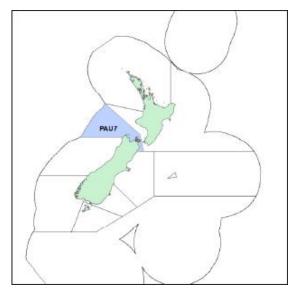
Review of MPI Sustainability Measures 2016 NZSFC Preliminary View Paua 7

As part of the October 2016 sustainability review, MPI are looking at reviewing TAC's for Paua 7. You are welcome to review this document and provide your input to the fisheries team. Contact John Holdsworth or Trish Rea by 4 July. **Submissions are due with MPI by 11 July.**

In recent years, assessments of Paua 7 indicated stocks are well below the target biomass of B40, it is currently estimated at 18%. It has failed to recover at current harvest levels, this has prompted a review into TACC's.



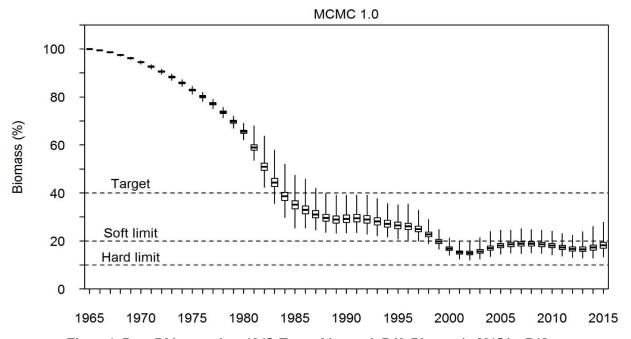


Figure 1: Paua 7 biomass since 1965. Target biomass is B40. Biomass in 2015 is ~B18.

MPI Proposed Options - PAU 7

Option 1: The Status Quo. No Change to TACC or Allowances as in Table 1 below. This option does not support a rebuild of the fishery and is likely to continue to cause a decline. This option does not meet the Minister's obligation to set a TAC is not inconsistent with the objective of moving the stock towards or above a level that can produce MSY.

Option 2: Proposes a ~30% decrease to TAC, comprising a 40% decrease in TACC. There is also an increase in Other Sources of Fishing Related Mortality allowance to better align with recent estimates. The TACC decrease is to encourage a rebuild in the fishery. MPI state that this meets the requirements to support a rebuild, predicting that stock biomass would increase to 23% by 2018. The Te Tau Ihu forum have expressed interest in coming to an arrangement that would see commercial

shelving additional ACE in order to support the rebuild. The paua industry have indicated they are not in favour of continuing shelving and are seeking stronger action. In this option customary and recreational allowances would remain unchanged.

Option 3: Proposes a 60% decrease to the TACC, with all other allowances the same as option 2. Predictions show that this greater decrease would support an increase to 25% B_0 by 2018. MPI have identified this as the safest option to rebuild the fishery, also would support a faster rebuild allowing greater use across all sectors in a shorter period of time. The paua industry have indicated that the industry is supportive of "meaningful catch limit reductions that are likely to result in an increase in abundance"

Table 1: Proposed TACs, TACCs, and allowances for PAU 7 (all values in tonnes)					
Option	Total Allowable Catch	Total Allowable Commercial Catch	Allowances		
			Customary Māori	Recreational	Other sources of fishing-related mortality
Option 1 (Status quo)	220.24	187.24	15	15	3
Option 2	152	112	15	15	10
Option 3	115	75	15	15	10

NZSFC preliminary view

Commercial catch rates (CPUE) provides information on changes in relative abundance. However, CPUE is generally considered to be a poor index of stock abundance for paua, due to divers' ability to maintain catch rates by moving from area to area despite a decreasing biomass (hyperstability). Paua fishers in this area have be using dive-logger data collection to provide accurate location and dive times.

Paua 7 has been sitting below the B20 soft limit for a number of years (Fig 1), despite voluntary commercial action since 2012-13 to shelve 20 to 30% of quota, the stocks have failed to show any sign of meaningful improvement. In order to achieve a rebuild and create a fishery that can support utilisation across all sectors in the future, cuts to existing catch levels must be made. This sentiment seems to be shared by MPI and industry, with both acknowledging that meaningful catch reductions are essential to increase abundance.

Consultation with the owner of the Blenheim Dive Center supports the need for action. As a regular diver/charter operator in the Marlborough region for the past 30+ years, he agreed that there has been a noticeable decline in the availability of paua in the inner out outer Marlborough Sounds. Due to his regular relationship with commercial operators in the region, he was also able to comment on the difficulties faced by the commercial divers, trying to find and collect their paua in recent years.

Recommendations

It is recommended that the NZSFC make a brief submission supporting **Option 3** on the basis of:

- The most recent scientific information shows PAU7 is in need of a rebuild, as it is currently below the B20 limit reference point.
- Option 2 provides less certainty of a rebuild in a reasonable period of time.
- o Voluntary commercial measures have failed to address the issue and should not be relied upon to continue shelving any ACE after a drop in TACC.