NOOSA FISHING FUTURES

REPORT on OPTIONS for SUSTAINABLE FISHERIES MANAGEMENT of the NOOSA RIVER, ESTUARY and BEACHES
MAY 2019

FRESH ADVISORY

CONTENTS

As part of the development of the Noosa River Management Plan, the Noosa Shire Council commissioned an evidence based desktop study of the Noosa River, estuary and beach fisheries.

The purpose of the study was to provide Council with information on commercial fisheries active in the river, estuary, lakes and beaches to better understand these activities, the current management arrangements that regulate these activities and the recorded commercial fisheries catch history in the waterways from 2013 to 2018 for the T5 Beam Trawl Fishery, the K8 Ocean Beach Net Fishery and the N1 Net Fishery.

The information provided is sourced directly from local commercial fishers and other local stakeholders that have a high level of interest in the Noosa River, estuary and beaches. From this information, the paper provides a range of options for Council to consider that are considerate of short-term, medium-term and longer-term priorities. The paper provides a pathway to implement these options that will afford Council the opportunity to garner community and stakeholder support.

The paper uses spatial catch and effort data from Fisheries Queensland over a six-year period to validate the commercial catch in the relevant fisheries.

The options are framed based on feedback from key stakeholder groups and can be achieved in the timeframes outlined in the stakeholder engagement plan, which provides a pathway forward for Council to further engage with the Noosa community and with key stakeholders assessed as high interest, high impact.

The short-term options emphasize the importance of ongoing engagement with the Queensland government in the short-term cognisant of some key dates over the next 18 months in the local and state government election cycles. The short-term options focus on some reforms for sustainable management of the N1 and K8 net fisheries in the river, lakes and beaches as well as consideration of a reallocation process for the T5 Beam Trawl fishery. These reforms are based on information collected from local stakeholders.

The medium and longer-term options present Council with the opportunity to consider some of the bigger picture issues that recognise the key features and natural assets of the region that are consistently listed as the top four reasons for tourist visits to the Noosa region – the high conservation values of the Noosa national park and beaches and the natural beauty and amenity of Noosa.

As part of the development of the Noosa River Plan, the Noosa Shire Council have commissioned an evidence-based desktop study of the Noosa River, estuary and beach fisheries. This information gathered will be used to inform the River Plan.

The focus of this paper is on the commercial fisheries that operate in the Noosa region to better understand the activities of fishermen and current management arrangements that regulate these activities.

The Noosa River is one of three river catchments located within or partly within the Noosa Shire Council area. The Noosa River flows south from the Cooloola section of the Great Sandy National Park into Laguna Bay. It is fed by springs that drain major sand deposits and is one of the few Queensland rivers with a continuous year-round freshwater inflow. The catchment forms a coastal lagoon system of five lakes that discharge into the Pacific Ocean at Noosa Heads.

The Noosa estuary is considered of high ecological value, abuts a national park and includes numerous fish habitat protection areas. The waterways remain the subject of high levels of community interest given the high value attributed to this community asset. This high level of interest is reflected in the numerous studies Noosa Council have commissioned over time on water quality, benthos and the health of the Noosa water catchment area more broadly.

One of these studies undertaken by Dr Ruth Thurstan, identifies declining catch rates by most anglers based on analysis of historical catch records and other fisheries relevant, publicly available media commentary over the 100 years recorded history of Noosa. As a result of this study and others, increasing investments are being made by Council, local philanthropists and other interests to 'bring back the fish' of Noosa waterways.

More recently, a study by Greg Skilleter revealed significant loss (between 70 and 90%) of benthic biodiversity over the last 20 years. Given the critical role of benthos in sustaining fish populations and catch, it indicates that regardless of fishing pressure, past fish catch rates are unlikely to be sustained.

The Noosa Council submission to the Queensland Government Green Paper on Fisheries Management Reform in 2016 noted concerns over the compatibility of some commercial fishing activities currently permitted in the Noosa River, lakes and beaches. This paper provides information to assist Council to better understand these activities and provide stakeholder feedback directly from commercial fishers and other key local stakeholders that have an interest in the Noosa waterways about current commercial fishing practices and combines that information with up-to-date fisheries catch data from Fisheries Queensland.

A detailed stakeholder analysis has been conducted that includes local Noosa commercial fishers, recreational fishers, recreational and charter businesses that operate on the river, local businesses and tourist and conservation groups that have a high level of interest in the permitted activities in the Noosa waterways. The focus of the stakeholder engagement and data collection is on the principle fisheries active in the waterways; the Beam Trawl T5 fishery and the Inshore Net Fishery that operates on the Ocean Beach (K8 Fishery) and offshore, as well as in the rivers and lakes (N1 and N11 Fishery).

Fresh Advisory provided Council with an Initial Findings Report (February 2019) that focussed on a stakeholder analysis and engagement plan, the relevant Fisheries Data analysis for the active fisheries currently operating in the Noosa waterways and an analysis of other fisheries management reforms to provide some insight into reforms undertaken in other jurisdictions. This information was assembled to provide Council with information upon which to consider some draft options that will enable Council to have a greater level of involvement in the regulatory decisions that apply to the current commercial fishing practices in the Noosa waterways.

The paper is divided into the following sections;

- An overview of current fisheries activities in the Noosa waterways, relevant fisheries data from 2013 to 2018, the relevant regulatory and management arrangements for those fisheries and the current issues relevant to these commercial fishing activities;
- Possible future fisheries management changes as options for Council to consider in the short-term, medium-term and longer-term with costs and benefits of these options; and,
- A detailed stakeholder analysis and engagement plan timeline on how to implement the options.

The paper also provides a pathway for ongoing engagement with the Queensland Government on the current Sustainable Fisheries Strategy 2017-2027 process.

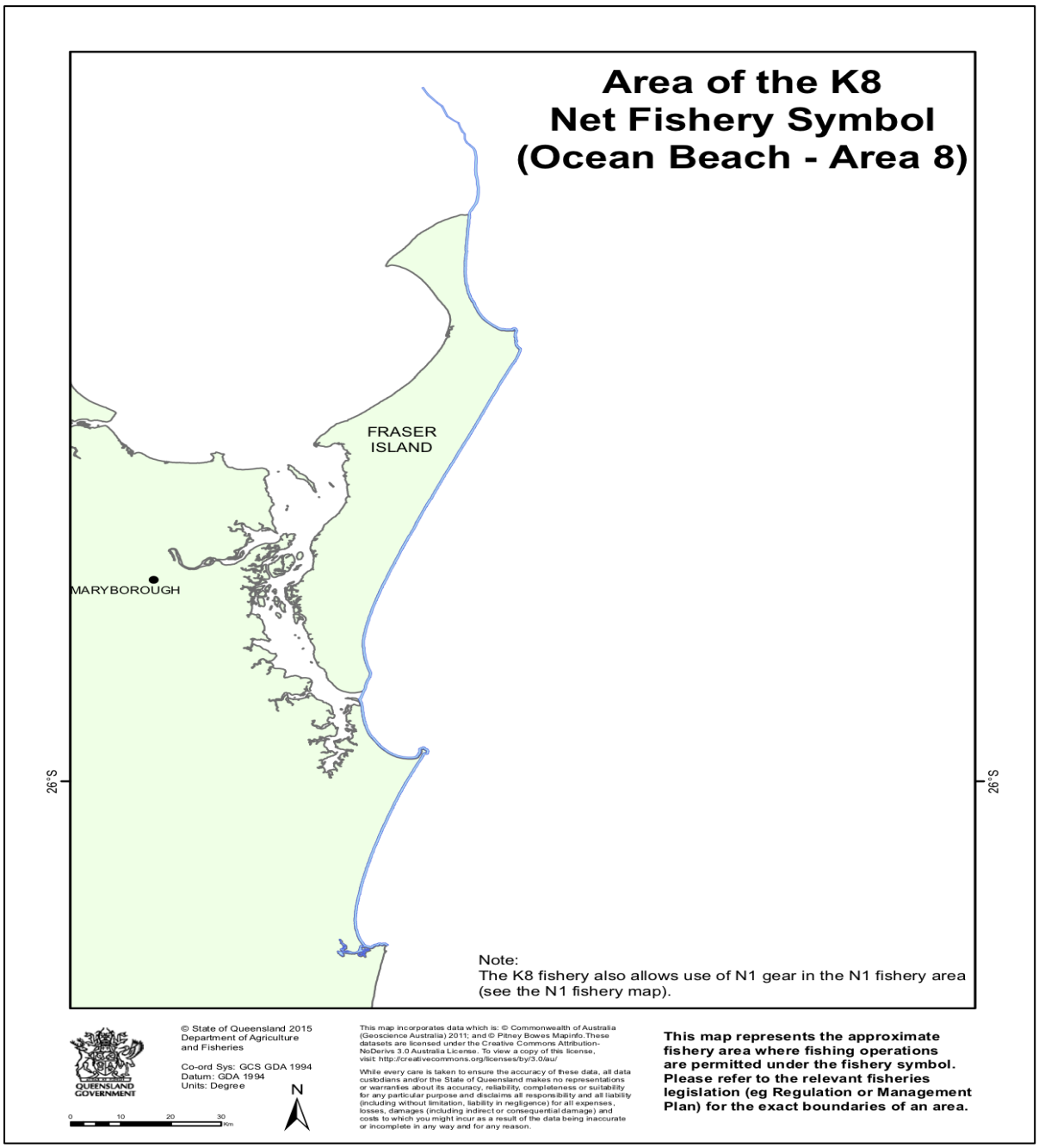


Diagram 1

The two major commercial fisheries operating in the Noosa River, lakes and beaches are the East Coast Inshore Fin Fish Fishery and the T5 Beam Trawl Fishery. The East Coast Inshore Fishery includes;

- The K8 Ocean Beach Net Fishery operating between 1st April to 31st August; and,
- The N1 Inshore Net Fishery operating all year (that operates predominately in the rivers and lakes but also on the Noosa North Shore outside of the K8 season).

This section of the paper focusses on the K8 and N1 net fisheries and the current activities of the commercial fishers operating in the Noosa region, the regulatory framework they operate within and their catch data from 2013 to 2018. The areas of the relevant net and beam trawl fisheries are shown in diagrams 1 and 2.

The East Coast Inshore Fin Fish Fishery

The East Coast Inshore Fin Fish Fishery runs the full length of the Queensland coastline and is made up of three main components, the inshore net fishery, the line fishery and the crab fishery. The fishery operating in the Noosa River, estuary and beaches of interest to the Noosa Council and community is the net fishery. Commercial net fishers require a Queensland commercial fisher licence to be in charge of commercial fishing activities aboard either their own commercial fishing boat or another person's commercial fishing boat. The commercial fisher licence allows you to:

- use authorised equipment to commercially take fish species under fishery symbols appearing on a commercial fishing boat licence
- supervise crew members assisting you in those fishing activities.

The net fishers operating in the Noosa region predominately use two types of gear; an N1 net fisher will use a 50mm – 165mm mesh net and K8 netters use 12mm – 75mm mesh nets, that can be no longer then 500m. The length of an N1 net varies according to the specific area regulations and can range from 200m to 1500m. There are also spatial rules that restrict access to a fishery symbol that apply in the Noosa River, estuary and beaches. Commercial fishers who have an authority to fish in the Area 8 Net Fishery (Ocean Beach – Area 8) are required to hold a K8 symbol and can only access the fishery from the 1st April to the 31st August. Commercial net fishers who have an authority to access the net fishery outside of the K8 season (for the remainder of the year) will have an N1 or an N11 symbol. An N1 symbol[1] is an authority to fish the East Coast of Queensland and an N11[2] symbol is essentially an authority to bait fish. Presently, there are 12 K8 symbol holders with the authority to fish in the Ocean Beach – Area 8 Net Fishery. This includes the Noosa River, estuaries and beaches extending from Noosa Heads up to the northern tip of Fraser Island. Any fish, other than barramundi or regulated coral reef fin fish, may be taken. Targeted species will typically include bream, mullet, tailor, whiting and flathead. The holders of a K8 symbol have an as-of-right-use for N1 apparatus within Queensland waters, which allows them to fish anywhere in state waters for those species permitted to be taken with that apparatus.

The K8 symbol is essentially an extra right that allows the holder to use a particular net for the ocean beach fishery for a specified time period being 1st April to 31st August. However, outside of that period, any licensed commercial fisher with an N1 and N11 symbol has the right to fish in those areas. Presently there are 86 N1 symbol holders and 281 N11 symbols holders who have the authority to access these fisheries. The jurisdictional arrangements for fisheries management in Queensland are as follows:

- The *Fisheries Act 1994* (Qld) provides Queensland's principal legislative framework for the regulation of commercial fishing, recreational fishing, indigenous fishing, coastal areas that are important as fisheries habitat and marine plants. The Act provides a range of mechanisms aimed at the sustainable management of fisheries including management plans, quotas, offences, licences and declarations of closed seasons, closed waters and fisheries habitat areas.
- The *Fisheries Regulation 2008* (Qld) provides technical and geographic detail for these mechanisms.
- Management plans such as the *Fisheries (East Coast Trawl) Management Plan 2010* (Qld) are subordinate legislation created under the Act.

[1] https://www.daf.qld.gov.au/__data/assets/pdf_file/0016/61252/n1-fishery.pdf

[2] N11 symbol (small mesh net)
The new N11 fishery symbol was introduced to replace the N6 fishery symbol and allow the use of small mesh nets to collect fish for commercial purposes. It was only allocated to licences with demonstrated previous activity in the commercial sale of baitfish. This change aimed to address latent effort and to remove unnecessary fishery symbols.

The Department of Agriculture and Fisheries administers the Act which is part of a complex network of Federal and State laws regulating fisheries. The State Government regulates fisheries resources and any change to the management arrangements will require the agreement and subsequent regulatory approval of the Queensland Government. Some key fisheries management issues for the Net Fishery include;

- Investment Warning - The Queensland Government issued an Investment and Increased Effort Warning[3] notification for Queensland commercial fishers on the 6th March 2014. The purpose of issuing the warning is to notify commercial fishers that a review of the management of Queensland's fisheries is about to commence that will result in future changes to the management of fisheries in Queensland, and that existing and new operators in all Queensland commercial fisheries are warned that any expansion of fishing effort or increased investment in these fisheries after 6 March 2014, may not be recognised in assessing applications for new or continued access to these fisheries, following the implementation of any new management arrangements that may be put in place following, or during, the implementation of the outcomes of this review.
- Vessel Monitoring System (VMS) - As part of the government's Sustainable Fisheries Strategy 2017-2027 vessel tracking[4] will be required on all commercial fishing boats by 2020 with a priority to install units on net, line and crab commercial fishing boats. This includes boats fishing in the Noosa waterways. This regulation took effect on 1st January 2019 meaning all fishing vessels are now recorded when fishing.
- Development of Harvest Strategy underway – The net fishery is likely to have a suite of new arrangements by the middle of 2020, including species-based whole-of-fishery catch limits aimed at recovering stocks to 60% of natural abundance, individual fisher catch quotas on the 5-6 main species which drive effort and behaviour in the fishery, and bycatch strategies and catch disposal records aimed at improved compliance and other measures.

There are two distinct net fisheries operating in the Noosa waterways and beaches. The K8 ocean beach fishery and the N1 net fishers who predominately fish the river and lakes.

[3] https://www.daf.qld.gov.au/__data/assets/pdf_file/0004/1396372/Investment-and-increased-effort-warning-notification-for-all-Queensland.pdf

[4] https://www.daf.qld.gov.au/business-priorities/fisheries/sustainable/sustainable-fisheries-strategy/vessel-tracking

Ocean beach net fishing on the Noosa North Shore

Information gleaned from local commercial fishers and Fisheries Queensland recorded catch data for the K8 ocean beach net fishery identified that there are nine owners of K8 symbol holders with the authority to fish the K8 Ocean Beach Net Fishery, that operates from 1st April to 31st August. They are;

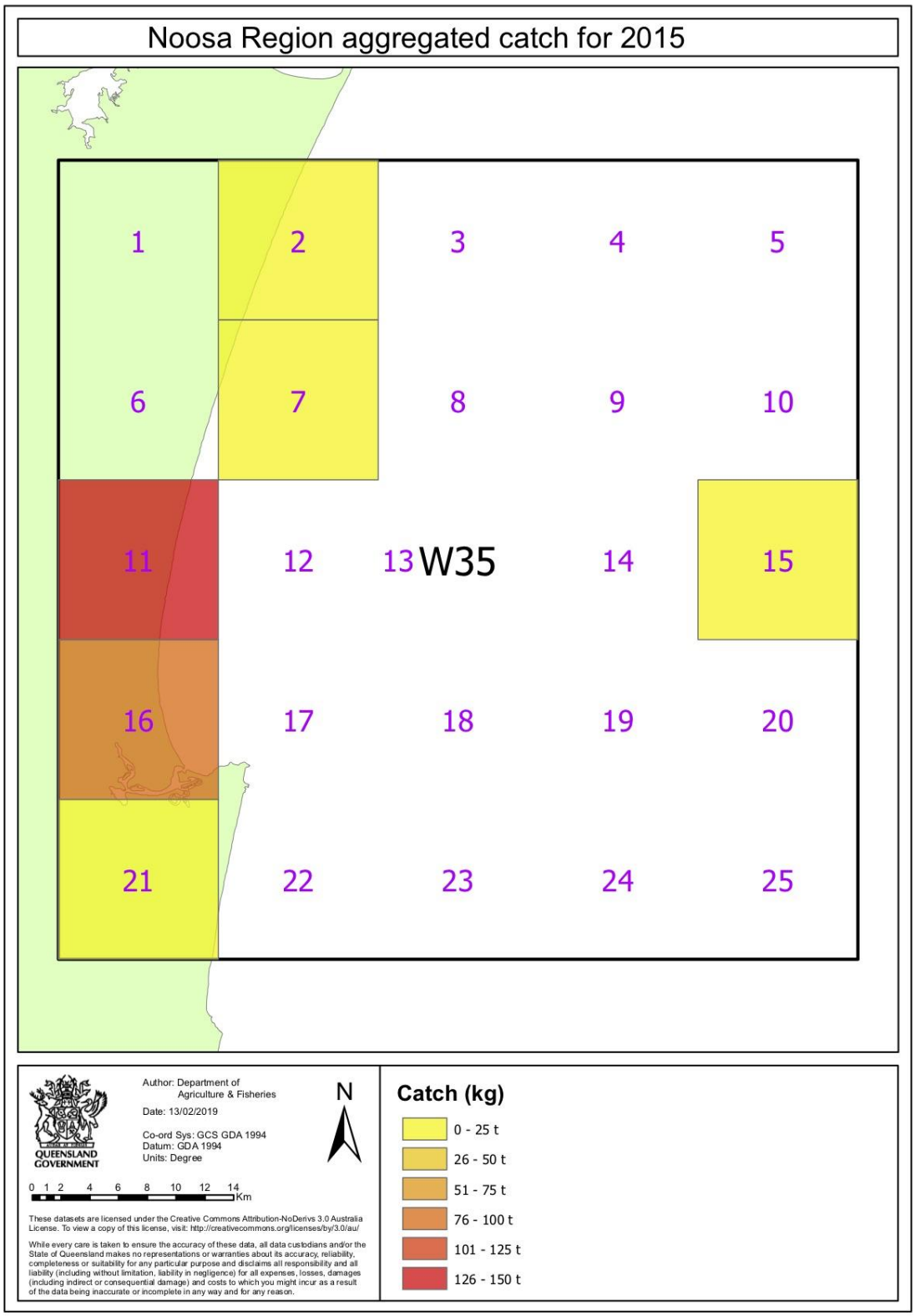
SYMBOL HOLDER	SYMBOLS HELD
Allan Burton	C1, C2, C3, K8, L1(3), L3(1), N11 & T5
Andreassen Investments Pty Ltd	C1, K8 & N11
Jeff Clark	K8, L3(1), N11 & T5
Jeff Clark	K8, L3(1), N11 & T5
Madonna Rees	K8, N11, S
Mark Alexander	K8, L3(1) & N11
Mark Alexander	K8 & L2(0)
Mark Catlow	K8, L3(1) & N11
Michael & Brooke Savige	K8, L3(1) N11 & T1
Paddockmist Pty Ltd	K8, L3(1), N10 & N11
Paddockmist Pty Ltd	K8, L1(1), L3(1) & N11
Tracey Eardley	K8, N11 & T5

Local commercial fishers have identified that not all the K8 symbol holders are active in the fishery, suggesting that around 6 have been active each year in the last 6 years. Without being able to identify the individual fishers, they could be the same or a combination of the twelve symbol holders. The fishery almost exclusively targets spawning mullet aggregations in the ocean beach in Laguna Bay during the peak winter months of June and July. The whole mullet fishery is dominated by two major seafood processors, Markwell Fisheries (Paddockmist Pty Ltd) from Chinderah and SupaFin Seafoods from Brisbane. The processors will often supply crews on the beach to work with local K8 fishers who will typically catch around 100 tonnes of whole sea mullet per year depending on seasonal factors. The processors market their product all over Australia, including to a prominent Sunshine Coast wholesaler and a Noosaville bait outlet. The Fisheries Queensland data in Table 1 identifies the total annual catch for ocean beach netting and haul netting (including the months outside of the K8 season) with the principle species and a high proportion of the catch, being whole sea mullet. The data is

identified by year and fishing method, the number of active licenses, the number of days fished, the species and catch in tonnes.

Table 1

Year	Method	Licenses	Days	Species	Catch (t)
2013	Ocean Beach Netting	5	9	Dart	1.11
2013	Ocean Beach Netting	9	84	Mullet	90.13
2013	Ocean Beach Netting	6	22	Tailor	4.64
2013	Ocean Beach Netting	6	16	Whiting	0.39
2014	Ocean Beach Netting	14	497	Mullet	105.45
2014	Ocean Beach Netting	5	13	Tailor	0.20
2014	Ocean Beach Netting	9	59	Trevally	0.69
2014	Ocean Beach Netting	11	60	Whiting	1.30
2015	Ocean Beach Netting	8	30	Bream	0.39
2015	Ocean Beach Netting	6	18	Dart	0.71
2015	Ocean Beach Netting	9	73	Mullet	148.48
2015	Ocean Beach Netting	7	30	Tailor	1.02
2015	Ocean Beach Netting	6	15	Whiting	0.30
2016	Ocean Beach Netting	8	28	Bream	0.25
2016	Ocean Beach Netting	5	11	Flathead	0.04
2016	Ocean Beach Netting	7	7	Milkfish	0.09
2016	Ocean Beach Netting	10	61	Mullet	153.80
2016	Ocean Beach Netting	7	13	Queenfish	0.05
2016	Ocean Beach Netting	9	27	Tailor	1.48
2016	Ocean Beach Netting	5	12	Trevally	0.21
2016	Ocean Beach Netting	9	30	Whiting	0.51
2017	Ocean Beach Netting	8	37	Bream	1.58
2017	Ocean Beach Netting	8	21	Dart	2.15
2017	Ocean Beach Netting	7	9	Flathead	0.36
2017	Ocean Beach Netting	10	68	Mullet	75.66
2017	Ocean Beach Netting	6	7	Queenfish	0.05
2017	Ocean Beach Netting	5	11	Shark - whaler	0.13
2017	Ocean Beach Netting	8	30	Tailor	0.85
2017	Ocean Beach Netting	6	14	Trevally	1.61
2017	Ocean Beach Netting	9	31	Whiting	1.37
2018	Ocean Beach Netting	7	11	Bream	0.04
2018	Ocean Beach Netting	10	43	Mullet	138.38
2018	Ocean Beach Netting	5	6	Whiting	0.24



Spatial data map showing catch for the net and trawl fishery by site for Grid W35

The East Coast Inshore Fishery is presently the subject of review as part of the Queensland Government's Sustainable Fisheries Strategy 2017-2027. The Fisheries Directions Paper released in January outlined the proposed direction of their future fisheries management reforms. Then in March, Fisheries Queensland sent out to commercial fishers a Draft Allocation Approach Discussion Paper seeking feedback from fishers on the preferred management framework (harvest strategy) of a Total Allowable Commercial Catch (TACC) and Individual Transferable Quota (ITQ).

This information will be used to inform the Fisheries Discussion Paper recently released by the Government as the final step in the consultation process before proposed regulatory changes are implemented and completed by the 1st September 2019. The current Fisheries Regulations 2008 are up for their ten-year review which was extended in 2018 so it is unlikely that another extension will be provided – hence the requirement for Fisheries Queensland to legislate by the 1st September.

THE N1 NET FISHERY IN THE RIVER AND LAKES

N1 inshore net fishers haul in their catch

The net fishers operating in the rivers and lakes are using an N1 symbol. This is a separate fishery to the K8 fishery operating on the ocean beach, and the fishery operates all year. Fisheries Queensland record the ocean beach catch as "Ocean Beach Netting" or haul netting. The N1 fishery is recorded by Fisheries Queensland as "Net Complex" which is also mostly referred to in the data as ring netting. This is where mesh nets are suspended in the water and used to encircle a school of fish. The N1 mullet component of the net fishery in the lakes and rivers is the largest as indicated in the FQ data. However, this data also includes an offshore component of the N1 fishery.

The issue with this data set is Site 16 also records some ocean beach catch by ring netting and there's no way of separating the ocean beach component of the N1 fishery from the rivers and lakes part of the N1 fishery. This is not important for a description of the N1 fishery but it may be important if future fisheries management options give consideration to limit the use of mesh nets in the rivers and lakes. The principle species caught is mullet and is the largest net fishery in the Noosa region, larger than the K8 ocean beach fishery. This is demonstrated by the Fisheries Queensland data by aggregated method and region in table 4.

Table 4

Year	Fishing Method Group	Catch (t)
2013	NetComplex	167.55
2013	Ocean Beach Netting	98.05
2014	NetComplex	123.65
2014	Ocean Beach Netting	84.34
2014	Tunnel Netting	0.61
2015	NetComplex	165.74
2015	Ocean Beach Netting	153.17
2016	NetComplex	178.09
2016	Ocean Beach Netting	159.34
2017	NetComplex	253.22
2017	Ocean Beach Netting	85.22
2018	NetComplex	205.83
2018	Ocean Beach Netting	140.18

Commercial Fisheries catch data for the K8 Ocean Beach Net fishery and the T5 Beam Trawl fishery has been provided by Fisheries Queensland for the years 2013 through to 2018. Information in this paper is sourced from Fisheries Queensland[5], Fishnet Public, ASIC's Companies and Business Register, traditional and online media platforms and stakeholders with a direct and indirect stake in the future management of the Noosa waterways. Where possible, data on commercial fishers is examined to identify the licenses that have the authority to fish in the Noosa River, estuaries and beaches.

Feedback from local commercial fishers and some stakeholders have identified a range of issues around current regulations and practices within this component of the net fishery and these have informed some short-term options for Council to consider. Issues included are suggested changes to net size in the Lakes Cootharaba, Cooroibah or Weyba, consideration of a regulated weekend closure for the Ocean Beach Fishery, consideration of a change to the regulated use of nets in the Noosa River at Munna Point to move the line closer to Makepeace Island, and the development of a code of practice for the mullet fishery.

Net Fishery License and Symbol Listings

The Queensland Fisheries Summary Report, October 2018 indicates for the East Coast Inshore Fin Fish Fishery, the number of net symbols in the fishery that have an Authority to access the Noosa waterways is 379 as identified in Table 1. Whilst this statement is accurate, the reality is that only a small proportion of these symbol holders are active in the Noosa area. This would include the 12 K8 net fishers, between 8 to 12 N1 net fishers (which may vary from year to year) and some N11 fishers, the N11 being recognised as a symbol that most commercial fishers use to catch bait fish[6].

[5] Fisheries Queensland will not provide data where there are less than 5 boats active in a region. That can result in an underestimate of the catch of individual species due to data access limitation of the author. Fisheries Queensland privacy laws prevent it from providing access to this data but it will be made available if a formal proposal for structural adjustment is considered.

[6] NOTE: Changes to fishing regulations during the last reform of the ECIFF provided all N2, K, N10 and N4 licence holders with the ability to operate in accordance with the N1 netting provisions. This adds significantly to the number of licences (just over 240 in total) that could currently access the Noosa system and therefore be 'entitled' to seek compensation under current management arrangements. The same reforms enable any commercial crab or line operators to use 'small mesh nets' to take bait for their own use. This also would add significantly to the number of licenses that could access the Noosa system (just over 2248 in total). This requires some explanation which will be provided at the formal briefing.

Table 1

SYMBOL	NUMBER of SYMBOLS	AUTHORITY
N1	86	The East Coast of Queensland. Can access Noosa waterways from 1 January to 31 December.
N11	281	The East Coast of Queensland and tidal waters in the Gulf of Carpentaria. Can access Noosa waterways from 1 January to 31 December.
K8	12	The fishery area consists of the area of all tidal waters; 1. from the eastern tip of Noosa Heads along the shore to the eastern tip of Inskip Point; and, 2. then to the southern tip of Fraser Island; and, 3. then along Fraser Island's eastern shore to the island's northern tip; and, 4. the shore of Breaksea Spit. Access is between 1st April to 31st August.

There are numerous Queensland based brokers to the commercial fishing industry who typically advertise their offering as brokers for the sale, purchase and leasing of commercial fishing licences, symbols, quota and commercial fishing boats. All have websites that list the licenses and symbols for sale or lease at current market rates. Five commercial brokers were examined to seek information on the availability and current market price for a primary license, and an N1, N11, K8 and T5 symbol. All values listed are a guide only and should be taken to represent the price only at the time of inquiry (February 2019). There are a number of factors that will impact on the market price for licenses and symbols including a formal investment warning when issued by Fisheries Queensland however this in itself has not historically been seen as preventing continued activity in the buying, selling and leasing of licenses and symbols. Feedback from FQ suggests some of the current prices are broadly the same as prices achieved during the recent buy back scheme. The following license and symbols listings are taken from those sites that had the relevant symbols listed:

BROKER	SYMBOL/LICENSE	PRICE	BUY OR LEASE
Qld Fishing Brokerage	N1	$55,000	To Buy
Saltwater Solutions	N1 & L3 (1)	$68,000	To Buy
Seavine Marine	None listed		
Pro Fishing Queensland	N1, N11, L1 & L3	$9,000	To Lease for 12 Months
Bay & Ocean Commercial Fishing Brokerage	N1	$55,000	To Buy
As Above	N1	$60,000	To Buy
As Above	Primary License	$17,500	To Buy
Bay & Ocean Commercial Fishing Brokerage	T5 symbol only	$25,000	To Buy

Sectoral Analysis of Economic Value

Local N1 net fishers note their principal species caught in the rivers and lakes is mullet and they supply mostly local and regional markets for human consumption as well as some local bait and tackle outlets. Prices achieved for mullet between April and August are depressed due to the large volume of mullet harvested from the K8 ocean beach fishery and on average achieve $4/kg for male and females. Outside of the K8 season they achieve significantly higher prices of up to $9/kg. Information sourced from conversations with local seafood retail outlets and commercial fishers indicates production from the Noosa area results in a small percentage of locally caught seafood being sold for human consumption in some local retail outlets. This information is reflected in the Stakeholder Analysis. For the K8 ocean beach fishery a fair proportion of the mullet that is processed by the two major processors, Markwell Fisheries or SupaFin Seafoods, and comes back to the local

bait and tackle outlets in Noosa. The K8 ocean beach mullet fishery is considered a low value fishery with females attracting $4/kg and males $2/kg to the fishermen (referred to as the beach price). These prices are lower than what the local N1 fisher is achieving. Initial conversations recorded with local seafood outlets report that they take very little fish from local commercial fishers however closer analysis has identified numerous retail outlets that sell locally caught net species such as mullet, flathead and whiting for human consumption in the Noosa region. A local net fisher who fishes the lakes and river throughout the year will typically supply product to the local bait and tackle shops or the a local Food Van.

Without a detailed analysis of the supply chain and sales information from processors and commercial fishers, attributing a precise value to the Noosa region of the economic benefits from commercially harvested seafood is not possible. Also, difficult to quantify is the economic value of the principal species (mullet) caught in the lakes and rivers. A local net fisher has identified their indicative prices per kg for their product sold to local bait and tackle outlets as well as their produce supplied for human consumption, however they were unable to provide any data on the volume of fish sold.

Information supplied by the Noosa Council on an Industry sector analysis[7] in 2017/18, for the Noosa Shire Council area contributed 3.3% of Regional QLD's Fishing, Hunting and Trapping employment and 3.1% of its value added. Industry sector profiles reveal the way in which each industry contributes to the economy in Noosa Shire Council area using ten economic measures generated by NIEIR[8] economic modelling. This helps in understanding the role each industry sector plays in the economy. In the first chart, you can also see how the output of an industry is divided between local sales, domestic exports and international exports. This information can reveal how an industry is structured, and whether it is focused on exporting or on serving the local population.

Current area:	Current benchmark:	Industry:	Comparison year:	
Noosa Shire Council area	Regional QLD	Fishing, Hunting and Trapping	2012/13	reset

Industry sector analysis

export

Noosa Shire Council area - Fishing, Hunting and Trapping - Constant prices

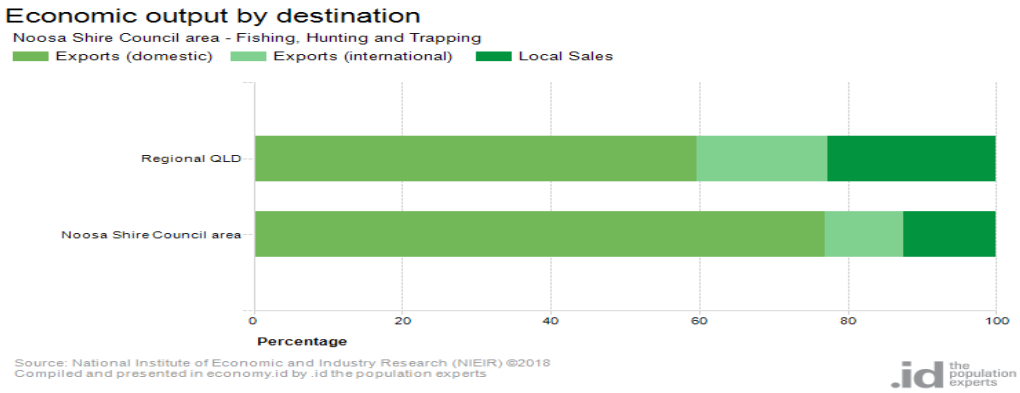
Economic measure	2017/18 Noosa Shire Council area	2017/18 Regional QLD	2017/18 Noosa Shire Council area as a % of Regional QLD	2012/13 Noosa Shire Council area	2012/13 Regional QLD	2012/13 Noosa Shire Council area as a % of Regional QLD	Change 2012/13 to 2017/18
Employment (total)	46	1,377	3.3%	60	1,725	3.5%	-14
Employment (FTE)	55	1,664	3.3%	70	2,077	3.4%	-15
FTE to total employment ratio	1.20	1.21	--	1.16	1.20	--	+0.04
Output/Total Sales ($m)	13.81	441.91	3.1%	10.85	288.12	3.8%	+2.96
Value add ($m)	7.82	249.19	3.1%	6.74	178.87	3.8%	+1.08
Exports ($m)	12.07	342.61	3.5%	9.56	213.06	4.5%	+2.51
Exports (domestic) ($m)	10.61	264.45	4.0%	7.49	141.60	5.3%	+3.12
Exports (international) ($m)	1.46	78.16	1.9%	2.07	71.45	2.9%	-0.61
Imports($m)	0.31	31.97	1.0%	0.30	28.94	1.0%	+0.01
Imports (domestic) ($m)	0.20	24.01	0.8%	0.16	17.94	0.9%	+0.04
Imports (international) ($m)	0.11	7.96	1.4%	0.15	11.00	1.3%	-0.03
Local Sales ($m)	1.74	100.31	1.7%	1.29	75.30	1.7%	+0.45
Worker productivity ($ per worker)	170,992	180,984	--	112,023	103,688	--	+58,968

Source: National Institute of Economic and Industry Research (NIEIR) ©2018. Compiled and presented in economy.id by .id, the population experts.
Data are based on a 2016-17 price base for all years. NIEIR-ID data are inflation adjusted each year to allow direct comparison, and annual data releases adjust previous years' figures to a new base year. Learn more

[7] https://economy.id.com.au/rda-sunshine-coast/industry-sector-analysis?IndkeyNieir=23004&WebID=100

[8] National Institute of Economic and Industry Research (NIEIR)

The table and second chart also show how Noosa Shire Council area contributes to the wider economy.



THE T5 BEAM TRAWL FISHERY

The T5 Beam Trawl Fishery is one of three sub-fisheries within the Queensland East Coast Trawl Fishery (ECTF). It represents the smallest component of the ECTF in terms of annual effort and number of vessels with an estimated Gross Value of Production (GVP) of approximately $1.3 Million. Operators in the fishery tow small beam trawls targeting prawns in rivers, creeks and inshore areas within 3 nautical miles of the coast. The catch of by-product species in the fishery is negligible and consists mainly of small fin fish species. Commercial catch is almost entirely composed of banana prawns, greentail (bay) prawns, and school prawns.

View looking backwards from a T5 Beam Trawler

School prawn is the main species caught in the Noosa T5 areas D and E. The biological stock structure of school prawn remains largely unknown. Eastern School prawn inhabit numerous estuarine habitats in Queensland and a portion of this biomass remains unfished, with fishing effort confined to accessible sections of larger river systems due to vessel size. The average annual catch (4t) in recent years (2012–17) has been well below the long-term average of ~60t (1990–2015). Long term catch levels are variable and nominal catch rates are fairly-stable but with occasional very high catch and high catch rate years[9].

Trawling is defined by the use of beam trawl gear which results in a small trawl footprint. The vessels are entitled to work in specified areas, are limited to a maximum size of 9 meters towing a single 5m wide trawl net made of mesh no smaller than 28mm for nets used in rivers and creeks. The net is attached to 2 'sleds' connected by a rigid pole, or beam, that holds the net open for fishing, a ground chain is connected to the net footrope across its mouth and contacts the sediment to stir up prawns. Trawl shots are generally short (less than 1 hr), occur in shallow water and result in

[9] *Submission for the reassessment of the Queensland River and Inshore Beam Trawl Fishery Wildlife Trade Operation approval under the Environment Protection and Biodiversity Conservation Act 1999*
A report prepared by the Queensland Department of Agriculture and Fisheries, December 2018

relatively small amounts of prawns caught (less than 100kg). Bycatch reduction devices in nets are compulsory and combined with short shots and shallow water, the bycatch in this fishery is relatively low and generally survives well. Interactions with species of conservation interest are minimal.

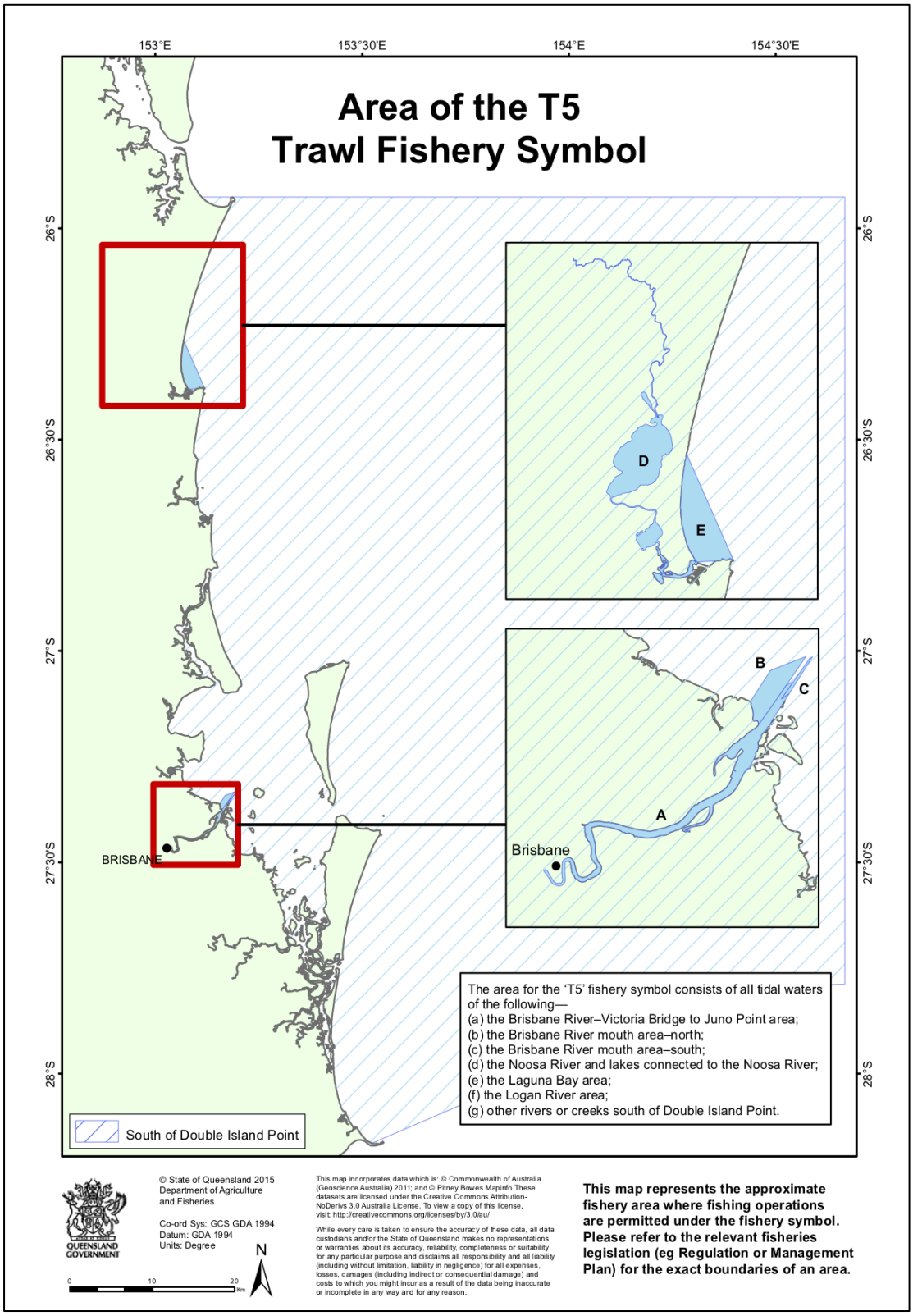


Diagram 2

There are 36 T5 symbol holders that have the authority to fish in the Noosa river and waterways (the T5 beam trawl fishery also includes the Brisbane and Logan Rivers area) however many of these fishers are not active in the Noosa waterways and may have never been active in the Noosa area. Local commercial fishers indicate

the T5 fishers who have historically fished the Noosa area being no more than eight fishers with as little as two being active in recent years. The fishing season is open all year. The Fisheries Queensland data shows that 6 fishers were active in the T5 fishery in 2013, less than 5 in 2014, 6 in 2015 and less than 5 in 2016 and 2017 and 6 in 2018.

In January 2013, much of southern Queensland suffered from major flooding including in the Burnett and Mary River catchments. In the six years that followed these major flood events, there has been a significant drop-off in effort in the Noosa area T5 fishery with no more than 6 boats active in any given year. The average annual catch over this 6-year period was 4.35 tonnes. This information is validated when discussed with local T5 fishers. The data for T5 Beam Trawl – aggregated method by year shows low volumes of prawns caught for the data period 2013 – 2018.

Year	Fishing Method Group	Catch (t)
2013	Beam trawling	6.48
2014	Beam trawling	3.68
2015	Beam trawling	2.98
2016	Beam trawling	0.01
2017	Beam trawling	2.13
2018	Beam trawling	10.84

Numerous studies into the health of the Noosa River have been undertaken. Recent studies include the 2014 **Historical Ecology of the Noosa Estuary Fisheries Report** by Dr Ruth Thurstan. Dr Thurstan's report examined historical fisheries productivity in the Noosa Estuary to better inform the Noosa community about ecological changes that occurred prior to their lifetimes, and to provide insights into the species that inhabited the Noosa River and their changing abundance over time. The historical analysis of prawn trawling records shows fishing effort declining from 1990 – 2015. The year 1991 showed 26 licenses recording catch for a total of 1,103 fishing days down to a low of just 63 fishing days recorded in 2014.

More recently, Greg Skilleter's interim findings report **Biodiversity in the Noosa River System** - **Assessment of the status and options for recovery of prawns & estuarine biodiversity in the Noosa River** identified; *marked declines in the number of species and overall abundance in the sediments. Comparisons of data collected in 1998 with samples from 2018, taken in exactly the same sections of the estuary. These declines were seen in all the major groups of animals (polychaete worms, amphipods, bivalves and snails).*

The report noted that, *all these groups form a critical component of the estuarine environment, due to their roles as food for fishes, crabs and prawns, major bioturbators (irrigators of the sediment, allowing oxygen and nutrients to be recycled), and sediment stabilisers (stopping sediment resuspension through the formation of binding tube mats).*

Professor Skilleter said, *in order to investigate these declines further, **we repeated the 2018 sampling**, at no extra cost to NBRF, but resulting in some delays due to the costly nature of collecting and processing the sediments to remove, count and identify the benthic infaunal animals. These samples have all been processed and final checking of the identification of the fauna is being completed at present. Based on analysis of the quantitative mapping data on threats from human activities within the shoreline of each major section of the estuary, we sampled the benthic (living in sediments) and nektonic (fish, crabs and prawns) fauna to compare the animals living adjacent to different types of human activity (control regions, canal estates, agricultural/forestry regions and urban/residential regions).*

Early analyses have ***identified differences in the fauna associated with different human activities***. The focus of these analyses will be to:

• Identify if community composition and the numbers and types of animals varies in relation to different human activities in the shoreline area, within 500m and 1000m, buffer zones;

• Identify which specific groups of animals are most affected and use information on their biology and life history to infer likely explanations for how human activities are impacting those groups;

• Link environmental data (sediment parameters) and the quantitative threat data to variation in the abundance of the fauna within different regions of human activity.

The report continues, *Extensive trawling in the main regions of the estuary showed that there were **very few prawns present in the sediments and these were found in only a few places**. Abundances of other nekton (fish and crabs) were also small. Again, concern over this specific finding led us to **repeat all the trawl sampling** to determine if the abundances of the nekton were still small later in the summer, after expected periods of recruitment. This additional work was again done at no additional cost to NBRF, but has led to come delays with progress of the work. These samples are being processed at present. Specimens from both periods of sampling of the nekton will be used for stable isotope and gut contents analysis as part of the examination of the benthic food webs within the Noosa River estuary.*

A final report from Professor Greg Skilleter is due sometime in 2019. What the various studies show is that human activity continues to have an impact on the health of the waterways. This is recognised by a local group of conservation organisations have called on the Noosa Council to ban beam trawling in the relevant T5 fishery area of Noosa. They see this as another step toward the recovery and restoration process in the rivers and lakes and the best chance to give the system a break. These groups cite as one of their main reason the recent interim report from Professor Greg Skilleter. The groups include the Noosa Parks Association, Noosa Shire Residents and Ratepayers Association, Noosa District Landcare, Sunshine Coast Environment Council, Noosa Integrated Catchment Association, the Friends of Lake Weyba and Friends of Kinaba. The T5 Beam Trawl fishery is considered in more detail in the option two of this paper.

STATUS QUO

The Noosa Council have articulated in numerous submissions to the Queensland Government desire to have a greater say in the permitted activities allowed in the Noosa River, estuary and beaches. To a large extent this has not occurred in a meaningful way whereby change has been affected. The issues before Council include the proliferation of moored vessels including house boats and holiday vessels, an increase in the volume of traffic using the rivers and lakes, the continuation of commercial, recreational and charter fishing with virtually no locally-initiated changes to management arrangements in an environment where population has continued to grow and visitor numbers continue to increase. The 2011 Australian Census[10] for the Noosa region listed 47,040 residents with 24,026 private dwellings compared to the 2016 Census[11] counting 52,149 residents and 26,099 private dwellings. Overnight and day-trip visitor numbers since 2015 – 2018 have increased 18.5%. The Noosa region welcomed 2 million overnight and day-trip visitors who spent almost $900 million in the year to March 2018[12]. These trends are likely to continue to impact the region and importantly, one of the top four reasons people list as their reason to visit Noosa; the beach, the food, the national park and the natural beauty and amenity of the region.

Whilst there is an expectation identified from the stakeholder analysis that at some point in the future there is likely to be a change to the permitted activities on the Noosa waterways, the broader community has yet to formally consulted on their views. Some of the reasons given for no change is to preserve what has always been; that includes beam trawling on the rivers and catching a bag of mullet, bream or flathead to put food on the table and there is a view from some commercial fishers that they do not want to see that change and further, see no reason to change it. Other state a very different view, including the river is being loved too death and commercial fishing in the waterways needs to stop. Local conservation groups have been very clear in their message that profound change is required and the sooner the better. Other groups are ambivalent and take only a passing interest in the health of the waterways in as much as it being a priority in the daily lives.

The Noosa Council seeks to identify and respond to community concerns regarding the health of the waterways and beaches. The question is if the regulatory oversight of the permitted activities should be left to others or whether there can be more local input into these activities that better reflects the Noosa community values and expectations. There is little short-term cost to the status quo but there may be a longer-term cost to doing nothing.

[10] https://quickstats.censusdata.abs.gov.au/census_services/getproduct/census/2011/quickstat/SED30065

[11] https://quickstats.censusdata.abs.gov.au/census_services/getproduct/census/2016/quickstat/SED30065

[12] https://www.visitnoosa.com.au/image/members/agm2018/Tourism-Noosa-Annual-Report-2018.pdf

For the following options, where possible, costs, benefits and risks of the various options are assessed based on available specific data and information, or quantitative estimates, while some are more qualitative, based on stakeholder consultation and feedback.

In January 2019, the Queensland Government under their Sustainable Fisheries Strategy 2017-2027 released a Fisheries Directions Paper to outline the proposed direction of their future fisheries management reforms. Then in March, Fisheries Queensland sent out to commercial fishers a Draft Allocation Approach Discussion Paper for the East Coast Inshore Fishery seeking feedback from fishers to have their say on the preferred management framework of a Total Allowable Commercial Catch (TACC) and Individual Transferable Quota (ITQ). Fishers had until the 26th April to provide a response. This information will be used to inform a further Discussion Paper to be released sometime in May or June on the Government's proposed regulatory changes based on feedback from fishers and stakeholders. Any subsequent regulatory changes will be completed by the 1st September 2019. This is an important opportunity for the Noosa Council to continue to engage in the short-term with the Queensland Government and to provide the Government with an update on the findings of this paper.

PROHIBIT THE USE OF 1,500M NET IN LAKES COOTHARABA, COOROIBAH AND WEYBA

Division 4 - Use of mesh or seine nets in particular areas within the fishery area.

Section 474 - A mesh net may be used in Lake Cootharaba, Cooroibah or Weyba only if it is no longer than 1,500m and has a mesh size of at least 50mm but no more than 175mm.

The Fisheries Regulations 2008 provides for the holder of an N1 symbol to use up to 1500 metres of net in Lakes Cootharaba, Cooroibah and Weyba. There are no other provisions in the Queensland Fisheries Regulations that allow for the use of this length of net. The areas are habitat for commercial, recreational and Indigenous fisheries including bass, bream, blue salmon, estuary cod, flathead, garfish, jewfish, luderick, mangrove jack, sea mullet, tailor, whiting, mud and sand crabs, school, greasyback, bay and eastern king prawns[13]. Feedback from fishers notes a fisher must shoot and haul the net (cannot soak the net[14]). Local fishers indicate there are several N1 fishers currently using this length of net in the lakes. Under current fisheries management arrangements anyone with an N1 can access the lakes for commercial fishing and there are currently 86 N1 symbol holders with access to the fishery. There are a variety of views put forward by stakeholders including commercial net fishers, regarding possible changes to the management arrangements for the lakes including;

- No change;
- Reduce the net length to 800m or 600m;
- Restrict the number of fishers on the lakes and rivers to the fishers with ten or more years of recorded catch history in the lakes; and,
- Prohibit the use of all nets in the Lakes.

[13] https://parks.des.qld.gov.au/managing/area-summaries/noosa.html

[14] Soak times, defined as the time elapsed from when the first of the mesh net is deployed into the water until the net is fully retrieved from the water.

POTENTIAL ECONOMIC, SOCIAL AND ENVIRONMENTAL COSTS AND BENEFITS OF THE PROPOSED CHANGE

Commercial fishers with a significant proportion of their catch history from the Noosa lakes will likely suffer economic loss and potentially some social impacts. However, the non-tangible benefits such as environmental improvements to the lakes may have a community-wide benefit. Whilst these benefits may be more difficult to measure and quantify at a local level, the long-term benefits of marine protected areas or aquatic reserves or net free zones, whatever they may be described as, are well documented.[15]

INTRODUCE A WEEKEND CLOSURE FOR THE OCEAN BEACH NET FISHERY

Part 9, Division 3 – Possessing or using nets – regulated periods

Prohibited activities

A regulated person must not in the regulated waters—

(a) possess a net for taking fish for trade or commerce; or

(b) use a net for taking a fish for trade or commerce; or

(c) possess a fish taken in contravention of paragraph (b).

A regulated closure in waterways south of Double Island Point from 6pm on Friday to 6pm on Sunday currently applies to Weyba Creek, the Noosa River and Noosa's main beach, Lake Como, Kin Kin Creek, the upper Noosa River and Lake Cootharaba. The closure applies to the river, estuary and lakes and Noosa main beach, not Noosa North Shore and refers to netting during this period (every weekend) however commercial fishers are permitted to crab and line fish during this period. Feedback from some stakeholders and commercial fishers notes this regulation should also be applied to the Ocean Beach Fishery north of the mouth of the Noosa River in Laguna Bay. The basis for these views is principally to address conflict issues between recreational and commercial fishers and tourists and commercial fishers, particularly when greater numbers of tourists are visiting during weekends and peak tourist periods.

POTENTIAL ECONOMIC, SOCIAL AND ENVIRONMENTAL COSTS AND BENEFITS OF THE PROPOSED CHANGE

The potential benefits of introducing a regulated closure on weekends to the ocean beach net fishery according to some commercial N1 net fishers and other key stakeholders would be to further reduce conflict in the fishery that has historically been a source of concern for commercial fishers and the community. Whilst anecdotally this conflict has subsided somewhat due to a range of factors, it has the potential to continue into the future if left unchecked. Removing commercial fishing operations from Laguna Bay (Noosa North Shore) for the same time period as the closure that applies to the rivers and lakes would lessen the likelihood of interactions between commercial fishers, recreational fishers, tourists and the wider community.

Measuring the costs of such a closure would require analysis of recorded catch history on weekends from logbook data. The two months of June and July that record a high concentration of catch history in the whole mullet ocean beach fishery may be impacted however this is an unknown until a deeper analysis is undertaken on peak catch days during this period.

The tangible benefits are less potential conflict for the aforementioned groups, but importantly, this was raised by numerous stakeholders during the consultation phase of this paper as being one of the major issues and sources of conflict between commercial fishers and the community. This issue was discussed in the context of contributing to the long term 'bad image' that has continued to prevail in the community and that no one group or authority had been able to change. By giving consideration to the Rules around priority of shot may go some way to addressing conflict and this is something Fisheries Queensland have advised they are willing to consider, however removing commercial fishing from the Noosa North Shore during periods of high exposure to visitors and the community is worth considering based on stakeholder feedback. The economic impact of a weekend closure in the river and lakes would be subject to closer analysis.

[15] https://www.coastalconference.com/2014/papers2014/Julia%20Mayo-Ramsay%20Full%20Paper.pdf

MOVE THE FISHING CLOSURE LINE FROM MUNNA POINT

Part 9, Division 2 – Possessing or using nets – no regulated periods

Prohibited activities

A regulated person must not in the regulated waters—

(a) possess a net for taking fish for trade or commerce; or

(b) use a net for taking a fish for trade or commerce; or

(c) possess a fish taken in contravention of paragraph (b).

Feedback from some commercial fishers is to consult with Fisheries Queensland on moving the closure line at Munna Point back up the river closer to the cable ferries at Makepeace Island or up to the entrance to Lake Cooroibah. This suggestion is to prohibit the use of regulated nets in an area that is highly visual to locals and tourists and further reduce the risk of conflict and interactions between commercial and recreational fishers and tourists. The current closure applies to north of a line joining the following points;

- from FB (Fishing Boat) sign on Lake Cootharaba's north western shore;
- to FB sign on the southern tip of the peninsula on the eastern side of Shark bay (which is part of the Lake);
- to the FB sign at the southern tip of Kinaba Island;
- to an FB sign on Lake Cootharaba's eastern shore.

Whilst there were not specific incidents of conflict sited by stakeholders during consultation, this is an issue that was raised by a commercial fisher and a recreational fisher to have the issue be considered, but as a part of a suite of possible changes to further improve the image of the commercial sector in the community.

POTENTIAL ECONOMIC, SOCIAL AND ENVIRONMENTAL COSTS AND BENEFITS OF THE PROPOSED CHANGE

A possible benefit of changing the closure line further up river would be to remove commercial net fishing from a busy section of the Noosa River and remove any potential for conflict and out of sight from community views. There is a closure in place during the weekends however during peak tourist season there is no prohibition on commercial netting in this busy section of the river. The issue is likely to receive support from the local recreational fishing body, the Queensland Recreational Fishing Network, along with support from conservation groups.

ALLOCATE INDIVIDUAL TRANSFERRABLE QUOTA (ITQ) FOR MULLET

There is an opportunity to engage with the Queensland Government on the future harvest strategy for the Queensland mullet fishery. Commercial fishers are operating on the beach in Laguna Bay in the Ocean Beach Net Fishery targeting spawning mullet, during the K8 season from 1st April to the 31st August. This fishery is a large volume net fishery in the Noosa area with peak catch during June and July.

The preferred management framework for Queensland's commercial east coast inshore fishery is a combination of Total Allowable Commercial Catch (TACC) allocated through Individual Transferable Quota (ITQ). The key reforms include:

- divide the fishery into six management regions based on key fish species
- allocate ITQ on priority species (e.g. barramundi, king threadfin, grey mackerel, school mackerel, whiting)
- set competitive TACCs (which are not allocated to individuals) for other key species (e.g. mullet, tailor, bream, flathead, shark); and
- monitor the remainder of inshore species and establish triggers in harvest strategy for review.

Some commercial fishers consulted during the stakeholder engagement considered an ITQ would benefit them significantly more than management via a TACC. However, there is also significant opposition to ITQs for the key species, based on the lower than expected allocation by Fisheries Queensland as determined by log book catch records.

POTENTIAL ECONOMIC, SOCIAL AND ENVIRONMENTAL COSTS AND BENEFITS OF THE PROPOSED CHANGE

The economic benefits of an ITQ management regime is that it provides the freedom to fish at an optimum time to maximise economic yield to the commercial fisher. This is less likely to occur under a TACC as the imperative to fish will be driven by the need to 'not miss out' on a catch. This may result in fishing for less return and identifies some of the key drivers of fisher's behaviour. An ITQ management regime allocates quota to individual fishers which infers a type of security of ownership that is not currently present.

The imperative to fish is in the K8 fishery is by and large driven by the two major seafood processors who are active in the Noosa North Shore (NNS) during the peak catch period in June and July. They employ crews stationed on the Noosa North Shore and all efforts are applied to fish during this period when the spawning mullet are present. Advice from local commercial fishers is they receive between $2 and $4/kg for the whole mullet. This is known as the beach price and it can influence the price for the entire mullet fishery.

The processors follow the fishery in its migratory path north so in effect are catching fish from northern NSW well up the Queensland coast as far north as Fraser Island. Local K8 fishers will often fish for the processors and 'team up' with their crews to fish the NNS. The introduction of an ITQ management arrangement would likely be a significant driver of behavioural change in the fishery.

Additional benefits to an ITQ management regime is that changed patterns of behaviour will reduce the likelihood of conflict between stakeholders. Feedback from local stakeholders and commercial fishers suggest the behaviour of some of the crews on the beach has been less than what the community would expect at times, with conflict between the crews over priority of shot issues. The community would welcome improved rules and management arrangements that address this issue.

Noosa Council's submission to the Queensland Fisheries Management Review in 2014 first noted the conflict issues in the Ocean Beach Net Fishery targeting mullet. The Noosa North Shore (NNS) is part of the Cooloola Recreation Area and is easily accessed by locals and visitors for recreational purposes by day trippers, beach campers and recreational fishers.

Appropriate harvest strategy management arrangements for the mullet fishery that are based on the principles of science and sustainability of the stock with an ITQ that is set at realistic levels would be supported by many local N1 fishers however this support may not be universal among stakeholders.

DEVELOP A CODE OF PRACTICE FOR THE MULLET FISHERY & ADDRESSING THE AUTHORISATION FISHING PRIORITY ISSUES PREVALENT IN THE OCEAN BEACH MULLET FISHERY
Chapter 5, Division 2, Subdivision 1, 2, and 3
235, Meaning of ready to fish;
236, Fishing Priority, Ocean Beach Fisheries;
237, Fishing Priority, Other Commercial Fishers;
238, Duration of Fishing Priority;
239, Joint Fishers Taken to be 1 Fisher;

The development of a Code of Practice for the mullet fishery in Region 6[16] (between the NSW QLD border and just north of Bundaberg) once the fisheries allocation process has been completed that seeks to address longer-term management issues for this key species would benefit the participants of the fishery. This would include regular stock assessment and scientific research to determine the long-term ecosystem impacts of removing large quantities of spawning fish from the biomass every year. As species populations decline due to a combination of harvesting, recovery of affected species populations becomes increasingly less possible. A Code of Practice would also ideally be the platform to address any remaining conflict issues that are not addressed by the outcome of the harvest strategy, including a proposal for a weekend closure and possibly even moving the fishery off the beaches on the NNS to a location inside the Noosa River mouth as suggested by a local recreational fishing group representative. A Code of Practice would be a living breathing document and establish a process to validate any future changes to mullet netting practises during the autumn/winter spawning migration and beyond with local net fishers driving the process.

[16] https://www.daf.qld.gov.au/__data/assets/pdf_file/0008/1438865/inshore-allocation-discussion-paper.pdf

Consistent with Noosa Council's submission to the Queensland Government Green Paper on Fisheries Management Reform in 2016, Noosa Council has continued to express concerns over the compatibility of trawling in the Noosa River and lakes, particularly due to current projects underway aimed at the restoration of the waterways, such as Bring Back the Fish. Council's concerns have resulted in the commissioning of numerous studies into the health of the Noosa River. Recent studies include the 2014 **Historical Ecology of the Noosa Estuary Fisheries Report** by Dr Ruth Thurstan. Dr Thurstan's report examined historical fisheries productivity in the Noosa Estuary to better inform the Noosa community about ecological changes that occurred prior to their lifetimes, and to provide insights into the species that inhabited the Noosa River and their changing abundance over time. The historical analysis of prawn trawling records shows fishing effort declining from 1990 – 2015. The year 1991 showed 26 licenses recording catch for a total of 1,103 fishing days down to a low of just 63 fishing days recorded in 2014.

What is clear from numerous studies over time is that human activity and population concentrations in coastal areas have an impact on water quality and the abundance of plant and animal life present in coastal waterways. In Australia where more than 80% of the population live within 50km of the coast and in South east Queensland, one of Australia's fastest growing regions, governments of all levels will seek to ensure natural resources and areas of high conservation value are protected for future generations.

The Noosa Council has consistently flagged that it is a high priority for Council to protect what is arguably its greatest community asset, the rivers, lakes and beaches. The option to cease beam trawling in the relevant T5 fishery area of Noosa is seen by many groups[17] as another step toward the recovery and restoration process in the rivers and lakes and the best chance to give the system a break. These groups have requested the Noosa Council support a ban on beam trawling in the river system and cite as one of their main reason the recent interim report from Professor Greg Skilleter. The groups include the Noosa Parks Association, Noosa Shire Residents and Ratepayers Association, Noosa District Landcare, Sunshine Coast Environment Council, Noosa Integrated Catchment Association, the Friends of Lake Weyba and Friends of Kinaba. Professor Skilleter's report points to a decline in biodiversity in the rivers and lakes and these conservation groups have attributed this decline in biodiversity to activities such as beam trawling, damaging the habitats of the benthic communities the fish and prawns feed on.

There is also a view prevalent among many commercial fishers who have said '*the river is being loved to death'*. There are some opposing views notably from T5 fishers that the low incidence of beam trawl activity over the last six years since major flood events in south east Queensland in 2010/11 as a reason not to shut the fishery. Flooding was widespread across Queensland and New South Wales from the end of December 2010 to January 2011 with several separate rain events causing rivers to rise over a lengthy period. Again in January 2013, much of southern Queensland suffered from major flooding, including in the Burnett and Mary River catchments. In the six years that followed these major flood events, there has been a significant drop-off of in effort in the T5 fishery with no more than 6 boats active in any given year. Initial conversations with fishers have identified that in some years, no more than two boats have been active in the fishery. The average annual catch over this 6-year period was 4.35 tonnes. By any historical measure of catch rates[18], this is very low. Ironically, this is also sighted as a reason not to close the fishery. Fisheries Queensland data for the T5 fishery, effort and days fished information is validated when discussed with local T5 fishers, that for the past 6 years the beam trawl fishery has been the worst observed for a long time. The data for T5 Beam Trawl – aggregated method by year shows low volumes of prawns caught for the data period 2013 – 2018.

[17] https://www.noosanews.com.au/news/groups-combine-to-ban-noosa-river-trawling/3670634/

[18] Historical ecology of the Noosa Estuary Fisheries, Dr Ruth Thurstan

Year	Fishing Method Group	Catch (t)
2013	Beam trawling	6.48
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2015	Beam trawling	2.98
2016	Beam trawling	0.01
2017	Beam trawling	2.13
2018	Beam trawling	10.84

The fishery is a low value fishery. The school prawn is the most common species caught making up a significant portion (approximately 75%) of the catch. The remainder of the catch is king, banana and tiger prawns. Much of the catch is sold as bait to local businesses including Sea Queen Marine in Noosa and Tweed Bait in South Tweed Heads.

Commercial fishers have confirmed prices achieved[19] for school prawns averaged between $7 and $12 per kilogram. In addition to school prawns, the cooked king, banana and tiger prawns that account for up to 25% of the catch sold for human consumption, have achieved between $15 and $25 per kilogram. The current market value of a Beam Trawl T5 symbol according to listings available on any of the five major Queensland fishing brokerage online platforms (based on the dates of inquiry over the four-month period from January to April in 2019) is low. During this period only one T5 symbol was listed for sale on one the five brokerage sites, valued at $25,000.

There are 36 T5 symbol holders that have the authority to fish in the Noosa river and waterways (the T5 beam trawl fishery also includes the Brisbane and Logan Rivers area) however many of these fishers are not active in the Noosa waterways and may have never been active in the Noosa area. Local commercial fishers have identified the T5 fishers who have historically fished the Noosa area being no more than eight fishers with as little as just two being active in recent years. The fishing is open all year. The Fisheries Queensland data shows that 6 fishers were active in the T5 fishery in 2013, less than 5 in 2014, 6 in 2015 and less than 5 in 2016 and 2017 and 6 in 2018. Where there are less than 5 fishers active in a year, only the aggregated data by method and region will be identified.

COSTS, BENEFITS AND RISKS OF A BUYOUT

A buy out of the Beam Trawl fishery in the Noosa River and waterways would trigger the Queensland government Fisheries Reallocation Policy. The Fisheries Reallocation Policy is intended to guide decisions about reallocation of access to fisheries resources. The policy scope includes requests to reallocate access from one or more fishing sectors to a non-extractive use. A cost-benefit analysis will be used by the Queensland Government to quantify the benefits to the community of reallocation proposals. Collection of additional data may be required if existing information is insufficient for such an analysis. In general, analyses will need to be evidence- based and must provide facts to substantiate any claims. Information supporting the application must be sufficient to enable a cost-benefit analysis.

The objective of the reallocation proposal would result in an investment of funds to purchase the T5 symbols, and would only be available to commercial fishers who have recorded catch history in the T5 fishery in the Noosa River and lakes between the years 2013 and 2018. There are no other fishing sectors that access the T5 fishery so sectoral allocation is not relevant. The size of the fishery is small and operates exclusively for those commercial fishers with a commercial fishing boat license with a T5 symbol. The area of the T5 Trawl Fishery

[19] Prices quoted are for 2017 and 2018

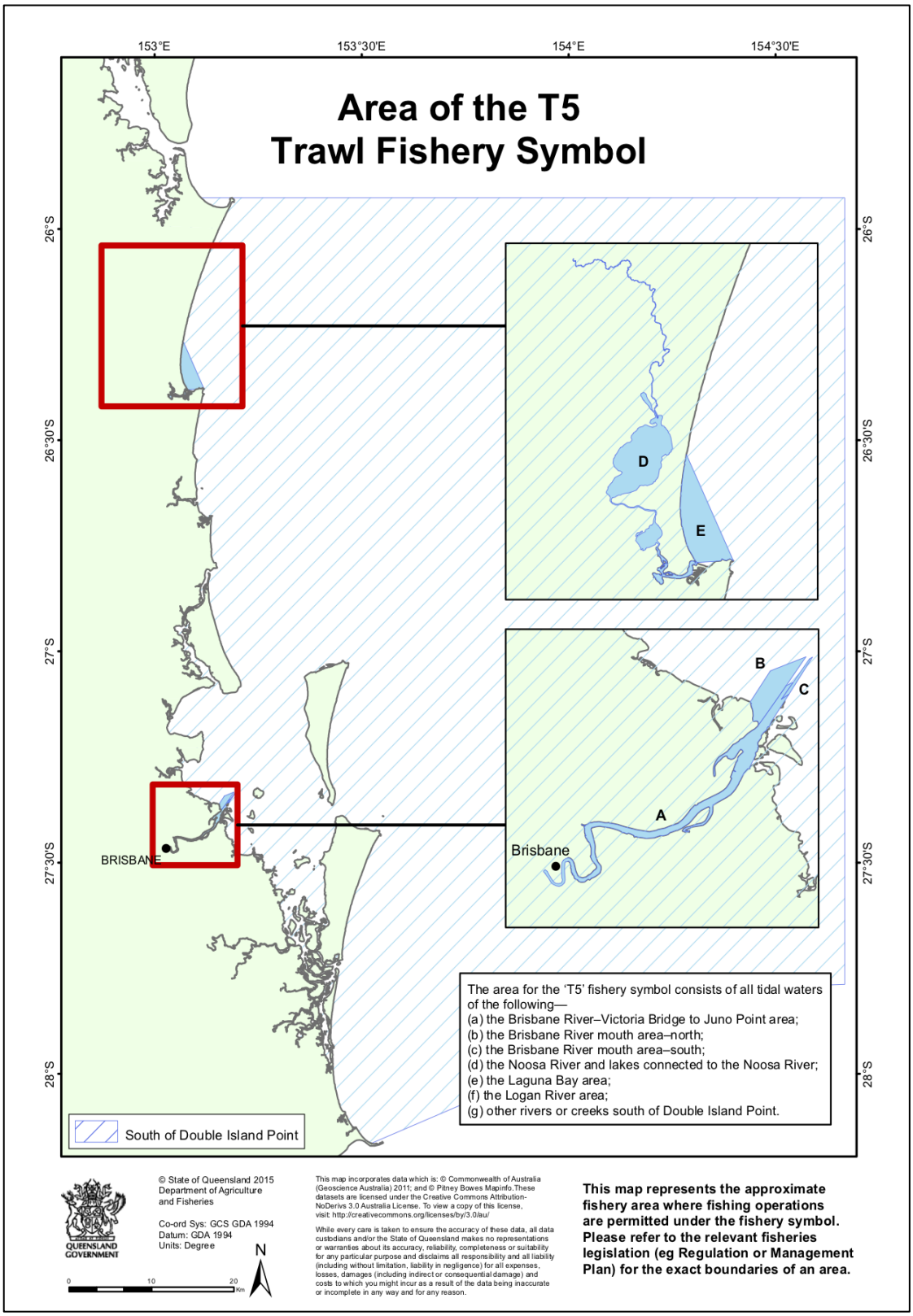
Symbol[20] relevant to the reallocation proposal is the Noosa River and lakes connected to the Noosa River and Laguna Bay area as defined in the *Fisheries Regulations 2008*.

The environmental benefits of the proposal are considered by many in the community to be significant. This is also consistent with the Noosa Shire Council submission to the Green Paper on Fisheries Management Reform in 2016 that identified Council's concerns relating to commercial fishing and the compatibility of prawn trawling in the Noosa River and Lakes. There is potential for an increase in abundance of local prawn stocks as a result of the removal of beam trawl activity. Prawns clean up the beds of rivers and lakes, oysters filter water (a single oyster sieving a bathtub of water daily). Both species secrete essential food for fish. They are fundamental to a healthy marine environment and the project aims to ensure these fundamentals are maintained.

Based on the historical data from the last few decades, it is possible to draw the conclusion that the abundance of prawns in the rivers and lakes has been diminishing over time. What is evident from the last 6 years of data is the practice of beam trawling is economically unviable as a stand-alone business as not one of the T5 symbol holders earns a sustainable annual income from the fishery. Since 2013, total recorded catch was just 26.38 tonnes. Averaged over the six years that's 4.39 tonnes per year between 6 active boats. This data, combined with recent stakeholder feedback suggest the conditions for a buyout of the T5 symbols for Areas D and E are present and represent an opportunity for Noosa Council to work with the Queensland Government to close the Beam Trawl T5 Fishery in areas D and E, as soon as practicable.

In summary, the Reallocation Policy requires a proposal to demonstrate community support (all applications must be accompanied by evidence of adequate stakeholder consultation, including written feedback from potentially affected stakeholders. Consultation on the proposal including payment of all costs incurred is the responsibility of the proponent).

[20] https://www.daf.qld.gov.au/__data/assets/pdf_file/0005/61844/t5-fishery.pdf


Area of the T5
Trawl Fishery Symbol
153°E
153°30'E
154°E
154°30'E
26°S
26°30'S
27°S
27°30'S
28°S
D
E
B
C
A
Brisbane
BRISBANE
The area for the 'T5' fishery symbol consists of all tidal waters of the following—
(a) the Brisbane River–Victoria Bridge to Juno Point area;
(b) the Brisbane River mouth area–north;
(c) the Brisbane River mouth area–south;
(d) the Noosa River and lakes connected to the Noosa River;
(e) the Laguna Bay area;
(f) the Logan River area;
(g) other rivers or creeks south of Double Island Point.
South of Double Island Point
QUEENSLAND GOVERNMENT
© State of Queensland 2015
Department of Agriculture and Fisheries
Co-ord Sys: GCS GDA 1994
Datum: GDA 1994
Units: Degree
N
0
10
20
Km
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While every care is taken to ensure the accuracy of these data, all data custodians and/or the State of Queensland makes no representations or warranties about its accuracy, reliability, completeness or suitability for any particular purpose and disclaims all responsibility and all liability (including without limitation, liability in negligence) for all expenses, losses, damages (including indirect or consequential damage) and costs to which you might incur as a result of the data being inaccurate or incomplete in any way and for any reason.
This map represents the approximate fishery area where fishing operations are permitted under the fishery symbol. Please refer to the relevant fisheries legislation (eg Regulation or Management Plan) for the exact boundaries of an area.

ESTABLISH A PROCESS TO REMOVE NETS FROM THE NOOSA RIVER AND LAKES

A medium-term option includes establishing a process of removing netting from the Noosa River and Lakes Cootharaba, Cooroibah and Weyba. If Council were to support this approach the support of the Queensland Government is required;

1. Acceptance by the Queensland Government of the numerous initiatives included in Council's submission that focus on addressing N1 net fishery issues in the rivers and lakes;
2. Noosa Council builds on those initiatives with further proposed reforms that achieve a higher conservation value outcome that begins the process of removing nets from the three lakes and the Noosa River; and,
3. Addresses the finer scale spatial data collection and more granular economic analysis required to accurately measure the fishing effort and the costs of removing the N1 nets from the system, over the next three years.

The N1 mullet component of the net fishery in the lakes and rivers (W35, Site 16) is the key data point which records the catch for the river and lakes, however, there is an issue with this data set. The issue is Site 16 also includes some N1 ocean beach catch and there's no way of identifying the river and lakes catch as distinct from the recorded catch offshore. To indicate this, the following diagram shows the Method, Grid, Site, Number of Boats, Species and Catch Volume in tonnes for Site 16 since 2015. Data for 2014 is not provided as there were less than 5 boats active in Site 16.

The ring netting data from Site 16 only suggests the total catch is not significant however much finer scale examination is required to get a very accurate estimate of the overall catch and effort for the purposes of progressing a proposal that would meet the Fisheries Reallocation Policy requirements.

2015	Ocean Beach Netting	W35	16	6	Mullet - unspecified	106.48
2015	Ring Netting	W35	16	5	Bream - unspecified	0.21
2015	Ring Netting	W35	16	5	Mullet - unspecified	17.33
2016	Ocean Beach Netting	W35	16	7	Bream - unspecified	0.13
2016	Ocean Beach Netting	W35	16	7	Milkfish	0.09
2016	Ocean Beach Netting	W35	16	8	Mullet - unspecified	144.53
2016	Ocean Beach Netting	W35	16	7	Queenfish - unspecified	0.02
2016	Ocean Beach Netting	W35	16	7	Tailor	0.08
2016	Ocean Beach Netting	W35	16	7	Whiting - unspecified	0.09
2016	Ring Netting	W35	16	11	Bream - unspecified	0.73
2016	Ring Netting	W35	16	5	Eel (marine)	0.16
2016	Ring Netting	W35	16	8	Flathead - unspecified	0.66
2016	Ring Netting	W35	16	12	Mullet - unspecified	50.24
2016	Ring Netting	W35	16	8	Trevally - unspecified	1.88
2016	Ring Netting	W35	16	6	Whiting - unspecified	0.57
2017	Ocean Beach Netting	W35	16	5	Dart - unspecified	0.11
2017	Ocean Beach Netting	W35	16	8	Mullet - unspecified	70.35
2017	Ocean Beach Netting	W35	16	5	Shark - whaler unspecified	0.13
2017	Ocean Beach Netting	W35	16	5	Trevally - unspecified	0.70
2017	Ring Netting	W35	16	6	Flathead - unspecified	0.26
2017	Ring Netting	W35	16	5	Grunter - unspecified	0.16
2017	Ring Netting	W35	16	5	John dory	0.03
2017	Ring Netting	W35	16	12	Mullet - unspecified	26.32

2017	Ring Netting	W35	16	7	Trevally - unspecified	3.40
2017	Ring Netting	W35	16	6	Whiting - unspecified	2.16
2018	Ocean Beach Netting	W35	16	5	Bream - unspecified	0.03
2018	Ocean Beach Netting	W35	16	8	Mullet - unspecified	135.32
2018	Ring Netting	W35	16	5	Bream - unspecified	0.27
2018	Ring Netting	W35	16	5	Flathead - unspecified	0.44
2018	Ring Netting	W35	16	8	Mullet - unspecified	33.90
2018	Ring Netting	W35	16	5	ponyfishes	1.48
2018	Ring Netting	W35	16	6	Trevally - unspecified	1.52

To accurately establish the catch data would require direct conversations with the active commercial fishers to closely identify their fishing activity and recorded catch in the lakes. Some local stakeholders have indicated the process to remove nets from the lakes commence with the least fished of the lakes, Lake Weyba however this requires logbook data validation and confirmation from local fishers. Coupled with the advent of VMS[21], over the next three years FQ will have a more robust catch record data set of the commercial fishing activity in the river and lakes that will benefit an application to apply the Reallocation Policy framework should this option receive support.

MEDIUM TERM – OPTION TWO

WORK WITH THE QUEENSLAND GOVERNMENT ON A NOOSA REGIONAL MANAGEMENT TRIAL

The Moreton Bay Regional Management Trial is now well underway and has identified some significant challenges and complexities associated with achieving agreement on future fisheries management arrangements under a regional management model with a diverse cohort of stakeholders and user groups. Council has for some time noted a desire to have a greater level of involvement in the future management of the permitted activities in its waterways and a regional management model could be a vehicle in which to achieve this objective. The Noosa Council already supports projects that aim to deliver improvements in aquatic biodiversity and fish abundance that will assist the restoration of the rivers, estuaries and lakes. Council recognises the commercial fishing sector provides an income producing resource to local fishers who also seek to continue to harvest this resource sustainably. Council also recognises there must be a balance between the extractive activities permitted in the waterways and the communities desire to preserve the aquatic resources and fish abundance for future generations.

This option proposes that Noosa Council identifies a framework and set of objectives for a regional management trial for Noosa's rivers, lakes and beaches and establish a stakeholder working group to bring together representatives from key user groups of the river, lakes and beaches to provide a Regional Management Trial Plan to submit to the Queensland Government for consideration.

The aim of the Noosa Stakeholder Working Group would be to develop a plan for future management priorities for the sustainable use of aquatic resources including commercial, charter, recreational and indigenous fishing. These objectives would ideally include consideration of some of the following principles;

Ecological Objectives

- Advocate for habitat protection and rehabilitation
- Minimise the risk of localised depletion of fish stocks and reduce bycatch
- Advocate for continuous data collection and scientific knowledge assessments of fish stocks and water monitoring
- Protect vulnerable spawning aggregations

[21] Vessel Monitoring System

Economic Objectives

- Maintain viable commercial, charter and recreational fishing businesses and associated businesses that rely on these activities
- Optimise the value of the recreational fishing experience

Social Objectives

- Reduce conflict (both inter- and intra-sectoral, as well as with community)
- Promote a shared responsibility to sustainably manage fisheries resources
- Improve stewardship and compliance
- Improve community understandings of allowable practices
- Enhance the recreational fishing experience

Cultural Objectives

- Improve stakeholder and community understanding of Traditional Owner connection to country and Native Title rights
- Improve the role of Traditional Owners in planning and management of fisheries in Traditional Owner waters
- Minimise impacts on cultural sites of high significance by high impact fishing activities

Rather than a one-size-fits-all approach to resource management the Queensland Government and Noosa Shire Council could partner to establish a Noosa Stakeholder Working Group for a regional management trial in Noosa. The Working Group would consider localised or regional fisheries issues within the broader scope of the Queensland Government's Sustainable Fisheries Strategy 2017-27.

The working group would ideally include representatives from the ocean beach net fishery, the rivers and lakes net fisheries, the T5 Beam Trawl Fishery, recreational and charter fisheries, seafood retail including bait sectors, indigenous group, conservation and land care sector reps, tourism and business sectors and government representatives. The purpose of the regional management trial would be to consider how local fisheries management issues can be introduced via the required changes to the general fisheries rules that will better suit the Noosa coastal regions and communities. This approach recognises that local people have a greater interest in protecting and fairly-allocating resources in their region.

To-date, there has not been a successful regional management framework introduced into fisheries management arrangements in Queensland so it is difficult to undertake a cost benefit analysis until such a trial is completed. For example, the regional management framework in Moreton Bay is significantly more complex than it would be for Noosa and hence costs incurred may vary greatly.

Previously, the State Government commenced a regional co-management trial in the Burdekin in 2010/11. The proposed reforms enjoyed wide spread local support however the trial was ultimately not successful in part due to influences outside of the region. The proposed changes were designed to achieve the following objectives;

- Recreational fishers will enjoy net free fishing in a popular recreational fishing area;
- Commercial fishers will be able to supply a range of fish species to local markets and avoid conflict with recreational fishers; and,
- Dugong will have greater levels of protection

The objectives described could be applied to any region across Queensland.

ESTABLISH A NET FREE ZONE IN THE NOOSA RIVER, ESTUARIES AND LAKES.

The establishment of Net Free Zones in Cairns, Mackay and Rockhampton on the 1st November 2015 was to increase recreational fishing opportunities in Queensland, thereby supporting tourism and economic growth. The cost to the Queensland Government was $3.318 million for the Buyback Scheme, $1.026 million for the Settlement Scheme and $1.5 million for the Alleviation Scheme. The total funds set aside to administer the Scheme and for the purposes of buying back commercial fishing boat licenses and allocate compensation was $10 million.

The establishment of a net free zone in the Noosa River and lakes connected to the river is a medium to long term option and would require support for the Queensland Government. A proposal will require significant fine scale fisheries data and further detailed investigation into the current activities of all commercial net fishers that have recorded catch history in the Noosa region. As the effects of a NFZ will be considered to impact all authority holders of a net endorsement, a detailed compensation plan will also need to be constructed. There would be considerable benefits to the establishment of a net free zone in Noosa and many of these benefits are recognised in the Government's monitoring of the net free zones[22] since their introduction in Cairns, Mackay and Rockhampton. It would also assist an application to the Queensland Government if the Noosa Council consider the development of a Recreational Fishing Strategy similar to those initiated by other jurisdictions in Queensland to support the case for a NFZ.

THE ESTABLISHMENT OF A 'NOOSA MARINE PARK' FOR THE REGION THAT ADJOINS THE GREAT SANDY MARINE PARK AND COMPLEMENTS THE EXISTING NOOSA NATIONAL PARK

Noosa Shire Council could work with the Queensland government to establish a multi-use Noosa Marine Park that provides legislated protection for conservation values while allowing for ongoing sustainable use. The establishment of a marine park will typically require a Public Benefit Test Report, usually prepared by the Queensland Government Environment Protection Agency. This process includes a set of scientific guiding principles that underpins the development of a new zoning plan in addition to extensive community consultation to seek public support, without which a zoning plan is unlikely to progress.

It is important to acknowledge the establishment of a new zoning plan for the purposes of developing a new marine park is a comprehensive process that will require government support from the commencement of the process. Should Noosa Shire Council consider this objective as an option, sowing the seeds of the intent to work with the government to seek marine park status for the Noosa area would ideally commence in parallel to the medium-term options in this paper. It is also important to note that up front the costs of this option will be significant and would require a substantial commitment from the Queensland government. For example, the structural adjustment component of the Moreton Bay Marine Park introduced in 2008 was $16.5 million. Additionally, there are other significant administrative costs such as the preliminary scientific works in developing the Public Benefit Test, along with community consultation process. The establishment of a Marine Park for Noosa would require the commitment of the local state Member of Parliament and many other key stakeholders, including the two major political parties. Establishing an internal Noosa Council committee to explore the opportunity may assist Council to consider the costs and benefits as a way to identify if this is a realistic long term option for Council to pursue.

[22] https://www.daf.qld.gov.au/business-priorities/fisheries/monitoring-compliance/monitoring-reporting/recreational-fishing/net-free-fishing-zones-monitoring

Background

Marine parks are established to protect tidal lands and waters and conserve the natural marine environment while allowing for its sustainable use. They protect habitats, including mangrove wetlands, seagrass beds, mudflats, sandbanks, beaches, rocky outcrops and fringing reefs. These parks include the subsoil below and airspace above their boundaries, and the plants and animals within them. There are three state marine parks in Queensland:

- Great Barrier Reef Coast Marine Park
- Great Sandy Marine Park
- Moreton Bay Marine Park

The three Queensland marine parks are all multiple use marine parks. The Great Sandy Marine Park (GSMP) was established in 2006 and covers approximately 6000 km2 extending from Baffle Creek in the north to Double Island Point in the south. Like all Queensland marine parks, the GSMP is a multiple use area supporting conservation while providing opportunities for a range of recreational, commercial and tourism opportunities. The Great Sandy Marine Park Zones include;

Marine national park zone (referred to as a Green Zone)
Marine national park (green) zones or *no-take* zones provide the highest level of protection in the marine park. They support conservation of areas containing high natural or ecological value/s and enable a mix of habitats, plus their supporting species to be represented in highly protected areas. Green zones are *look, but don't take* areas where non-extractive activities such as boating, diving and photography are allowed. Activities such as fishing and collecting are prohibited.

Conservation park zone
Conservation park (yellow) zones protect significant marine habitats. Commercial netting, trawling, and harvest fishing are prohibited within a conservation park zone. Some exemptions apply in the Great Sandy Marine Park.

Habitat protection zone
Habitat protection (dark blue) zones are located over areas that contain sensitive habitats. Trawling is prohibited in these zones, but most other activities are allowed.

General use zone
General use (light blue) zones provide both conservation and reasonable use of the marine park. A wide range of activities are allowed to occur in these zones.

Buffer zone

Buffer (olive-green) zones have the same entry and use provisions as a green zone with the exception of allowing trolling for pelagic species. In the Great Sandy Marine Park there is only one buffer zone and this is located around Wolf Rock to support the protection of the endangered grey nurse shark.

A proposal for a Noosa Marine Park may seek to include any or all of the above zones and would be a management opportunity for moored vessels, particular developments and recreational fishing. A marine park would also be a mechanism to work more closely with traditional owners on management issues they view as important. The marine park framework would embrace best practice conservation similar to the conservation values of land-based national parks. This is particularly important to the area given the high value placed on Noosa's national park and its status as a reason for tourists visits.

This is a long-term process however if adopted as an option the process would ideally commence in the near term with Council considering the cost benefit analysis of a Noosa Marine Park.

COMMUNITY AND STAKEHOLDER ENGAGEMENT PLAN

As part of the development of the Noosa River Management Plan, the Noosa Shire Council have commissioned an evidence-based desktop study of the Noosa River, estuary and beach fisheries. The information gathered will be used to inform the River Plan. The focus of this paper is on the commercial fisheries that operate in the Noosa region to better understand the activities of fishermen and current management arrangements that regulate these activities. From this, the paper provides Council with a number of options on how it can more closely work with the Queensland Government to have greater input into the activities in the Noosa River, estuary and beaches.

Following consultation with key stakeholders including commercial fishers from the Noosa region, a community and stakeholder engagement plan has been developed to inform residents of Council's preferred options from the paper and seek to their views on those options.

The community and stakeholder engagement plan is developed based on the views of those engaged with during this project and represents the next stage of a process Noosa Council can utilise following agreement on preferred options to measure community support for those options.

KEY MESSAGES FROM THE STAKEHOLDER ANALYSIS

In the time it has taken to prepare this paper, a consistent message from stakeholders has identified time and again; there is a recognition that the waterways are under significant pressure from multiple user groups, who have some strongly held and divergent views over the activities currently permitted in the Noosa River, estuaries and beaches. Further, there is an expectation that at some time in the future, Council is likely to seek support from the community to more closely control the permitted activities allowable in the Noosa waterways and beaches.

Feedback ranged from '*the river is being loved to death and it needs a break'* through to *'the biggest contributor to the degradation of the Noosa waterways is over development and sediment run off'* and '*commercial fishing needs to be removed from the lakes and waterways'*. These views are permeated by a common theme that there is an expectation that 'someone' needs to do 'something' about it.

This community and stakeholder engagement plan is in response to this feedback and provides the Noosa Council with a pathway to hear the views of the broader community and measure support for Council's preferred options. Council's preferred options are included in the plan and seek feedback from the community to implement the proposed changes to the permitted activities in the Noosa River, estuaries and beaches.

Importantly, the community and stakeholder engagement plan identifies the current regulatory framework for the management of commercial, recreational and charter fisheries does not provide Council with the authority to alter or change the permitted activities in the waterways. This authority lies with the Queensland Government. The community and stakeholder engagement plan is informed by the stakeholder analysis conducted over the months of January through to April 2019, with select key stakeholders who have been assessed as having a high level of interest in the Noosa waterways and that if change was initiated, would also have a medium to high level of impact on those individuals and groups.

Continue to engage with the Queensland Government on the implementation of the Sustainable Fisheries Strategy 2017-2027 and make a submission on some identified regulatory changes based on feedback from key local stakeholders contained in this paper. Some of the proposed regulatory changes included in the Council submission be included in the broader community consultation as part of the final River Plan. Council writes to the Queensland Government to inform them of the outcomes of this Report and to seek their support to work together on the permitted activities in the Noosa River, estuary and beaches to achieve the reforms Council has identified. Once Council gains agreement from the Queensland Government to partner with Council on a pathway to implementation of some fisheries management reforms, the community consultation process occurs in stages.

COMMUNITY CONSULTATION – STAGE ONE

Notify the community of Council's preferred options on the proposed permitted activities in the Noosa River and waterways and seek community and stakeholder support as part of the Noosa Council River Plan. Once feedback is received from the community and the level of community support has been identified, informs the community of the outcome via the Noosa Council Website and amends the Draft River Plan to include the proposed reforms.

COMMUNITY CONSULTATION – STAGE TWO

Council engages directly with stakeholders that are assessed as HIGH IMPACT HIGH INTEREST and HIGH IMPACT LOW INTEREST and LOW IMPACT HIGH INTEREST[23] to inform them that Council intends to implement the reforms agreed in the community consultation, in partnership with the State Government.

ESTABLISH THE NOOSA FISHING FUTURES WORKING GROUP

Noosa Council establishes a Working Group of key stakeholders to work through the proposed reforms and work with the Queensland Government to implement the reforms ensuring all legislative and regulatory amendments are secured. The Noosa Fishing Futures Working Group will facilitate implementation of Noosa Council's short term options. The plan also allows for community announcements as the preferred options issues are considered and completed.

THE PLAN

The Noosa Council community stakeholder and engagement plan will conduct a range of community engagement activities to understand community views regarding the future permitted activities in the Noosa River, lakes and beaches. The final Noosa Council Fishing Futures Report will note Council's preferred options for the future management of Noosa waterways to ensure these unique community assets is protected for future generations. More detail to be provided once Council decides on the options it is going to pursue.

ENGAGEMENT PURPOSE

Noosa Council has received the Noosa Fishing Futures Report that provided insights previously not well understood by Council into the current commercial fishing activities conducted in our waterways and beaches to inform the River Plan. The Report provides some context to Noosa Council's proposed preferred options that is the basis for this engagement process, to seek community support to have a greater level of input into the permitted activities allowed in the Noosa waterways. This includes the commercial fishing activities currently allowed in the Noosa region. The affected stakeholders are Noosa residents and those assessed in the stakeholder analysis as high impact high interest, low impact high interest and high interest low impact.

[23] Refer Stakeholder Spreadsheet

ENGAGEMENT SCOPE

The scope of Noosa Council's preferred options is outlined in the community engagement plan and Council will seek views on these options for commercial fishing in the Noosa waterways and beaches.

ENGAGEMENT OBJECTIVES

The objectives of this engagement process is to hear residents views on Council's desire to achieve greater levels input into the future allowable uses of the Noosa waterways to;

- Better protect the aquatic habitat and marine ecosystem biodiversity;
- Extend protections similar to land based protections afforded to the Noosa National Park to our waterways and beaches; and,
- Ensure the status of the top four reasons tourists visit Noosa (*the beach; the food; the National Park and, the regions natural beauty and amenity)* is maintained for the future.

STAKEHOLDER AND ISSUES ANALYSIS

Noosa Council has conducted an initial engagement and a stakeholder analysis with some key stakeholders including those assessed as high impact high interest. This included commercial and recreational fishers, seafood retail and wholesalers, community conservation groups, Kabi Kabi, business and tourism groups and individuals with a high level of interest in the Noosa waterways. Noosa Council will consider the community feedback and further engagement with these key stakeholders to ensure all impacted and interested groups views are considered in an open and transparent way.

LEVEL OF ENGAGEMENT

Noosa Council will consult and engage with key stakeholders and the community on the revised Draft River Plan through various methods. It will also inform the community of the outcomes of this engagement process in the final River Plan.

INFORMATION COLLECTION

Noosa Council will engage with the community with communication materials including fact sheets, key messages and FAQs, social media website content and face-to-face briefings for key stakeholders (directly impacted groups). All information collected will be used to inform the decision outcome.

RESOURCES REQUIRED

Council will allocate the resources including financial and human resources that are available and required to meet defined engagement methods.

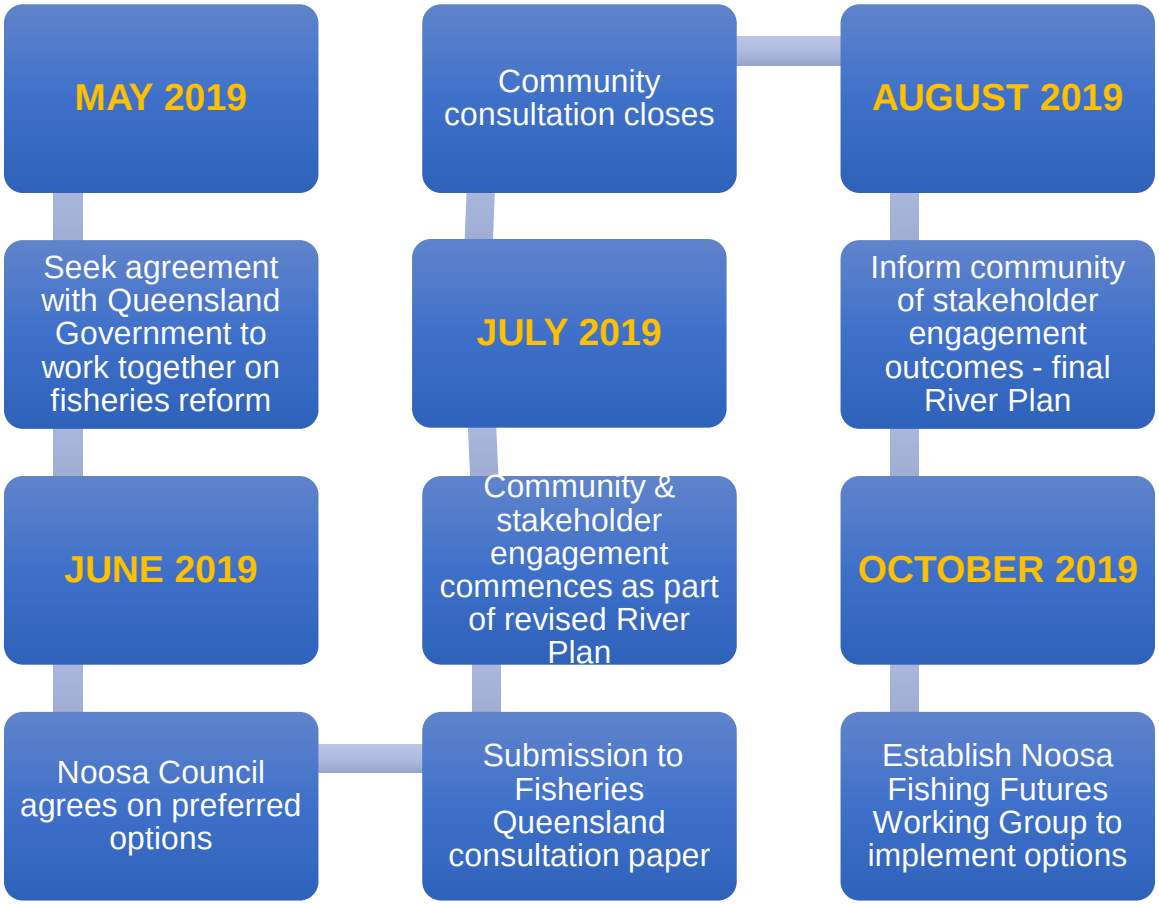
IMPLEMENTATION PLAN

Community and stakeholder engagement will commence upon agreement from the Queensland Government to work with Noosa Council to have a greater say over the permitted activities in the Noosa River, lakes and beaches.

NEXT STEPS

Design the community and stakeholder engagement plan framing relevant questions and supporting information with Council officers once Council has agreed on preferred options.

PROPOSED TIMELINE of ENGAGEMENT PLAN



PRECIS OF OTHER SUSTAINABLE FISHERIES MANAGEMENT OPTIONS

The Initial Findings Working Paper presented to Council in February provided some insights into examples of fisheries management reforms undertaken in other jurisdictions around Australia. This is a precis of those options.

CASE STUDY ONE - INTRODUCTION of NET FREE ZONES

The Queensland Government introduced net-free fishing zones in Cairns, Mackay and Rockhampton on 1st November 2015. At the time of introduction, the government said, "the net-free fishing zones will increase recreational fishing opportunities in Queensland, thereby supporting tourism and economic growth. By recognising the total value of spending by recreational fishers, the net-free fishing zones improve the potential for fishing-based tourism in our regional areas". The net free zones were opposed by the commercial sector but well supported by the recreational fishing sector. The net-free zones exclude the use of any commercial nets by commercial fishers, including for the purpose of collecting bait for personal use. Activities allowed in the net-free zones includes commercial crabbing, line fishing and trawling where it was permitted previously and recreational fishers can use cast nets and bait nets where they were permitted previously, as long as these nets are lawful and comply with current length and mesh size restrictions.

To assist commercial fishers adjust to the changes, a **Structured Buyback Scheme** for commercial fishing boat licence holders who were directly affected by the net-free zones was established and has now been completed. This scheme was established in 2015. The Buyback Scheme was targeted at the holders of the commercial fishing boat licences used in the zones between 2012 and 2014. The scheme sought to buy back up to 46 licences voluntarily to minimise commercial fishing effort moving into other areas or other fisheries (displaced effort). Twenty-seven offers were received at a cost of $3,318M. This equates to an average payment of $122,888 per license holder. A **voluntary Licence Buyback Scheme** was also available to holders of a commercial fishing vessel licence that had recorded net fishing effort in one or more of the Zones in the period between 1 January 2012 and 31 December 2014. To reduce the possibility of displaced fishing effort, the voluntary buyback scheme aimed to remove 46 commercial fishing vessel licences of the total of 78 commercial fishing vessel licences that were eligible for the scheme. Licence holders were offered a fixed price for the entire licence package. The value of the offer varied from licence to licence depending on the fishery symbols attached to the licence.

The remaining 2 schemes, the **Settlement Scheme** and the Impact Alleviation Scheme, were targeted at impacted commercial fishers who were offered a cash payment based on the level of commercial netting undertaken in each of the zones. There were 95 fishers eligible for the Settlement Scheme, and 87 fishers chose to accept the offer at a total cost $1.026M. This equates to an average payment to commercial fishers of $11,793 each. The Settlement Scheme was available to commercial fishers who had been in control of a licensed commercial fishing boat that undertook commercial net fishing within one or more the Zones. To be eligible for the settlement scheme evidence had to be provided, in the form of commercial logbooks, that demonstrated that the fisher was in charge of a commercial vessel operating in the Zones between 1 January 2012 and 31 December 2014. Fishers were offered a set amount based on a formula which used the number of days they had fished in the Zones between 2012 and 2014 and a daily rate. There were 30 fishers eligible for the **Impact Alleviation Scheme** and all fishers chose to accept the offer made at a total cost of $1.5M. This equates to an average payment of $50,000 per fisher. The Impact Alleviation Scheme was available to commercial fishers most impacted as a result of the introduction of the Zones. Fishers who had recorded at least 60 days net fishing effort in the Zones (as recorded in logbooks received before 1 April 2015) and where that effort was at least 50% of their total net fishing effort were eligible for payments under this scheme.

NOTE: Fisheries Queensland have noted that post the buy-out scheme being completed, the noticeable changes in the sector are the departure of some commercial fishers from the sector resulting in the catch effort days is down from levels prior to the scheme however the overall fishing effort has remained steady. Importantly, the effort has moved to other coastal waters now there is no net fishing allowed in the NFZs. Early indications are some of this effort has shifted to the areas adjacent to the NFZs.

Recreational Fishers' Satisfaction and Expectations of Queensland's Net Free Zones

Following the introduction of Net Free Zones in 2015, the Queensland Government have undertaken surveys to determine if the satisfaction and expectations of recreational fishers changed following the establishment of the NFZs. The surveys identified that satisfaction with fishing is generally positive and appears to be increasing. The overall satisfaction over the previous 12 months was greater in 2016 than 2015. In Cairns and Rockhampton, satisfaction was similar between years but in Mackay satisfaction was significantly greater in 2016. Recreational fishers were more satisfied with the number of big fish caught, the number of fish caught, the size of the fish caught and the overall fishing in the area. All three Councils have developed recreational fishing strategies since the introduction of NFZs. By way of example, the Mackay Region Recreational Fishing Strategy 2017-2022[24] seeks to maximise economic benefits and opportunities from what it considers to be a position of strength – its varied range of fish species and diverse range of freshwater and marine fishing locations provide the core attributes necessary for the region to become a premier recreational fishing destination. Designation of the Net Free Zone has provided the additional impetus necessary to take the next step – it can be a gamechanger for the region. The Mackay Council is aiming to offer a recreational fishing experience 365 days of the year by nurturing our fish stocks and habitats, and targeted investment in infrastructure provide the basis for sustainable growth.

The key element of the strategy is collaboration between Council, State Government and the volunteer sector. The Mackay Council recognises they will require external funding and partnership opportunities to invest in recreational fishing infrastructure, and work to improve ecology and fisheries management whilst working with the existing community resources available to them. This means utilising some of their inherent strengths; education, accessibility, conservation, environment, sport and recreation, marketing and events, tourism and business development. This is a success story in all three jurisdictions. The data for the most recent Fisheries Queensland survey for 2018 is not yet available but early indicators are the feedback from survey participants is very positive. These most recent surveys and further data from each jurisdiction will be provided later in the report.

CASE STUDY TWO - THE REMOVAL of NET FISHING from PORT PHILLIP BAY

In 2014, the Victorian government committed to phase out netting in Port Phillip Bay to improve recreational fishing opportunities and contribute to the government's aim to increase the number of anglers in Victoria to 1 million. The plan commenced in 2014 and will end on 1st April 2022. To date, 33 fishers have elected to exit the fishery and 8 have decided to remain in the Bay are restricted to using non-net gear types and methods. Two types of compensation packages have been provided to those whose fishery licenses are surrendered or restricted by the scheme;

- a surrender package for license holders exiting the fishery, payable in the year in which they exit; and,
- an adjustment package for the license holders eligible to remain in the non-net fishery.

Under the Victorian plan the scheme provided $27M for compensation, depending on when a license holder exits the fishery. A surrender package compensation scheme consisted of;

- the assessed market value of the license, assessed by the Victorian Valuer General as being $310,000;
- an allowance of $75,000 for commercial fishing equipment such as vessels and nets; and,
- an amount to provide compensation for loss of income based on 3 times the average annual catch value taken over 5 fishing years from1 April 2009 to 31 March 2014 under the license.

[24] https://www.connectingmackay.com.au/25549/documents/55616

An adjustment package for the 8 fishers who chose to remain license holders in non-net fishery after 1 April 2022 to be paid on 1 April 2022 will receive;

- 50% of the assessed market value of the license, in recognition of the reduced utility and earning capacity of the license without the authority to use nets; and,
- an allowance of $50,000 to account for the reduced market value of specialised gear given the prohibition on netting.

Incentivised payments or increased up-front funding was provided to provide greater recognition and compensation to fishers if they exit early. This meant that for fishers that did exit early received a more valuable package or stay in the fishery and continue to earn an income from their license over the remaining 7 years. The increased management mechanisms placed on the recreational sector included a new state wide recreational catch survey and to expand the Victorian Angler program combined with size, bag and possession limits. Nets were removed from Port Phillip Bay to improve recreational fishing plus to remove conflict from the fishery. It was recorded at the time that the percentage of seafood consumed in Victoria that came out of Port Phillip Bay was 1%.

CASE STUDY THREE – THE BURDEKIN REGIONAL MANAGEMENT TRIAL

In 2010-11 the Queensland Government established a trial of regional co-management in the Burdekin. The Burdekin Regional Fisheries Management Committee was formed to consider regional fisheries issues. The committee included recreational fishers, commercial fishers, fish shop owners and government representatives. The purpose of the trial was to consider how changes to the general fisheries rules may be introduced to better suit local coastal regions and communities. Effectively introduce a regime of regional co-management where the responsibilities for sustainable fisheries management are negotiated and shared between the government, fishers and other groups and stakeholders. This approach recognises that local people have a greater interest in protecting and fairly allocating resources in their region. After many months of working through the localised issues with excellent knowledge between the recreational, commercial and some indigenous fishers being shared a number of proposed changes were put forward to the community for consideration. This was done in the form of a two-page survey seeking community and stakeholder feedback. The proposed changes to netting closures were as follows;

- Commercial netting occurs in the lower stretches of the Burdekin River. Species targeted include barramundi, blue salmon, king salmon, diamond scale mullet and shark. Commercial netting also occurs in the foreshores of Home Hill Beach, targeting the same species and occasionally bream, whiting and flathead when in season. The proposal is to close Home Hill Beach to commercial netting, but compensate by extending the commercial netting area in the Burdekin River. The proposed commercial netting area of the Burdekin River is only lightly fished by recreational fishers. In contrast, Home Hill Beach is heavily fished by recreational fishers.

The proposed changes were designed to achieve the following benefits;

- Recreational fishers will enjoy net free fishing in a popular recreational fishing area;
- Commercial fishers will be able to supply a range of fish species to local markets and avoid conflict with recreational fishers; and,
- Dugong will have greater levels of protection

The proposed reforms enjoyed wide spread local support however the trial was ultimately not successful in part due to influences outside of the region.

CASE STUDY FOUR – THE MORETON BAY REGIONAL MANAGEMENT TRIAL

The Sustainable Fisheries Strategy commits to piloting regional management in a key location e.g. Moreton Bay to assess the benefits and limitations of regionally specific management arrangements. Management

arrangements for many fisheries are currently set at a state-wide level (e.g. recreational bag and size limits, commercial endorsements accessing entire east coast). Many stakeholders, however, are seeking a more regional approach to fisheries management. This is often seen as a way to address localised social, economic or environmental issues, which are difficult to address at a state-wide level (e.g. regional quotas and zoning to address resource sharing within and between sectors). Moreton Bay is a popular adjacent to the primary population area of South East Queensland. The commercial catch from Moreton Bay comes from a variety of different methods including otter trawl, beam trawl, tunnel netting, gill netting, line and stocks a range of local markets and fish and chip shops. There is also a significant worm and crab fishery operating within the Bay. Many of the commercially targeted species are also taken by recreational fishers so there is significant competition for access to fisheries resources. The fishery is also home to important traditional fishing by Aboriginal groups. Given the demand for fisheries resources from this area, it is also susceptible to localised depletion issues. The Working Group has met three times since the meetings commenced in September 2018 so it is early days. The outcomes of the WG process will be important to Noosa Council in determining if regional management is a valid option at some point in the future. For more information on the Working Group including the membership go to:

https://www.daf.qld.gov.au/business-priorities/fisheries/sustainable/sustainable-fisheries-strategy/fishery-working-groups/moreton-bay-working-group/mbwg-terms-of-reference