

## **Fishery Resource Advisory Group (FRAG)**

Meeting 3/2019

Friday August 16, 2019

IMAS, Nubeena Crescent Tarooma

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### **Minutes**

#### **1. Members:**

Ian Cartwright (Chair), A Gray, J McKibben D Lisson, D Hansen, A Brown, B Cobbing, B Ransom, P Richardson, J Huddleston, R Bock, T Bush, S Cocker A Hansen, C Mundy (IMAS), J McAllister, (IMAS), M Bradshaw (DPIPWE), J Freeman (minutes),

#### **Observers:**

R Rex, T Lesser, B Lesser, T Chadwick, J Franklin, S Anning, B Allen, R Searle, S McRae, M Fleming, M Budd (DPIPWE), T Hitchens, G Woodham, J Franklin

**Apologies:** R Baillie

#### **1. Welcome and opening remarks:**

The Chair welcomed members and observers to the third FRAG meeting of 2019. The main purposes of the meeting were to: review catches, catch rates and other information for the season to date; gain an overall view of the status of the resource and discuss other matters related to the assessment and, where appropriate, the management of the fishery. Importantly, this meeting provided an opportunity to review the MCDA and consider preliminary catch targets, which would need to be firmed up at the fourth and final FRAG. The Chair acknowledged the presence of observers, including divers, and thanked them for their time. It was emphasised that they are always welcome, and their input is appreciated.

The Chair noted that he and Joey McKibben, as Chair of AbFAC and President of the TACL respectively, had received a letter from Minister Barnett noting i) his approval of the Harvest Strategy and ii) a request to develop a schedule to implement the three-year size limit rule, which is a key element of the Harvest Strategy. DPIPWE had drafted a proposal which was tabled and discussed at AbFAC prior to distributing to the FRAG for comment. Some surprise was expressed that the FRAG had not been consulted by the Department prior to the development of the draft proposal, but it was noted that the formal channel of communication by the Minister was through the Chair of the FAC.

#### **2. Adoption of agenda;**

The agenda as circulated was agreed, with the additions that were discussed during the meeting.

#### **3. Minutes of the previous meeting:**

The minutes of the FRAG meeting held on June 19, 2019 were accepted as a true and accurate record.

#### **4. Actions Arising from Previous Meeting:**

##### **Action 1. – Closing of blocks - AbFAC**

***Completed***

## **Action 2. Catch control for Block 30B**

Testing for PST will be conducted closer to the opening time, if the testing is clear the block will be opened in November 2019 with a TACC of 500kg for each of the two divers engaged in the Experimental Fishing.

***Ongoing***

## **Action 3. Perkins Bay greenlip**

The Department will close areas at the cap. IMAS will work with divers to ascertain the productive areas and work with divers to ascertain which areas will open at the lower size limit of 132mm, the Department will issue permits to divers who express an interest to fish at 132mm. Several divers had done some initial exploration in the adjacent 145mm region, but no significant areas of fish were identified as yet.

Noted - Paul Richardson wished to record his opposition the lower size limit.

***Ongoing***

## **Action 4. Reverse cap for greenlip**

Mixed results in 2018. The TACL Board and DPIPWE decided not to go ahead for 2019

***Completed***

## **Action 5. East Coast structured opening**

Darwin was given the opportunity to follow up on his previous presentation on a possible strategy for an earlier opening of the East Coast to maximise market opportunities and price, while seeking to not undermine facility. Noted that this issue will not be progressed at this time.

***Completed***

## **Action 6. Three Year Rule**

Develop a draft plan to align the three-year rule across all zones. Pre-empted by the Department; draft plan tabled at the FAC

***Completed***

## **5. Outcomes of 2019 FAC #2 meeting relevant to FRAG**

Dean and Joey have been in discussion with Dr Ian Dutton (DPIPWE) about a review of abalone fishery management; focusing on all aspects of management, including: the current assessment models, data collection and operational strategies within the fishery. This a joint industry/government initiative that will be undertaken later in the year, most likely in the first week of December.

## **6. IMAS presentation of updated data, fisheries assessment including the MCDA outcomes and additional diver/stakeholder input.**

IMAS (Craig Mundy) took the FRAG through the latest data from the fishery, zone by zone. Preliminary catch targets were discussed.

### **Eastern Zone:**

Catch across the board is low for this time of year, the % caught is proportional to previous years, given the reduced TAC.

IMAS notes:

- Stock declines in the Eastern Zone due to multiple factors
  - Overfishing in the 1990's
  - Reduction in fishing grounds by *Centrostephanus*
  - Marine heat wave mortality and Marine heat wave sub-lethal effects (growth, reproduction)
  - Storm events (2007, 2016)

- Understanding contribution to these events critical for informing management decisions
  - E.g. Block 16 catch and CPUE declining for many years, but no *Centrostephanus*, and before MHW events?
  - Cost of rebuilding stocks will be significant and require 8 + 10 years of restoration work
  - Minimising fishing mortality in the short term will increase rate of recovery
- Block 13 catch rates improving with  $\approx 64.2$  t caught
  - CPUE in Block 13 likely to be lower by year end given history of lower CPUE in Q4
- CPUE in blocks 17 and 19 stable or declining
- CPUE in blocks 20, 21, 29 and 31 improving in 2019
- \*Review catch targets for blocks (22, 23, 24, 27, 28) between Cape Pillar and Bicheno for 2020 (long term gain vs short term benefit)
  - IMAS preferred option is close for 5 years, with ongoing monitoring (counts, length frequency)

IMAS Abalone Research team submitted two EOI to the AIRF which were both rejected. The primary project to examine rebuilding options for the East Coast being; 'Cost-effective commercial scale stock recovery of east Coast abalone'. The AIRF have requested IMAS prepare a smaller proposal to undertake a pilot scale exercise around the in situ mobile spawning concept. IMAS will submit a fully costed proposal to the AIRF and also present to FRAG #4.

***FRAG Comments;***

Eastern Zone – overall the catch is increasing with a good sighting of juveniles, 72kg per unit over the last couple of years appears to be working, with no further increase suggested.

The Acteons appear to be fishing well, with a relatively stable/slightly increasing catch rate.

Some industry members considered that the TAC was so low that further reductions were unnecessary.

Block 16 may need to be discussed for action in FRAG #4.

The FRAG noted that the (failed) AIRF proposal would ensure monitoring of (any) recovery using commercial divers and structured surveys to strict IMAS specifications. There would be no commercial take under this proposal. Not all FRAG members were supportive of a closure. IMAS restated their preference for a closure.

**Summary: Concern remains about blocks 22-28 and a reduction will be required for Block 16. The MCDA currently indicates a reduction from 252t to 219t**

**Western Zone:**

IMAS notes:

- CPUE in block 6 increasing
- CPUE in blocks 7, 9, 8, 10, 12 and 13 decreasing
- CPUE in block 11 stable
  - Difficult weather in January shifted effort to protected anchorages
- Fishing at depth in Western Zone Blocks 12 and 13 is stable, with  $\approx 30\%$  of effort deeper than 11m in 2018-2019
  - Is there sign of multiple year classes at depth?
- Spatial Indicators suggestive of decline in abundance for block 12

***FRAG Comments;***

Majority agreement was reached at this meeting and at the previous FRAG and FAC that the Central West Zone not be reinstated, against the preferred view of the

Department. As a compromise and to ensure there was no excessive undercatch, the FRAG agreed to the Department proposal of setting the catch target for blocks 6D, 7 and 8 and the average of the previous three years' catches. The method would continue for at least three years, resulting in a rolling average. Initially the three-year average is well below the MCDA, which will encourage divers and processors to catch and take more abalone from these blocks, which will result in an increase in the target catch (and TAC). When, and if, there are increases, IMAS will maintain a watching brief to ensure catches are sustainable, particularly if CPUE declines, which will be reflected in the MCDA-driven change under the harvest strategy.

IMAS has developed an analytical process using the GPS data, BOM Auswave data and an IMAS developed index of exposure to examine the consequences of weather on fishing. This was trialed in Block 12, but will be extended to the remainder of the Western Zone. This approach provides an objective process to include weather in the standardisation of the catch rate, which may change the HS outcomes.

Industry are firmly of the opinion that swell has had an impact this year, forcing fishing into sheltered areas with resultant lower catch rates.

### Summary

**The MCDA currently indicates a reduction from 717t to 604t. The current and at times sharp decline in catch rate in many blocks is consistent with diver reports over the past 18 months. However, it is clear that weather has restricted fishing opportunities and is also likely to have affected catch rates, and the separation of these factors will present a dilemma for FRAG 4.**

### Northern Zone:

IMAS Notes:

- Block 31 CPUE stable
- Block 39 CPUE stable
- Block 5 – CPUE improving marginally with  $\approx 10$  t caught. Expect low levels of recruitment over the next 6 – 8 years given decreasing catch and decreasing CPUE over the last 8 years.
  - Note: 2 mm increase to 129 mm in 2018 and 2019
- Block 6 CPUE stable with  $\approx 10$  t caught
- King Island Block 3 CPUE stable in 2019 at low level, with  $\approx 2.9$  t
  - $\approx 35\%$  of fishing effort in 2019 in Block 3 deeper than 15 m and 20% deeper than 20 m

**Summary: The MCDA currently indicates a reduction from 99t to 72t. Blocks 5 & 6 will require most of this reduction if rebuilding is to occur in a reasonable timeframe**

### Bass Strait:

IMAS Notes:

- Consider reviewing 1t catch allocation to each of Blocks 32, 34 – 37, 44, 45, 51
  - 5 year average catch (t) is 0.7, 0.5, 0.4, 2.9, 2.6, 0.7, 0.6, 4.6 respectively
- CPUE in Blocks 33 and 38 trending up
- Spatial Indicators for Block 33 suggest abundance is declining
- Expect CPUE to fall in 33 and 38 after 8 years of catches at the new low LML of 114mm. Reduced recruitment from lower biomass following LML change will begin to influence the fishery (based on 7 to 8 year from biological recruitment to entering the fishery)
- CPUE in Hunter Island (blocks 49A, B, C) improving during 2019
- CPUE at Three Hummock (Block 48) declining sharply

**Summary: The MCDA currently indicates minimal change; FRAG 4 will need to determine if the rebuild rate is sufficient.**

## Greenlip Zone:

### IMAS Notes:

- North East catch allocation reached in 4 fishing days for the third consecutive year
- CPUE on King Island is stable
- CPUE in North West declining  $\approx$  9.4 t caught
- Central North – 1.1 t taken YTD
- Perkins bay open but negligible catch YTD, and CPUE still falling
  - IMAS preferred option – close for 2 years then re-open at 2 t
- CPUE increasing in Furneaux Group with  $\approx$  10.5 t caught
- Long term decline in CPUE in North East
  - IMAS option 1; close for 1 year, re-open at 10 t, then manage by HS
  - IMAS option 2; 50% TAC reduction for 2 years, then manage by HS
  - Separate openings for Blacklip and Greenlip in North east?

HS summary – MCDA recommends 86t = 26t reduction

<b>Action: IMAS &amp; TACL to look at the line at Woolnorth for greenlip and blacklip fishing</b>
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The closure of the North-West greenlip area creates a fleet restriction issue, preventing catch of greenlip in some areas. This issue is not dissimilar the complication at the Eastern end of Bass Strait Central North area and the North-East Greenlip region.

The proposed solution is to keep sub-blocks 48C, 49 B and 49C closed to blacklip fishing from January 1, with an opening at the same time as the North-West greenlip capped area.

### FRAG Comments:

Industry proposals to set the diver economics

There have been a few suggestions on how the industry can regulate the greenlip catch to reduce the 'rush to fish', but it appears that the possible solutions currently on the table do not fully address the issue

<b>Summary: A catch reduction for greelip was flagged for consideration for FRAG 4 (Application of the MCDA suggests a reduction from 108t to 86t.</b>
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## 7. Size limits

The draft size limit proposal was discussed briefly. Some surprise was expressed concerning the speed of LML increases suggested, given the fact industry had been suggesting increases for many years, some of which were only just being introduced. Given the time spent on TAC setting and the late start to the meeting, it was not possible to give consideration to individual legal minimum size limits and the proposed timetable to achieve the L50+3 requirement of the harvest strategy. The Chair asked for general comments which, in summary, were centred on slowing up the process somewhat given the considerable changes facing the fishery already, including a likely change in TAC and existing agreed LML changes, including those for Block 5 and the West Coast.

Specific FRAG comments included:

- Consider maintaining the status quo for at least one year (with another suggestion for waiting 3-4 years) to allow the fishery to 'settle'
- At the very least, there should be no consideration of significant change until mid-next year, but that would not preclude discussion of an appropriate timing for increases to the size limits.
- Designate priority areas for LML change, and in particular Block 31; it would be neither appropriate nor prudent to change too many settings at one time

- Significant areas of the fishery have already agreed to make LML changes, so there should be no perception that the fishery was 'stalling' on moving to the L50+3 settings.
- Some areas will not require change at this time, if ever.
- Industry has been told by Malcolm Haddon that it is not advisable to increase size limits when catches and catch rates are falling.
- Significant areas of the fishery may be lost to commercial harvest as a result of the proposed LML increases.

It was noted that where changes were to be made in a series of steps, it would be possible to monitor effects on the fishery and hold off on further steps if it was determined that increasing the LML was not appropriate.

DPIPWE expressed the view that it would not wish to see undue delay in the introduction of the L50+3 rule, and that the expectation of the Minister and the Department was that the Harvest Strategy, including the LML rule, would be implemented in a timely manner. Industry reiterated the views expressed above, and considered that considerable efforts and progress had been made and that all that was being suggested was that there was a need to review the draft proposal carefully and cooperate with DPIPWE and IMAS to develop a workable draft to be sent out for public comment.

The recreational sector has expressed concern at the changes and reduced bag limits in the proposed amendments to the Abalone Fishery Management Plan.

There is no cap for the 'Central West'; the TACC will be based on the three-year rolling average.

#### 8. Management Report; updates from Fisheries Manager:

No specific report. General comments were made within the meeting.

#### 9. Industry report, including funding arrangements for research:

**AIRF** – the *Centrosptpanius* harvesting subsidy on the South West Coast will be extended for 2020, there will be minimal subsidy for the North East Coast. Other methods of containment will be used for other areas.

Commercial divers will be asked to use a GoPro to show the areas harvested and the results.

There is progress with firmware upgrades for the new data loggers.

Measuring boards are nearly ready for distribution.

Craig and Jamie attended a meeting with other scientists & statisticians looking at spatial data, extracting information in other ways to get a picture of where the fishery is at and an indicator of how the reef systems are being used.

A new tagging system is being used with less harm to the fish, faster growth is noted and being recorded.

#### 10. Other Business:

**CPUE Capture** – the divers are expressing a different view from the data captured on the dive docket. Is there a different way of reporting mixed species fishing and how the docket are being filled out?

**Action: Joey will write up the broad concerns industry has on CPUE capture, especially in the case of mixed greenlip/blacklip fishing. TACL to provide a list of concerns to IMAS. Craig to write up the captured data and the processing workflow to produce the summary results.**

## Rebuilding the Tasmanian Abalone Fishery - Darwin presentation

Darvin showed a presentation with 25 years of data and using 2018 SAFS data to give an overview of the status of Australia's fish stocks.

#### Rebuilding Plan – A Depletion-Dependent Harvest Strategy

- Need to estimate Maximum Sustainable Yield, and Sustainable Yield for each block.
- Rebuild everywhere with high confidence except for the Bass Strait Zone. (There is not enough history to easily estimate productive capacity of most BS blocks.)
- This plan respects the nature of an abalone fishery – abalone for the most part recruit within sub-blocks, and within the reefs within blocks. Every block must be managed for sustainability with sufficient margin.
- Optimized to maximize Net Present Value of each block (and hence fishery), which in turn results in an overall smooth rebuild of TACC beginning after ~7 years and continuing for the next 10-20 years after that.

Key element #1: Halt catch in highly depleted areas until biomass is rebuilt.

Key element #2: Ensure fully stocked areas are fished conservatively at a 'good yield'.

Key element #3: Ensure partially depleted areas are fished at Sustainable Yield less sufficient margin to allow for biomass to rebuild with confidence.

#### *TACL Sustainability Policy*

- Catch Target below a real, sustained, Sustainable Yield in every block with margin for mortality events and sub-lethal negative impacts to productivity.
- Prompt catch target reductions in the case of mass mortality events and maintained to allow rebuild.
- The TACL to take advice from scientists well respected by peers and preferably with good track records. Encourage periodic review of IMAS research and assessment advice by such scientists.
- In the absence of information or when in doubt, TACL errs on side of increased sustainability.

the consumer consumption is higher.

Darvin was thanked for his presentation. Time precluded detailed discussion of the proposal and it was noted that a motion on this rebuilding strategy will be put to the AGM. The FRAG advised that additional peer analysis, of both the biological and economic aspects of the proposal would be advisable. It was broadly agreed that the FRAG will continue with the MCDA and Meta Rules as they stand, pending additional analysis to ensure the MCDA is suitable for rebuilding heavily depleted areas.

#### **11. General Business:**

All additional items initially proposed were discussed within other agenda items.

**Meeting closed 4:40pm**

**Action List FRAG #1 2019:**

<b>Action</b>	<b>Responsible Member</b>	<b>Task</b>	<b>Progress</b>
1	IMAS and TACL	Catch control for block 30B	IMAS and the TACL to consider a structured fishing plan for Block 30B  PST testing will be undertaken closer to the re-opening with a TAC of 500kg  ONGOING
2	IMAS/TACL	Perkins Bay greenlip	The Dept. will close areas at the cap, IMAS will work with divers to ascertain the productive areas. The Dept. will issue permits to divers to fish at 132mm  ONGOING
4	IMAS/TACL	Woolnorth line	Look at options for the boundary line at Woolnorth for greenlip and blacklip fishing
5	IMAS/TACL	CPUE capture	TACL to write up broad concerns  IMAS to write up the captured data & the filters used

<b>Blocks - Area</b>	<b>TAC 2019</b>	<b>KG's/unit</b>
<b>Eastern Zone</b>		
Blocks 13C, -14 E. Actaeons		
Blocks 14A and 14B. Lower Huon Channel, Huon to Southport Island, inc Dover, Southport		
Blocks 14C-16 Bruny Island		
Blocks 17-21 Hobart to Tasman Island inc Nubeena		
Block 22		
Blocks 23 and 24 Deep Glen Bay to Triabunna, inc Maria		
Blocks 25-29A Freycinet and Bicheno		
Blocks 29B, 29C, 29D and 30A North East		
<b>Total Eastern Zone TAC</b>	<b>252.0</b>	<b>72</b>
<b>Western Zone</b>		
Blocks 6D, 7 and 8. Granville Harbour, Sandy Cape		
Block 9 South of Strahan		
Blocks 10, 11 and 12A. South West		
Blocks 12B-13B South Coast		
<b>Total Western Zone TAC</b>	<b>717.5</b>	<b>205</b>
<b>Northern Zone</b>		
Blocks 5A-5C		
Blocks 47-48 NW not Block 5		
Blocks 1-4 King Island		
Blocks 31B, 39 and 40 North East		
<b>Total Northern Zone TAC</b>	<b>98.0</b>	<b>28</b>
<b>Bass Strait Blacklip</b>		
Blocks 32-38 Furneaux Group		
Blocks 50-56 Bass Strait Islands		
Blocks 42-46 Central North		
<b>Total Bass Strait TAC</b>	<b>91.0</b>	<b>26</b>
<b>Greenlip</b>		
Blocks 32-38 Furneaux		
Blocks 1-4 King Island		
North West not Perkins Bay		
Block 48A Perkins Bay		
Blocks 31,39,40 North East		
Central North		
<b>Total Greenlip TAC</b>	<b>108.5</b>	<b>31</b>
<b>2019 TAC TOTAL</b>	<b>1267.0</b>	<b>362</b>

