



# TASMANIAN ABALONE COUNCIL LTD

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

Meeting 3/2014

Thursday September 4, 2014 – 11.00am

IMAS, Nubeena Crescent Tarooma

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### **DRAFT Minutes**

#### **Present:**

##### **Members:**

I Cartwright (Chair), Greg Woodham, J McKibben, P. Richardson, B Cobbing, J. Hoult, D Hansen, A Gray, J McKibben, A Brown, M Daft, D Lisson, R Scanlon, A Hansen, D Tarbath, C Mundy H Jones (IMAS) M Bradshaw (DPIPWE), M Haddon (CSIRO), J Freeman (minutes),

##### **Observers:**

E Thorpe, S Seabourne, M Marriott, A Marriott, A Hitchens, M Chesterman, G Moroney, M Lovett, R Menadue, P Pyke, M Debnam, D Browning, S Anning, B Ransom, J Ramsden, G Hughes, K Hoskin, W Seabourne, H Jones (IMAS)

#### **Apologies:**

M Webster,

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

It was noted that there had been a pre-meeting of the FRAG to consider data on the stock and the MCDA process, including sources of data, target indicators and associated matters.

The Chair outlined the Tasmanian Abalone Council Limited (TACL) expectations for the FRAG under the current terms of reference. It was noted that the FRAG had always been transparent, but of late input from some observers had meant that it was getting more difficult to reach an agreed position. Observers would continue to be welcome at meetings, but should advise the TACL when they will be attending. The Chair reminded/informed those present about the FRAG processes and how members and observers can have input into the meeting in an orderly manner.

The FRAG is comprised of the TACL Board members, IMAS researchers, CSIRO DPIPWE, observers and an independent chair.

The FRAG is an industry body, funded and administered by the TACL and was formed to allow in-depth discussion on the status of the resource, , including the fisheries assessment, target catches, boundaries and size limits. In setting the TACC the Minister receives advice from three sources: the AbFAC, the Tasmanian Abalone Council AGM, and DPIPWE in the form of a Departmental brief. The Minister takes, and gives due consideration to this advice to make a decision on the TACC and associated issues. TACC settings, size limits and related issues. The FRAG provides advice to the TACC Board and AbFAC.

It was noted that the FRAG is challenging, especially with the resource in a rebuilding phase, and observers sometimes leave the meeting with some confusion about the ongoing future of the resource. The FRAG process is developing and improving over time with constructive views from a range of sources leading to better outcomes for the resource and industry.

The purpose of the meeting was to look at the status of the fishery and consider preliminary views on target catches prior to the next FRAG meeting which is the last meeting prior to the provision of TAC advice to the AGM and FAC.

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

The agenda was adopted with two additions,

- Alan Hansen - Shell Study
- Greg Hughes – reseeded proposal

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

The FRAG agreed that the draft minutes were an accurate record and were accepted.

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

### **Action 1. Development of target and limit reference points**

Ongoing, being developed by Craig and Malcolm- to be discussed later in the meeting

### **Action 2. Workshop to develop criteria for MCDA process –**

Completed

### **Action 3. Central Western Zone Boundaries**

To be discussed later in the meeting

### **Action 4. Block 31 – Zone changes north of Georges Rock**

No Action - changes to boundaries to be discussed at length

### **Action 5. Zone Boundaries – draw up proposal**

Discuss later in the meeting

### **Action 6. CPUE targets for east coast TAC setting**

Completed

### **Action 7. Standardise King Island data**

Completed

### **Action 8. Closure of Greenlip fishery NE and NW inshore 132mm**

Furneaux, Perkins Bay and King Island to remain open.

Support for a closure from January 1, to March 31 2015 due to poor condition of fish.

Discussion with processors on the feedback for markets, the recovery of meat weight is a processor issue.

### **Action 9. Blacklip zone changes**

Discussion later in the meeting

## **5. Preliminary discussion re 2015 quota including catch effort update and results of MCDA and other IMAS/CSIRO analysis**

Craig explained the evolution of requests for an automated process for more precise information.

MCDA Harvest Strategy for 2015, the CPUE target for each Block will be taken to be the 65<sup>th</sup> percentile of the annual block mean CPUE, using data from 1985 – 2014.

Craig and Malcolm are adding further variants to the model to better understand and model CPUE including impacts on catch rate of weather (temperature and swell from the

BOM) double up diving. While only two performance indicators will be used in today's presentation (CPUE and change in CPUE) information from the data loggers will be added in the future to provide more detailed consideration of stock status at the level of appropriate spatial management units. Other factors impacting on CPUE may be analysed and applied to raw CPUE and IMAS is happy to receive additional ideas on this issue.

## **6. Stock status and preliminary 2015 TACC settings**

IMAS presented outputs from the stock assessment, augmented in some places by modelling undertaken by Malcolm Haddon (CSIRO)

### **Western Zone:**

#### **IMAS:**

Blocks 6D, 7 & 8 Granville Harbour, Sandy Cape: catch rates are still declining.

Block 9 South of Strahan; catch rates were stable until 2011, but are now falling away, catch rate trend suggest current catch is now depleting the biomass.

Blocks 10, 11, & 12A South West, in decline, new recruits will decline over the next few years.

Blocks 12b – 13B South Coast appears stable, however increasing catch rate in 12C (southern islands) is masking the overall decline of the coastal fishery which has now dropped to historic low catch rate.

In recent years as much as 80% of fish is being caught by divers doubling up, which is suggested by divers to depress raw CPUE figures by 30%. Malcolm has adjusted his modelling and has found a difference of 15-20%. It was noted, however, that the model takes into account previous quota cuts, doubling up and weather.

**Using a weighting of 50% catch rate and 50% change in catch rate, the MCDA analysis suggests a reduction of 210 tonnes, which IMAS supports.**

### **Summary of Western zone FRAG comments:**

#### **Industry Members;**

There was substantial support for leaving the TAC for the WZ at the previous level on the basis that the fishery has taken substantial reductions and these need to be given time to flow through to the stock. However, most who advocated no change in TAC noted that the decline continued to be of concern, and that if the decline continued next year, then there would be a need for further action.

Others members were of the opinion that some form of cut was necessary and that there was a need to evaluate the long term risk to the western zone at current catch levels, It appeared that there may be benefits in a reduction of 50% of that suggested by the harvest strategy.

One member advocated taking the full cut recommended by the MCDA analysis. In his view taking the cut now would get under the current decline and ensure rapid rebuilding of the stock. Put another way the value of fish in the water contributing to the rebuild and higher catches in the future was worth more than continuing to fish the current level. Not to act now could mean a future TAC cut of up to 40% in his view.

#### **DPIPWE**

The Department noted that the MCDA assessment model is still being built, and that additional criteria can be added. Once completed the Government will adopt the model for future assessments. Malcolm Haddon's model is looking forward – with some caveats and risks there is a 70% chance of improvement. The Government

has to look at sustainability and be mindful of the viability of each sector of the industry, which is a balancing act.

In 2008/9 the boundaries were changed to create a Central West Zone, which has changed the fishery fleet dynamic. This may change in 2015 if there is a further change of the boundary back to north of Strahan.

**In summary DPIPWE supports maintenance of the status quo in the WZ TACC for 12 months.**

#### **Observer Divers;**

It was noted that the stock status as indicated by catch to date is unlikely to change by the end of the season.

**Most divers present strongly supported a reduction on TAC noting that blocks 9, 10 and 11 are in decline.**

#### **Eastern Zone;**

Actaeons –catch rates still falling away, as divers have increased effort in this area  
Block 13E – there is not a lot of biomass, should see an increase in recruitment over the next few years.

Blocks 14C - 16 Bruny Island – increasing slightly, catches quite low but picking up.  
Storm Bay – picking up.

Fortescue – catch rate sitting lower.

Block 22 – stable.

Block 27 Catch and catch rates remain low.

Bicheno north – (29) CPUE improved in 2013, but lower in 2014 after increased attention.

St Helens – stable.

#### **IMAS**

Noted that the MCDA analysis suggested a reduction from 530t to 433.5t (using 50/50 CPUE/Change in CPUE) or 493t (using 10/90). There is an expectation that recruitment will improve over the next few years based on the 'lag' effect and the spawning potential from previously higher stock levels between 2007 and 2010. Divers are also seeing an increased number of sub-legal animals.

**Accordingly IMAS suggests maintaining the status quo for the EZ TAC**

Additional comments and questions were raised from Observers:

Storm Bay – what is the impact of the salmon farm in Nubeena with sediment loadings?

Sub-block 28A north of Bicheno - the 145mm size limit is too high.

Dunalley area - approaching caps, as we are in a re-building phase it shouldn't be overfished.

Block 29 – what would the maximum be as a backstop?

Proposal:

Open Freycinet at 145mm which has been closed for 3 months with the size limit of 145mm for good protection.

Action: Matt to contact local divers to ask their opinion on the resource
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Block 30B (the Gardens) is in year 2 of a 2 year Experimental Fishing plan. Based on Experimental Fishing in 2013, Sub-Block30C should be left closed.

The boundary between Block 30C and Block 31A could be changed to allow access to Victoria Rocks, and avoid confusion.

ACTION – Boundary adjustments to be discussed

Block 14B & C – there has been no PST detected in these blocks in the last 12 months  
– is it possible to re-open?

Action: Dean to contact AQUIs for a possible re-opening of these areas

### **Central Western Zone;**

Catch and CPUE falling away.

Not a good response to the changes in size limit from 136 to 132mm.

Suggest no further fishdown experiments in this area.

The weather hasn't been favourable.

MCDAs TACC adjustment suggests TACC set at 60% of 2013 level, which would be ~ 50t.

Proposal – to delay the discussion on boundary changes to the next meeting with everyone having the opportunity to write and put forward their recommendations on any changes.

Action– TACL to prepare a zone map and discuss recommendations for boundary changes.

Proposal –

Blocks 8C to 6D becomes the Central West inclusive.

Blocks 6C to 5D inclusive becomes Northern Zone.

All with existing size limit.      AGREED

### **Northern Zone;**

Proposal;

Block 31A at Cobblers Rocks move into the Northern Zone at 132mm – AGREED

Block 3 – catch rates declining, but different catch rates observed between local and visiting divers – requires more detailed analysis.

Block 49 –initial increase in CPUE associated with size limit reduction, but falling away rapidly now.

Block 5 – continues to decline.

Blocks 31B, 39, 40 – up and down, but no consistent trend.

Processor suggestion there should be no particular pricing for fish based on Zone.

TACC projected 2015;

Suggest 100t reduction

Eventual reduction may change when boundary changes are taken into consideration.

Block 49 should be reduced - AGREED

There are reports from local divers of good areas of fish in the King Island area.

Action - Matt or Craig to talk with resident divers accessing large quantities of fish in deep water around King Island

Bass Straight Zone;

Catch rates ok.

Furneaux group small increase in catch rate.

Bass Strait Islands small drop.

TACC projected 2015;

Status quo

Comments –

Fishing well.

Boundary changes - Block 40A, B

Action – TACL to write up proposal and bring to next FRAG
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Greenlip;

Catch increasing in the Furneaux group.

Mixed catch green and black makes interpretation of trends difficult.

Block 35 – a concern.

Block 38 – ok.

Blocks 1-4 King Island – concern, in past years there was a good supply of 132mm greenlip, should this block be closed or cap reduced?

Block 3 – stable.

Block 4 – concern.

North West – stable.

Perkins Bay – stable.

Blocks 31 – catch rates falling away.

Block 39 – catch rates falling.

Block 40 North East – ?

Processor comments good catches of greenlip.

Action: Craig Mundy to investigate the green lip data – King Island
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## 8. Re-opening of the NE Greenlip fishery and SW part of the Western Zone

Proposal:

Reopen Block 9 when the Western Zone cap is down to 100t. To be finalised at the next FRAG – AGREED

- No over-run of the magnitude seen in 2013 is to be permitted in 2014
- Is closed 56t short of cap = 1 pattern.

## 9. Hunter Island Shell Study Update – Dave Tarbath & Hugh Jones

The project was instigated by Alan Hansen and Tasmanian Seafoods.

'Will the blacklip stocks be better if the density of old abalone is reduced? Will the meat be better?

- The fishdown significantly reduced the density of large > 110mm abalone by 2/3<sup>rd</sup>
- 500 fish were tagged at each site in 2013 and 500 in 2014. Growth rate data showed the growth rate was very slow around Hunter Island.
- The shells were riddled with worm/borers which would affect the growth rate.
- No detectable change in size at maturity was observed between fishdown sites and controls.
- The fishdown didn't seem to have an affect on the growth rate or size at maturity.
- Changes in meat quality – not completed.

- Morphometric measurements – shell length, width, height, curve length curve width and thickness.
- The shells were measured against Tas Seafoods shell graders.
- The reliability of shell grading between graders (New, Medium and Old) ~ 50% reliability.
- The reliability of grading between New and Old improves to 85%
- Testing binomial model across the fishing zones.

**Conclusion;**

Bionomial model is spatially limited to the populations on which it is based and not suitable a management tool

Allometric shape model derived from morphometric measurements has the potential to be used as an assessment tool of shell quality.

**Conclusions to date;**

- Changes in density did not affect growth rate.
- Affect of density reduction on meat quality remains unknown.
- 600kg of fish is required to finish further studies on the meat quality, which needs to be extended over a two year period.
- Research projects are usually completed outside of the quota system.
- Ten tonne has been collected to date, the diver is paid at \$10 per kg the rest of the money is deposited into a trust fund.
- The project funded by CRC/Tasmanian Seafoods is governed by milestones and completion dates.
- The project may be used in other areas around the state that may show a different outcome ie a fishdown may have fish growing at a faster rate.

**Proposal;**

Use the trust fund to purchase the required fish.

Action - Dave Tarbath to write up a proposal to the TACL Board to continue the project to look at the quality of the meat after the initial project is completed.

**9. Other business**

Greg Hughes;

Showed a presentation on the reseeded program he is undertaking.

**Meeting Close 4.30pm**

**New Actions:**

1. Malcolm Haddon to provide a report on the 'diver doubling up' effect
2. Matt Bradshaw to contact local divers re Freycinet resource
3. Block 31, discuss boundary changes
4. Block 14B & C, Dean Lisson contact AQUIS for possible re-open
5. Zone map to discuss boundary changes
6. King Island, Matt/Craig discuss with local divers accessing large quantities in deeper water.
7. Block 40a & B, boundary changes.
8. King Island, Craig Mundy to investigate Greenlip data.
9. Dave Tarbath to write proposal to TACL Board to continue Shell Study meat quality project.
10. TACL bring copies of map with block numbers

### Action Items FRAG #3 2014

	<b>Action</b>	<b>Responsibility</b>
1	Development of target and limit reference points	IMAS: Malcolm Haddon, Craig Mundy and Dave Tarbath  FRDC contact has been signed for new project; awaiting commencement  Ongoing
2	Central Western Zone boundaries	DPIPWE: ongoing
3	Zone Boundaries – draw up proposal	DPIPWE: Matt Bradshaw to draw up proposal  ongoing
4	Closure of Greenlip fishery	Matt Bradshaw
5	Blacklip zone changes	Craig Mundy
6	Provide a report on the 'diver doubling up' effect	Malcolm Haddon
7	Contact local divers re Freycinet resource	Matt Bradshaw
8	Block 31, discuss boundary changes	All
9	Block 40a & B, boundary changes	All
10	Block 14B & C, contact AQUIS for possible re-open	Dean Lisson
11	King Island, discuss with local divers accessing large quantities in deeper water.	Matt/Craig
12	King Island, to investigate Greenlip data	Craig Mundy
13	write proposal to TACL Board to continue Shell Study meat quality project	Dave Tarbath
14	copies of map with block numbers and zone map to next FRAG	TACL

## TAC for 2014

<b>Blocks - Area</b>	<b>TAC 2014</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, including Maria	
Blocks 25-29A Freycinet and Bicheno	
Blocks 29B, 29C, 29D and 30A North East	
<b>Total Eastern Zone TAC</b>	<b>530</b>
<b>Northern Zone</b>	
Blocks 5A-5C	50
Blocks 47-48 NW not Block 5	100
Blocks 1-4 King Island	100
Blocks 31B, 39 and 40 North East	30
<b>Total Northern Zone TAC</b>	<b>280</b>
<b>Central Western Zone</b>	
Blocks 6A-6C Cousta Rocks	75
<b>Total Central Western Zone TAC</b>	<b>75</b>
<b>Western Zone</b>	
Blocks 6D, 7 and 8. Granville Harbour, Sandy Cape	100
Block 9 South of Strachan	125
Blocks 10, 11 and 12A. South West	350
Blocks 12B-13B South Coast	265
<b>Total Western Zone TAC</b>	<b>840</b>
<b>Bass Strait</b>	
Blocks 32-38 Furneaux Group	
Blocks 50-56 Bass Strait Islands	
Blocks 42-46 Central North	
<b>Total Bass Strait TAC</b>	<b>70</b>
<b>Greenlip</b>	
Blocks 32-38 Furneaux	47
Blocks 1-4 King Island	20
North West not Perkins Bay	21
Block 48A Perkins Bay	25
Blocks 31,39,40 North East	25.5
<b>Total Greenlip TAC</b>	<b>138.5 (140)</b>
<b>TAC TOTAL</b>	<b>1935t</b>