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North Island Eel Review
Inshore Fisheries Management
Ministry for Primary Industries
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By email: FMSubmissions@mpi.govt.nz

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Review of North Island eel sustainability measures for 1 October 2018

1. Introduction

The Environment and Conservation Organisations of NZ (ECO) is the national alliance of 48 groups with a concern for the environment. We welcome this opportunity to make a submission on the ECO has been involved in issues of marine and fisheries policy since its formation 47 years ago. This submission has been prepared by members of the ECO Executive and the Marine and Fisheries Working Group, and is in line with ECO Policy that was developed in consultation with ECO member bodies and endorsed by our AGM.

ECO has supported measures to protect threatened species and to sustainably manage fisheries for the present and the future generations.

2. Harvest Strategy

ECO considers it is time the Harvest Strategy was reviewed. In most cases the plans use the default provisions in the harvest strategy. The strategy still refers to default soft and hard limits and not meeting international best practice. For example, the hard limits is half the level used in Australia where targeted fishing for a species must stop.

The targets are well below the practice used in CCAMLR for predator species (50%Bo) and prey species of (75%Bo). The strategy itself notes that" it is becoming increasingly difficult to justify stock targets less than 30-40% *Bo* (or, equivalently, removing more than 60-70% of the unfished biomass)."

The level of escapement is an essential element which needs to be given greater consideration. ICES recommended in 2003 a limit reference point for eels of 50% escapement (see below).

3. Habitat of significance and Escapement

There is still no identification of "habitat of particular significance for fisheries management [that] should be protected". This is a major flaw in implementing the requirements of the 1996 Fisheries Act, over 20 years after it came into force.

For eels this is an essential issue as the overall level of escapement of eels to spawn is not known.

"Due to the uncertainties in eel management and biology, ICES proposed a limit reference point of 50% for the escapement of silver eels from the continent in comparison to pristine conditions (ICES, 2003)."[1] Further "The escapement level of at least 40% "pristine" set by the EU regulation is below ICES proposal for a limit reference point of 50% for the escapement of silver eels."

4. Threatened species

There is widespread concern over sustainability of eel fisheries. As the PCE in her report (20

Although commercial fishing of longfin eels is far from the only reason for their decline, I have recommended that it be stopped, at least for a time. No other action has the immediate potential to reverse the decline of the species. I hope that some means can also be found to reduce customary and recreational catches, should they be significant.

The longfin eels have a current threat ranking of at risk declining[2] under the DoC threatened Species system.

Internationally agreed Aichi Biodiversity Target 12 *calls for the establishment of conservation plans for species that are most threatened with extinction. Thus, a primary step to achieve Aichi Target 12 is to understand the extinction risk posed to species through making conservation assessments of targeted species.*

The achievement of Target 12 is linked to progress towards many of the other Aichi Targets. Species threat assessments form the baseline of biodiversity data to inform decision making, for example for the identification of sites for Protected Areas (Target 11), ensuring no species is threatened through trade (Targets 4 and 6) and for the control and eradication of alien invasive species (Target 9).

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[1] ICES Advice **European eel** 9.4.9, December 2010.
ICES. 2003. Report of the ICES Advisory Committee on Fishery Management 2002. ICES Cooperative Research, Report, 255: 938–947.

[2] Goodman, J.M.; Dunn, N.R.; Ravenscroft, P.J.; Allibone, R.M.; Boubee, J.A.T.; David, B.O.; Griffiths, M.; Ling, N.; Hitchmough, R.A.; Rolfe, J.R. 2014: *New Zealand Threat Classification Series 7*. Department of Conservation, Wellington. 12 p.

New Zealand has signed up to the Sustainable Development Goals (SDG) and SDG 14 is to *"Conserve and sustainably use the oceans, seas and marine resources"*.

Sub-goal 14.4 is
By 2020, effectively regulate harvesting, and end overfishing, illegal, unreported and unregulated (IUU) fishing and destructive fishing practices and implement science-based management plans, to restore fish stocks in the shortest time feasible at least to levels that can produce maximum sustainable yield as determined by their biological characteristics.

5. Proposals

5.1 Shortfin eels (*Anguilla australis*) (SFE 20 to SFE 23)

The only proposed option is status quo (no change). This is because, based on the best available information, the current sustainability controls are allowing numbers of shortfin eels to increase.

There are no estimates of habitat use for shortfin eels and the proportion of that fished annually.

Given that the fishery mainly targets female fish due to the current size limit there needs to be further review of the management regime for short fin eels.

5.2 Longfin eels (*Anguilla dieffenbachia*) (LFE 20 to LFE 23)

ECO supports option 2 with the reduction in the longfin eels catches. This would reduce the total allowable catch by 15% and the total allowable commercial catch by 32%.

ECO notes there are no proposed changes to the allowances for customary or recreational fishing. ECO supports priority for customary fishing over commercial fishing.

There needs to be a review of escapement for longfin eels to the sea.

The Beentjes et al (2016)[3] estimated that 22.5% of longfin river and lakes habitat was fished and 29% of habitat had been impacted. From a pre-migrating eels habitat perspective some statistical areas had 50% of considered habitat fished.

Beentjes et al (2016) assessment of areas was based on 5 years of effort by fishers who took 91% of the catch in the North Island but did not include customary or recreational fishers. Further, *"the areas fished commercially are expected to change over time"*.

ECO notes that Beentjes et al (2016) recommended *"the derivation of a new predictive model sometime in the future to estimate the proportion of longfin habitat fished." Further "For the project update the working group also recommended 1) investigating methods to capture*

[3] Beentjes, M.P.; Sykes, J.; Crow, S. (2016). GIS mapping of the longfin eel commercial fishery throughout New Zealand, and estimates of longfin habitat and proportion fished. *New Zealand Fisheries Assessment Report 2016/32.* 53 p.

areas fished by customary and recreational fishers, and 2) investigating available information on loss of wetlands and river area (e.g., through straightening) to come up with a realistic estimate of habitat loss. A nominal figure of 5% was used for the current study."

6. Research Commitments

There must be ongoing research commitments on both longfin and shortfin eels.

The Plenary report includes some of the research priorities but there are others including those identified by the Parliamentary Commissioner for the Environment in her 2013 report and Beentjes et al 2016 report that should be implemented.

7. Conclusions

If you require further information could you please contact the ECO office on 385-7545 or contact me on 021-738-807.

Yours sincerely,

Barry Weeber
ECO Co-Chairperson