass through the grid, and are therefore prevented from entering the harvest area of the net and can easily be released unharmed.

MBTNF fishers use grids made of solid material that have a maximum width between bars not exceeding 25cm.

To maximise exclusion of bycatch and protected species, MBTNf fishers are committed to the installation, in the mouth of the tunnel or the trap, of exclusion grids made of solid material with a maximum width between bars not exceeding 25 centimetres.



Tunnel net fishers showing exclusion grid

In conjunction with relevant Government and non-government organisations, MBTNf fishers are always seeking to develop means to improve environmental and economic performance through the development of improved fishing gear or fishing practices.

MBTNf fishers are committed to the ongoing use and further development of more efficient fishing gear, improved fishing practices and practical bycatch exclusion and reduction devices.

PROTECTED SPECIES

A number of protected species inhabit areas of the Bay where tunnel net fishing operations take place. Protected species include species that have some level of protection under State, Commonwealth or international law and include whales, dolphins, dugongs, turtles, sea snakes, great white and grey nurse sharks, seals and birds.

The Queensland commercial fishing industry has been heavily involved and invested in looking after and working with protected species in the last few decades, and has contributed to a number of individual programs.

The industry has demonstrated its commitment to sustainable management and world's best practice through the development of the MBSIA, EMS and by undertaking assessment through the *EPBC Act* process. For ecological and fishery operational reasons, minimising interactions with protected species is a key driver of today's fishing practices in the MBTNF.

As part of the MBTNF fishers' commitment to minimising environmental impact, fishers have adopted, as a minimum standard, the guidelines set out in the Queensland Government publication '*Looking after protected species in Queensland – a comprehensive guide for commercial fishers*' (protected species guidelines).

MBTNF fishers are aware of the need to take exceptional care when fishing within known or identified turtle or dugong areas. Fishers must always be vigilant when fishing so that protected species can be safely released according to the procedures set out in the protected species guidelines. In most cases this will involve lifting or dropping the net so that the animal may swim out.

The industry has collaborated with researchers in the design of apparatus that can minimise bycatch, such as the bycatch exclusion grids developed in the 1980s, which are used throughout the MBTNF. This commitment to sustainability by fishers will ensure that fisheries resources and the ecosystem on which they depend can be maintained for future generations.

As part of a co-management approach to the fishery, MBTNF fishers will participate in annual briefings on relevant protected species matters with staff from relevant Queensland agencies, such as the Department of Agriculture, Fisheries and Forestry (DAFF Qld), the Department of National Parks, Recreation, Sport and Racing (DNPRSR), the Department of Environment and Heritage Protection (DEHP) and the Queensland Parks and Wildlife Service (QPWS), along with supporting a protected species induction program for all new operators in the fishery. At this time the Code will also be assessed as to its effectiveness in achieving its objectives, and revised if necessary and practical.

It is not an offence to have incidental interaction with a protected species, but it is an offence to fail to notify the correct authorities. MBTNF fishers must record any interaction with a protected species in their Net/Crab Logbook and also in their Species of Conservation Interest (SOCI) logbook, which are both submitted to DAFF Qld.

By definition, an interaction is considered to be any physical contact an individual (person), boat or gear has with a protected species, including catching and colliding with any of these species. This has been interpreted in the protected species guidelines as meaning that you are not required to report sightings of protected species interacting indirectly with your fishing operation.

In Queensland a number of marine species are given protection under the Commonwealth's *EPBC Act* or the *Queensland Nature Conservation Act 1992*. These multiple jurisdictions' legislation can result in confusion for fishers as to who is managing which species in which areas, and what reporting requirements are in place. In some instances reporting could be required to three separate organisations³ for the same incidents (e.g. dugongs, whales and dolphins).

³ SEWPaC, DAFF Qld and QPWS

DAFF Qld and the Commonwealth Department of Sustainability, Environment, Water, Population and Communities (SEWPaC), have negotiated an agreement whereby Queensland commercial fishers can report interactions with protected species under the EPBC Act through the logbooks that are provided to DAFF Qld.

Arrangements are also in place that will allow the transfer of this information to QPWS, so long as the interaction hadn't lead to death or injury to the protected species.

Importantly, if fishing activity causes injury or death to a protected species QPWOS must be contacted immediately, through the Marine Park Duty Ranger (direct phone details provided in CONTACT section of the Code). This will allow rangers to assess the situation with respect to treatment and/or inspection of injured or deceased animals.



Free swimming fish in tunnel part of net

Tunnel netting, as practiced by the MBTNF fishers, is recognised as a particularly safe fishing method in respect to interacting with protected species as it employs sustainable and environmentally sound fishing methods. The operators in the MBTNF have not recorded a fatal interaction with a turtle, dugong or dolphin.

MBTNF fishers are committed to maintaining zero fishing related fatal interactions with turtles, dugong and dolphins.

Following is specific information on potential species that tunnel net fishers may come across in the Bay.

Dugongs

Dugongs inhabit protected inshore areas in the vicinity of seagrass beds. Unlike many marine mammals, they do not have the capacity to remain under water for long periods. Because they are air breathing they need to surface often (intervals of 2 minutes or less) and they prefer sheltered areas protected from rough seas.

MBTNF fishing gear and operational methods have meant that there have been no fatalities of dugongs as a result of MBTNF fishing activity, even though dugongs can occasionally be in the vicinity of areas fished.

When fishing in an area where dugongs might be present MBTNF operators first conduct a 'drive past' or quick survey of the area. Nets are not set if a dugong is known to be in the area.

Nets are also designed with relatively weak mesh and netting panel ties so that in the unlikely event of a dugong contacting the gear, the netting will yield easily and allow the dugong to swim through and away.

Tunnel nets have been assessed as being low risk⁴ with respect to interactions with dugongs as they are attended, have short soak times, provide easy vision and have small mesh sizes.

Dolphins

A number of dolphin species are found in the Bay. MBTNF fishing gear and operational methods have meant that there have been no recorded fatalities of dolphins as a result of MBTNF fishing activity.

It is extremely rare for dolphins to interact with tunnel net gear as nets are set in very shallow water and any dolphins in the area invariably move away before nets are set. Nets are also designed with relatively weak mesh and netting panel ties so that in the unlikely event of a dolphin finding itself on the shore side of the wings the netting will yield easily and allow the dolphin to swim through and away. Dolphins can also easily hurdle the panels.

Turtles

A number of turtle species are found in the Bay and interactions with fishers and other user groups are not unusual. There is incorrect public perception that the fishery harms turtles. MBTNF fishing gear and operational methods have negligible negative impact on turtles and there have been no fatalities recorded due to fishing activity.

An important form of protection for turtles involved in interactions with MBTNF fishing gear is the use of metal mesh grids across the entrance to the trap or tunnel section of the net. These grids prevent turtles entering the tunnel part of the net. Turtles can move freely along the panels and are easily released unharmed before the tunnel is closed and product sorted.

The tunnel net method, as used by the MBTNF, is so benign and safe around turtles that organisations undertaking authorised turtle sampling for research purposes often work with MBTNF fishers to obtain turtles for tagging and other research programs.

Protected shark species

A number of large shark species, including great white sharks and grey nurse sharks, could be found in the Bay. MBTNF fishing gear and operational methods have meant that there have been no recorded fatalities of these protected sharks. For the purpose of this Code, sharks refer to elasmobranchs that have gills at the side

⁴ Looking after protected species in Queensland - A comprehensive guide for commercial fishers

of their body above the pectoral fins. This means guitarfish and rays which have their gills under their body are excluded.

Earlier fishery practices saw the discarding of dead or damaged bycatch that could sometimes attract sharks to areas where fishing was taking place. The current practices, the use of sorting trays, and the quick release of unharmed bycatch, has reduced this problem so that it is in effect non-existent.

It is highly unlikely that a protected shark species would interact with tunnel net gear as nets are set in very shallow water and large sharks in the area invariably move away before nets are set.

Nets are also designed with relatively weak mesh and netting panel ties so that in the unlikely event of a large shark being on the shore side of the wings, the netting will yield easily and allow the shark to swim through and away.

From time to time MBTNF fishers may possibly catch some larger examples of shark species that can be legally retained. The fishers in the MBTNF however choose to release all sharks greater than 1.5m in length (measured from the nose to the tip of the tail), with the exception of guitarfish and rays.

MBTNF fishers release all shark species (excluding guitarfish and rays) greater than 1.5 metre in length measured from the nose of the animal to the tip of the tail.

Sea birds

MBTNF fishing gear and operational methods have negligible interactions with seabirds, although sometimes they will congregate around fishing operations. Pelicans, gulls, sea eagles and cormorants are sometimes attracted to near-shore fishing operations in the Bay, particularly if dead or damaged bycatch is being discarded. Interactions with seabirds have been minimised by ensuring that bycatch is released quickly and in good condition.

DUTY OF CARE

Operators in the MBTNF embrace a broad range of responsibilities across areas, including the health and safety of fellow fishers, the food safety qualities of produce, and the impact on the environment of all aspects of fishing operations. Industry goals are to provide a safe and healthy workplace, whilst producing quality seafood, with no adverse impact on the environment.

Working Environment

All personnel are responsible for maintaining a safe workplace and are accountable for carrying out their health and safety responsibilities. MBTNF fishers recognise the

importance of consultation and co-operation between all personnel in order to achieve the desired health and safety outcomes.

MBTNF fishers are committed to eliminating risks and hazards that could result in injury or ill health.

Food Safety and Quality

One of the key foundations of the economic performance of any fishery is consumer confidence, and its impact on demand for the product. The product handling component of this Code reflects the MBTNF's commitment to providing seafood for human consumption that is produced in accordance with internationally recognised standards, and matches or exceeds the requirements and expectations of customers and food safety authorities alike.

All MBTNF fishers comply with Safe Food Queensland's '*Food Safety Scheme for Seafood*'. This scheme sets out the food safety requirements that apply to seafood in Queensland. Compliance requires each operator to prepare a Food Safety Plan that outlines procedures to reduce or eliminate food safety hazards.

Fishers who adopt the Code go a step further to produce the best quality Moreton Bay seafood possible for consumers. In recognition of this, fishers who commit to producing seafood under the rules and intent of the Code and the EMS have a licence to display the "Moreton Bay Fresh" logo on their products.



When the logo is displayed on tunnel net caught fish, it can be considered to be a guarantee that the product is produced by a fishing operation that conforms to the operating procedures and rules described in the Code, and uses the technology deemed mandatory for minimising environmental impact and maximising seafood quality, including freshness.

Habitat Protection

Gear and operational methods have limited interaction with sea grass or mangroves, as nets are not dragged, but lifted directly onto dories or boats when being set, checked and retrieved. Nets are also set in such a way that they do not dry out.

MBTNF fishers, along with all other users of the Bay, are required to report any habitat damage that they have caused or are likely to cause. The tunnel net method has been refined to the point where habitat damage is virtually non-existent.



Net and equipment is removed after fishing

Reporting Environmental Damage

MBTNF fishers are committed to protecting the marine environment within the Bay and have extensive, as yet untapped, knowledge of their local area. They can make a significant contribution to the early detection of possible environmental damage. Apart from managing MBTNF activities, fishers have an opportunity to be the eyes and ears for DEHP, DNRM, DNPRSR and other Agencies in respect to a range of potentially adverse environmental impacts unrelated to fishery activities. These impacts might be related to the presence of aggregations of protected species that could be impacted by other users of the Bay, or the presence of introduced marine pests, weeds or pollutants.

MBTNF fishers, along with other users of the Bay, are in some circumstances required to report environmental damage. The MBTNF fishers take this further by reporting additional information to relevant agencies and organisations (relevant contacts are provided in the CONTACT section of the Code). Examples of additional reporting include;

- identifying areas of dugong concentrations to minimise boat strike by other users of the Bay
- providing early advice of blooms of marine algae
- identifying the presence of introduced marine pests (see www.marinepests.gov.au for pest information)
- providing information on pollutants or other hazards in the Bay.

MBTNF fishers are committed to going beyond minimum reporting requirements and providing additional information to relevant agencies and authorities to protect the environment.

INTERACTIONS WITH USERS OF THE MARINE ENVIRONMENT

This Code is a public document and access to it will be made available on request to other users of the marine environment.

The Queensland Government Publication, '*Guidelines for commercial operators in the East Coast Inshore Finfish Fishery*' provides detailed guidelines for fishing priority and interactions with other users of the area. All fishers, commercial and recreational alike, must comply with legislative requirements to not interfere with another person's fishing gear or operation.

Commercial fishers

The Bay hosts a number of commercial fisheries, including a crab fishery, trawl fishery, mesh net fishery and the tunnel net fishery. Interactions between fishers operating in different fisheries are uncommon and require no detailed guidelines. The rule of primacy governs any interactions – the first operator ready to fish in a particular area has right of access to that area.

Many operators in the MBTNF tend to operate in particular tunnel netting sites with which they have some connection and, as such, interactions are generally limited. If two tunnel net fishers are however competing for the same fishing site, the rule of primacy again applies. The order of fishing priority in all net fisheries is determined by the order in which commercial fishers become 'ready to fish'.

Commercial fishers should also respect other fishers' areas and not travel through areas where other fishers are preparing to set gear.

Operators in the MBTNF are committed to treating other commercial fishers with courtesy and respect.

Recreational fishers

MBTNF fishers recognise the rights of recreational fishers operating in areas that overlap with the tunnel net fishery.

The MBTNF will develop a simple handout that can be distributed to recreational fishers and the public to provide basic information about the sustainable operation of the tunnel net fishery.

MBTNF fishers will take all reasonable steps to minimise adverse interactions with recreational fishers.

Indigenous users

MBTNF fishers respect the rights of descendants of the original inhabitants of the Moreton Bay area, and recognise their statutory rights to access the Bay for hunting, fishing and other cultural activities.

MBTNF fishers recognise and respect the rights of indigenous users.

General community

The Bay area is heavily populated and the wider community identify strongly with its natural qualities and the associated Marine Park. People are quick to act if they think that the ecology of the Bay is under any kind of threat. There is however a general lack of awareness regarding the arrangements that allows the co-existence of commercial fishing and a Marine Park.

MBTNF fishers, and other commercial fishers operating legitimately in the Bay, must take all possible steps to inform the general public about their legitimate fishing rights, and to explain the sustainable and environmentally friendly nature of commercial fishing activities. This includes working cooperatively with fishery and environment agencies and other resource users to highlight the positive benefits of having a commercial fishery, like the MBTNf, in the area.

The MBTNf will continue to work with relevant agencies and organisations to develop communication processes to advise the wider community of the status of commercial fishing in Moreton Bay, the contribution of the industry to research, its environmental performance and its commitment to the well-being of the community, through the sustainable production of quality seafood.

Shipping

All vessel operations associated with this fishery are subject to those laws that govern commercial marine operations in Queensland. The key components of these laws are the *Maritime Safety Queensland Act 2002*, the *Transport Operations (Marine Pollution) Act 1995* and the *Transport Operations (Marine Safety) Act 1994*. The Bay hosts a great deal of commercial shipping activity, with the Port of Brisbane alone hosting over 5,000 shipping movements per year.

The *Uniform Shipping Laws (USL) Code* provides a framework for conducting commercial vessel operations and commercial fishing in areas with substantial shipping and other marine traffic. All vessel operations in the tunnel net fishery are undertaken according to the requirement of the USL code.

FISHERIES MANAGEMENT

Legislation

Commercial net fishing in the Bay is managed by DAFF Qld. A range of other legislation also impacts on the operations of MBTNF fishers. Relevant legislation includes;

- Queensland Fisheries Act 1994
- Queensland Integrated Planning Act 1997
- Queensland Fisheries Regulation 1995 (amendments – 2003, 2004)
- Marine Parks Act 2004
- Marine Parks Regulation 2006
- Marine Parks (Moreton Bay) Zoning Plan 2008
- Queensland Nature Conservation Act 1992. .

The MBTNF is always seeking to develop innovative fishing gear and methods that are more efficient and sustainable and will continue to work with DAFF Qld on this.

MBTNF fishers are committed to operating within the requirements of fisheries management and associated legislation, and working with DAFF Qld to continually improve efficiency and sustainability.

Fisheries Closures and Marine Protected Areas

The Moreton Bay Marine Park incorporates a zoning system that provides various levels of protection within the Bay. The areas where tunnel netting is permitted are clearly defined in the management arrangements. MBTNF fishers are aware of and comply with these arrangements.

Fisheries arrangements include a ban on tunnel net fishing between 6pm Friday and 6pm Sunday. This ban is designed to reduce interaction with recreational fishers.

Illegal fishing

The future health of fish stocks in Queensland depends on all users of the resource (commercial and non commercial) 'doing the right thing' and observing the rules.

Illegal fishing can lead to damage to fish stocks through overharvesting, or failure to protect breeding areas and other sanctuary areas. DAFF Qld utilises information from the public to identify and eliminate illegal fishing.

The MBTNF does not condone illegal fishing by any of its members or the general public, and encourages the reporting of illegal fishing activity by any person or sector to the relevant authorities.

MBTNF fishers are committed to passing on prompt and detailed information where they suspect that illegal fishing is taking place.

FISHERIES RESEARCH AND MONITORING

Logbooks

Good fishery management can only occur if managers have timely access to accurate information about catch and fishing effort (i.e. how much fishing gear is used, for how long and where to catch what). Operators in the MBTNF record and provide information to DAFF Qld in the form of catch and effort logbooks.

Information to assist in the monitoring and management of interactions with protected species is also collected through the use of SOCI logbooks. Situations that must be reported in SOCI logbooks are detailed in the section on protected species.

Research and Observers

The MBSIA coordinates cooperative research and development (R&D) activities undertaken in conjunction with, or by, MBTNF operators. This includes a commitment to co-operate where practical with any research, observer or monitoring programs that lead to a more sustainable and profitable fishery.

The MBSIA maintains a log of requested and undertaken research, monitoring and observer activity. MBSIA maintains a register of fishers who are in a position to provide assistance and appropriate support to ensure compliance with safety and other requirements.



Tunnel Net fishers working with Government observer

Those wishing to work with MBTNF fishers must contact the MBSIA or MBTNF representatives identified in the CONTACTS section of the Code to make appropriate arrangements. This is to ensure that the boats and skippers can practically and safely handle additional people as part of their operation.

MBTNF fishers are committed to cooperating and supporting fisheries research, monitoring and observer activities where practical and beneficial.

MARINE POLLUTION

A healthy marine environment is crucial to the sustainability of the MBTNF and pollution of the marine environment can cause significant environmental impacts. The MBSIA has developed a comprehensive EMS that has been adopted by MBTNF operators, and is read in conjunction with the Code to minimise their impact on the environment.

MBTNF fishers are committed to protecting the marine environment and to undertaking all reasonable steps to avoid contributing to marine pollution.

Vessel Maintenance and Cleaning

Spillage of chemicals and/or fuels and oils can occur during poorly managed vessel maintenance and cleaning operations. Major cleaning and maintenance operations should, where possible, be conducted when the vessel has been removed from the water. This is particularly important where chemicals, solvent or paints are being used. For removal of old antifouling compounds, vessels should be slipped well away from the water rather than careened in an intertidal area.

When undertaking machinery maintenance while the vessel is in the water, a spill kit that includes absorbent material should be readily at hand. Any spill that goes overboard should be immediately reported to the relevant authority, and action to contain and clean up the spill should commence immediately.

Measures to reduce the likelihood of a fuel, oil or chemical spill

Most oil and chemical pollution results from activities such as refuelling, maintenance and bilge discharges. Fuel, hydraulic oil, engine oil, and chemicals such as degreasers and paints, contain a range of chemicals harmful to both marine animals and humans.

Fuelling generally occurs on land so spillages into the marine environment are unlikely, but all fishers are to follow the Code and EMS in relation to loading fuel and the cleanup of any spillage.

In the event a spillage does occur, fishers must follow procedures as set out in fuel spillage instructions at the re-fuelling point. MBTNF fishers are committed to prevention of fuel, oil or chemical spillages.

Garbage and Waste

Everyday items such as cigarette butts, plastic bags, bottles, cans and discarded fishing gear are common causes of marine pollution. These objects, whether discarded intentionally or simply lost overboard, contribute to increasing pressures on marine ecosystems. There is potential for severe adverse impact on marine animals and sea birds.

MBTNF fishers undertake to adopt the following practices;

- nothing is thrown overboard
- all garbage is securely stored on board until disposed of ashore
- every effort is made to retrieve any lost or damaged fishing gear
- every effort is made to retrieve any garbage that accidentally ends up in the water.

MBTNF fishers should regularly review their waste management procedures, with the view to reducing, reusing and recycling materials.

KEY CONTACTS⁵

Following are a number of valuable contacts for those who operate in the MBTNF.

Morton Bay Seafood Industry Association	0418756933 or info@mbsia.org.au
Morton Bay Seafood Industry Association website	www.mbsia.org.au
Moreton Bay Tunnel Net Fishery	0407170883
Moreton Bay Marine Park - Duty Ranger (QPWS)	0427753683
Moreton Bay Marine Park - Office (QPWS)	(07) 31312888
Biosecurity Queensland	132523
Customs and Border Protection	1800061800
DAFF Qld logbook section	(07) 32276299
FishWatch Hotline	1800017116
General Queensland Government Inquiries	13QGOV (137468)
Marine Wildlife and Stranding	1300ANIMAL (1300264625)
Maritime Safety Queensland Brisbane	(07) 31207462
Pollution	137468.
Queensland Boating and Fisheries Patrol	132523
SeaNet Extension Officer – SE Qld	0409347495
SEWPaC	(02) 62741111
Tide to Table – SE Qld	(07) 32866194
Waterbird Rescue	(07) 54853543

IMPORTANT REFERENCES FOR FISHERS

Environmental Management System for professional fisheries in Moreton Bay.
MBSIA (2007)

Guidelines for commercial operators in the East Coast Inshore Finfish Fishery.
Qld Govt

Looking after protected species - A comprehensive guide for commercial fishers.
DPI&F (2005)

Marine Parks (Moreton Bay) Zoning Plan (2008)

Marine Parks Act (2004)

Marine Parks Regulation (2006)

Queensland Fisheries Act (1994)

Queensland Fisheries Regulation (1995) (amendments – 2003, 2004)

Queensland Integrated Planning Act (1997)

Queensland Nature Conservation Act (1992).

⁵ Due to changes in organisational structures and to Government Departments' responsibilities, these numbers and contact points may change over time.

MORETON BAY TUNNEL NET FISHERY - SUSTAINABILITY COMMITMENTS

As part of the development of this Code, MBTNF members identified three key commitments that will improve the environmental performance of the fishery. These relate to the use of sorting trays to facilitate the release of unwanted fish, the use of a grid in the tunnel or the trap section of the fishing gear to exclude a range of species from the tunnel of the net, and to release large sharks.

The fishers have requested that DAFF Qld develop a mechanism to incorporate the following commitments made in the Code, as licence conditions for all MBTNF licence holders.

MBTNF Commitment

To optimise survivability of released non-target fish, Moreton Bay Tunnel Net Fishery fishers are committed to using sorting trays when sorting or grading fish. Sorting trays must have a minimum area of one metre square and sides that are between 15 centimetres and 45 centimetres high.

MBTNF Commitment

To maximise exclusion of bycatch and protected species, Moreton Bay Tunnel Net Fishery fishers are committed to the installation, in the mouth of the tunnel or the trap, of exclusion grids made of solid material with a maximum width between bars not exceeding 25 centimetres.

MBTNF Commitment

Moreton Bay Tunnel Net Fishery fishers release all shark species (excluding guitarfish and rays) greater than 1.5 metre in length measured from the nose of the animal to the tip of the tail.

NOTES

An initiative of the
Moreton Bay Tunnel Net Fishery Operators

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