

Fishery Resource Advisory Group (FRAG)

Meeting 2/2017

Tuesday July 7, 2017

IMAS, Nubeena Crescent Tarooma

Minutes

Present:

Members:

Ian Cartwright (Chair), Joey McKibben, Dean Lisson, Darvin Hansen, Ben Cobbing, Byron Ransom, Rob Scanlon, Steve Crocker, Malcolm Haddon (CSIRO), Craig Mundy, (IMAS), Matt Bradshaw (DPIPWE), Jillian Freeman (minutes),

Observers:

Alan Hansen, John Ramsden, Bev Amos, Amanda Green, Robin Searle

Apologies:

Paul Richardson, Alan Gray, Avril Brown, Jeremy Huddleston, Tony Bush, Greg Woodham,

Welcome and opening remarks:

The Chair welcomed members and observers, and outlined the main purposes of the meeting, which were to review catches, catch rates and other information for the season to date, and gain an overall view of the status of resource. Using the IMAS data, diver and other industry input the FRAG considers recommendations to AbFAC. Limited data is available for some blocks that have not been significantly fished to date,

the Chair acknowledged the presence of observers, including divers, and thanked them for their time. While attendance was down due to a good weather pattern, the industry observers were acknowledged and it was emphasised that they are always welcome and their input was appreciated.

Adoption of agenda;

The agenda as circulated was agreed with additions;

- Marine Steward Certification
- Flinders Island

Minutes of the previous meeting:

Members agreed the minutes of the FRAG meeting held on April 10, 2017 were accepted as a true and accurate record.

5. Actions Arising from Previous Meeting:

Action 1. Size limit/caps – DPIPWE set a date for consultation with industry on operational aspects of the industry in relation to harvest strategy and size limits

The Draft size limit paper has been completed and a consultative session held with industry has been held. There are clarifications to be made to the paper before it is completed.

Action 2. SAM + 2 – Policy on agreed values. IMAS to submit technical paper

Completed in the form of a late draft.

Action 3. IMAS to consider the impact of effort shifts to deeper water on CPUE

The issue of effort shifts to deep water as a factor influencing CPUE was examined in the 2016 Fishery Assessment. Other than Maatsuyker there has been no significant shifts into deep water. Where that has been deep water fishing historically, no real change in catch rates has been observed.

There is a small amount of deep-water fishing around King Island and Maatsuyker; and it was acknowledged that short dive times with good catch rates can skew the CPUE. The majority of records are dives in shallow waters, with only around 15% of total dives in water >12m.

It was agreed that the IMAS statement clarifies that there are no serious impacts on catch rates from deep water diving and that while IMAS will keep a watching brief on diver depth, it is not currently a significant issue within the fishery.

Action 4. DPIPWE to consult with CVO with respect to prospects for changing the current restriction on motherboats taking fish around the south coast for unloading at Margate

It was noted that the FAC #1 had considered a request from a Processor to relax the restrictions (Biosecurity Code of Conduct) on bringing live fish from north of Strahan to Margate via motherboat, with the expectation that the fish would be in better condition on arrival at the processor. Travis Baulch (Biosecurity Officer) had addressed the FAC and noted that the clinical expression of AVG takes 4 to 5 days to appear, with the exudation of virus affected mucus. If the fish were under stress when harvested, then 4 days is the maximum that abalone can be transported without an unacceptable risk to stocks *en route*. If abalone are exposed to water containing the mucus e.g. by water being pumped out while passing over the Actaeons, or other productive reef, then the risk to the fishery is substantial.

The risk assessment was discussed at AbFAC and the majority agreed.

If a processor wishes to transport fish they can do so, since the code of conduct covering abalone handling and transport is voluntary. There was a suggestion that those wishing to transport abalone could put additional biosecurity measures in place on the motherboat.

While the FRAG supported the AbFAC view to leave the voluntary code of conduct/policy as is, it was agreed that it was time that the industry Biosecurity Code of Conduct be reviewed to provide an update on risk.

Action: TACL to write to the Director, DPIPWE and request a review of the Biosecurity Code and if necessary develop a new Code with the CVO to manage disease risk.

Action 5. Refer the issue of the closure of the western side of Flinders Is to the AbFAC

The Furneaux Group was close to closing. There has been more fishing on the smaller islands, which was considered a success given the concern that opening the western side of Flinders would discourage fishing in the islands.

See further comment under general business

6. North East Greenlip: (Sean Larby)

A proposal has been received from a diver to the FRAG on closures and catch caps which the proponent believes is creating pulse fishing. To avoid this, the diver believes that all areas should be open on January 1 of each year.

This proposal has been discussed previously on several occasions, and the decision has always been made on scientific evidence concerning abalone condition (including weight) to close a number areas of the fishery during the summer months when the water is warmer. This strategy maximises the value of the catch and since abalone at this time are heavier in weight, result in less animals being taken for the same catch weight.

7. Pulse Fishing Proposal

The following options were outlined to the FRAG:

1. Olympic fishery = no change
 - a) East Coast closures Jan to March
 - b) Green lip – North East, North West, Clark Island & Black Reef Jan to April
 - c) Black lip - North East Jan to April
2. No closures – advocated by Sean Larby and others
3. Processors to agree to managed the catch voluntarily
4. Align closure dates

FRAG Comments:

Oversupply of labour is affecting pulse fishing through enabling high fishing pressure to be applied in a 'rush to fish' scenario. The FRAG expressed a wish to address the issue, since it is devaluing quota, impacting on markets and defeating the concept of orderly fishing under quota.

A number of suggestions/observations were made from the floor:

- Boundary adjustments from January 1, 2018 will affect the blacklip.
- Greenlip – suggest reverse cap = open the lower value area and close the high value part of the fishery.
- Rotate the fishery – leave areas closed to regenerate.
- Live Fish into NSW – the importer can apply to the NSW CVO with a risk assessment to cover the live shipment from Tasmania.
- Option of another zone – administratively impossible for (6) zones
- Discussion on option of reverse caps ie reverse Perkins Bay – open Clark Island!
- The FRAG then workshopped a proposal on the whiteboard; the outcome is shown in the table fellow:

Adjustment Date	OPEN		CLOSED	
	Blacklip	Greenlip	Blacklip	Greenlip
Jan 1		King Island Flinders Island 'to P Sound' Perkins Bay	East Coast North East	North East North West Clark Island
	East Coast North East Blocks 5, 6 King Island Albatross Island	North East North West Clark Island		
May 1				

8. IMAS presentation of data and fisheries assessment, including additional diver/stakeholder input (NB priority areas of the fishery will be dealt with first)

Greenlip

Slightly lower catch rate overall;

King Island – catch rate increased

North West exc Perkins Bay – catch rete decrease but diver report there is a lot of stock present which should recruit to the fishery.

Perkins Bay –last 4-5 years showing a falling CPUE which is currently just below the target. Some selective fishing, making it difficult to detect if the falling CPUE is a result of fishing practice or declining available biomass.

North East – opened and closed in short period of time (4 days). CPUE lower. Than target with a slight overrun of the catch cap. Some correction likely to be required in 2018

Furieux Group– standardised catch rates increasing, but raw CPUE falling; requires further investigation

FRAG comments;

- Caution needed for 2018 with the probability of a quota reduction in 2018.
- Some support for that reduction to be meaningful to get under the stock decline and rebuild stock/catch rates.

General FRAG Comments

- When there is a substantial over run of the catch cap should there be a 'payback' the following year?
- In the case of a 'lag' before action is taken, should allowance be made for the year when action is not taken?
- Two key issues questions to be dealt with under the harvest strategy:
 - I. Annual or biennial (every two years) catch setting
 - II. What action to take with overruns?

Blacklip

Eastern Zone 2017 (140t caught)

Overall catches plateaued for around 6 years and then have declined for four years

Block 13 – catch rates have picked up; about 40% caught

Block 14 – CPUE below target; no improvement from the marine heat wave

Block 16 – CPUE below target; affected by marine heat wave

Block 17 – Highest catch in 2016 with effort diverted into the block from other areas; falling CPUE

Block 19 – few catch records – appears OK.

Block 20 – Moderate effect from marine heat wave, steady decline in catch rate for the last few years

Block 21 – 2013-2015 showed some improvements but set back by storm and heat wave impacts, small amount of catch with some prospect of improvement

Block 22 – small amount of catch

Block 23 – small amount of catch

Block 24 – small amount of catch

Block 27 – small amount of catch

Block 28 - small amount of catch and volatile

Block 29 – small amount of catch

Block 30 – small amount of data

Block 31 – low catch rate

FRAG Comments;

The FRAG noted with some concern that there was likely to be a need for a further substantial reduction of catch on the East Coast, and that there was a need to work with industry to gain understanding and acceptance of such a reduction, and how it could be best effected.

Action: TAC to set up a working group on the issue of a catch reduction for the East Coast prior to FRAG #3
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The FRAG considered reasons for the poor condition of the East Coast fishery and reasons why it has not recovered as anticipated. Reasons include the recent marine heatwave, storm events and the incursion of *Centrostephanus* have all played a part in the state of the abalone resource on the East Coast.

The FRAG considered if more effort into research on the East Coast to determine what was the root cause of the east coast problems, thereby seeking to become more proactive in the management of the fishery.

IMAS noted that there were four key issues impacting on abalone stocks;

1. **Food** – quality and quantity, two species of red algae are particular nutritious as food for abalone and these appear not to be impacted by increasing water temperature, which is a positive finding for the fishery.
2. **Recruitment failure** – likely to be associated with spawning biomass reduction, and excess fishing, particularly in Block 27 and some of 28 at 132mm.

3. **Increased natural mortality** – heatwaves in 2000, 2007 & 2010 - external effects out of our control
 - a. 2015/16 juveniles under the plates were not affected by the heat wave event.
 - b. The thermal maximum is 27d, the optimum is 17d
4. **Habitat** – Impacts of *Centrostephanus*

IMAS noted that in severely depleted reefs reliance on natural recruitment was unlikely to be successful and that some form of stock enhancement would be necessary. Research on the broad-scale release of abalone larvae (c.0.2mm) onto depleted reefs from a bio secure floating facility shows some promise as a way to rehabilitate such reefs. Such an approach could be cost effective and reduce/eliminate biosecurity risk.

The FRAG was supportive of advancing a proposal to investigate the use of larval release onto depleted reefs.

Action: Dean Lisson to write up a research proposal to investigate the use of a bio-secure vessel to spawn and raise larva for return to formerly productive, but now severely depleted, reefs.

Western Zone:

Catch rates in most of the blocks in the West coast as picked up and it appears that the Zone is entering into a rebuild phase

Block 6 - looking good

Block 7 – big jump in catch rates

Block 8 – good catch rates, hard to access unless prime weather

Block 9 – same, action next year

Block 10 – slightly higher catch rate – cap will go off quickly with the next weather pattern

Block 11 – catch rates higher

Block 12 – catch rates higher – closing in on target

Block 13 – catch rates higher

Overall there appears to be a recruitment pulse coming through the fishery

The FRAG agreed that the Eastern Zone unlikely to require a quota cut in 2018

The FRAG noted that the Western Zone is showing improvement with positive signs in CPUE, and was cautiously optimistic with respect to the status of the Western Zone abalone stock.

FRAG Comments;

Size limit increase in 2018 appears supportable if there is continued good recovery; the Department requires a strong letter from the TACL to increase the size limit, with support from and on behalf of the membership if such an increase is to be achieved without recourse to a public comment process.

Alan Hansen suggested the size limit be reduced on the East Coast with an increase in the quota.

The boundary change document will be out for consultation in the next week.

Central West:

Block 6A-C - 75% caught, management action required. Weather dependant.

Northern Zone:

Block 31 – cap reached in 5 weeks; falling slowly, target species fishing.
Mixed species fishing standardised at 90% of target species.

Block 39 – ok

Block 48 – not enough data to trigger a catch rate

Block 49 – nil

Block 5 – finished

Block 5A, C -

Block 1 – up and down, small amount of catch. Black and green lip fading away, fewer locals in the area to fish.

Block 2 –

Block 3 – picked up, positive

Block 4 - nil

Bass Strait Zone:

Overall 25t so far to date, going well

Block 32 – less than 2 tonne

Block 33 – above target

Block 37 – no data

Block 38 – sharp drop, close to cap. Caution required

Block 39 – exceeded cap

Block 43 – ok

Block 51 – no catch rate

Block 52 – positive

9. Harvest Strategy parameters and settings for 2017:

- a) **Harvest Control Rule options** – changing the % has little difference to the overall outcome. The time lag is an issue.

The Harvest Strategy settings used to date in 2017, are identical to those used in FRAG 4 2016. In summary these are;

CPUE target PM - based on the 55th percentile of the annual standardised CPUE (sCPUE) in the reference period 1992 to current year.

Gradient 4 pm and Gradient 1 PM – target is zero (i.e. stable CPUE).

The upper and lower scoring functions for all three PMs are derived from the range observed in the PMs, extended by 15%. The rationale here is that we have yet to collapse a fishery in this reference period, so the boundaries should be broader than the observed range.

The PM weights are set at 0.6, 0.2, 0.2 respectively for the CPUE Target, Gradient 4 and Gradient 1 performance measures

The Control Rule applied is Option 5, where a combined score of 1 is also the Limit Reference Point. If the combined score is less than 1, we take significant action along the lines of action in Freycinet in 2012 ie. 75% reduction in TACC, and temporary increases in the LML.

Table 1. HCR Option 5

Score	<1	1 – 2	2 – 3	3 – 4	4 – 6	6 – 7	7 – 8	8 – 9	> 9
TACC Adjust	-75%	-20%	-15%	-10%	NC	5%	10%	15%	20%

In Hindsight the the Control Rule allows a degree of inaction around the Target (score of 5) and should be tightened to ensure action is taken earlier rather than later. There is also an issue around action every year, or every second year, and how we might compensate for the lack of action during the intervening year if fishery performance is still declining.

IMAS will run some outcomes to be explored and discussed at the next Board meeting; come up with a clear, well documented option that can be presented and discussed at FRAG #3. a final decision can be made at FRAG #3 and presented to AbFAC #3.

2. Meta Rules

Meta rules are modifications to the Harvest Strategy outcomes, to account for extraneous factors;

- a) Only reduce TACC if the combined zone change is >5%. Where this rule is triggered, the catch reductions in low performing blocks are to be incorporated within the Zoanal TACC, and spread to other blocks, unless Industry choose to run with the reduction anyway.
- b) If a block is improving, but still below the PM targets, then a suggested reduction can be waived. However, rules around how many years of improvement and the rate of improvement need to be established.
- c) If the CPUE is below the CPUE Target but the HS suggests an increase, the increase should be waived. This can occur in smaller production blocks when CPUE can change rapidly due to factors such as better than usual weather conditions in addition to stock rebuilding.

10. Industry research wish list for RAG, and for the Abalone Council Australia RD&E plan

7/8 August RAG - IMAS core projects and internal resources

There is a lack of research into egg production.

11. General Business

1. Marine Stewardship Council (MSC) – IMAS has completed a formal pre-assessment of abalone as a gap analysis prior to a full assessment. There has been a small failure on stock status.
2. Flinders Island –No change

Meeting closed 3:40pm

New Actions:

1. TACL to write to the Director, DPIPWE and request a review of the Biosecurity Code and if necessary develop a new Code with the CVO to manage disease risk.
2. TAC to set up a working group on the issue of a catch reduction for the East Coast prior to FRAG #3
3. Dean Lisson to write up a research proposal to investigate the use of a bio-secure vessel to spawn and raise larva for return to formerly productive, but now severely depleted, reefs.

Actions

1	IMAS and DPIPWE to finalise the paper on size limits	DPIPWE/IMAS
2	TACL to write to the Director, DPIPWE and request a review of the Biosecurity Code and if necessary develop a new Code with the CVO to manage disease risk.	Dean /DPIPWE
3	East Coast 2018 catch management – working group	TACL/IMAS/DPIPWE
4	Research proposal – spawn and hand raise larval on bio-secure vessel	Dean/IMAS

Blocks - Area	TAC 2017	Kgs/unit
Bass Strait Blacklip		
Blocks 32-38 Furneaux Group		
Blocks 50-56 Bass Strait Islands		
Blocks 42-46 Central North		
Total Bass Strait TAC	77	22
Central Western Zone		
Blocks 6A-6C Cousta Rocks		
Total Central Western Zone TAC	35	10
Eastern Zone		
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		
Total Eastern Zone TAC	444.5	127
Greenlip		
Blocks 32-38 Furneaux		
Blocks 1-4 King Island		
North West not Perkins Bay		
Block 48A Perkins Bay		
Blocks 31,39,40 North East		
Total Greenlip TAC	140	40
Northern Zone		
Blocks 5A-5C		
Blocks 47-48 NW not Block 5		
Blocks 1-4 King Island		
Blocks 31B, 39 and 40 North East		
Total Northern Zone TAC	148.3	42
Western Zone		
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		
Total Western Zone TAC	717	205
2017 TAC TOTAL	1561.8t	446kg/unit

