Fishery Resource Advisory Group (FRAG)

Meeting 2/2017

Tuesday August 15, 2017

IMAS, Nubeena Crescent Taroona

Minutes

Present:

Members:

Ian Cartwright (Chair), J McKibben, D Lisson, D Hansen, B Cobbing, B Ransom, R Scanlon, S Crocker, P Richardson, A Gray, A Brown, J Huddlestone, , C Mundy, (IMAS), M Bradshaw (DPIPWE), J Freeman (minutes),

Observers:

A Hansen, J Ramsden, B Amos, B Rowe, S Anning, L Tumney, B Lesser, T Lesser, R Searle, M Gleeson, R Baillie, B Richardson, B Rex, J Gasparinatos, T Chadwick, M Porteus, G Woodham, T Hitchens, B Gray

Apologies:

T Bush,

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 the resource. Using the IMAS data, diver and other industry input the FRAG considers recommendations to AbFAC.

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 was appreciated.

Adoption of agenda;

The agenda as circulated was agreed with the addition of;

11.1 Biosecurity Tasmania – Live broodstock import

Minutes of the previous meeting:

Members agreed the minutes of the FRAG meeting held on July 7, 2017 were accepted as a true and accurate record.

Actions Arising from Previous Meeting:

Action 1. IMAS and DPIPWE to finalise the paper on size limits

Still in final draft form. To be finalised and circulated prior to FRAG 4.

Action 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

Completed

Action 3. East Coast 2018 catch management – working Group

Removed; initially, the WG was established to alert industry to the need for additional measures on the East Coast by discussing issues with divers. Now no longer required.

Action 4 Research proposal – spawn and hand raise abalone larvae on bio-secure vessel and spray onto reefs.

Ongoing

Dean to write up an AIDF proposal, which will be based on the premise that the method will be used to augment natural recruitment on heavily depleted reefs . Discussions of this strategy are to be held in conjunction with planned meetings with the CVO regarding the biosecurity risks. The cost and effectiveness is being investigated and it was noted that similar trials have been considered in SA and in NSW.

Report on progress with size limit paper and boundaries: DPIPE update

IMAS has submitted a full draft report, which has yet to completed and distributed. It was noted that it is important that this information on available to support discussions on size limits.

DPIPWE will be gazetting a full copy of 'The Rules' which will be out for consultation for 60 days.

The Central West Zone will be disappear; Sub blocks 6A & B will go into the Northern Zone, and Sub Blocks 6C & D will be in the Western Zone.

The new rules, including the five-zone arrangement is due to start January 1, 2018.

Action: IMAS to finalise the size limit paper and distribute it, including to FRAG members, prior to FRAG 4.

DPIPWE noted that the Bass Strait zone currently has (3) size limits – and suggested having (2) ie 114mm and 120mm:

- Fern Islands and Bass Strait Islands to remain at 114mm.
- Central shore based zone at 110mm, and will change to 114mm.
- Hunter and Three Hummock Islands will be 120mm.

The initiative was generally supported by divers at the FRAG. IMAS noted that a precautionary TACC also reduces fishing pressure on smaller fish, by divers taking catch from several areas rather than concentrating on one area.

It was noted that some divers would be more affected by the suggested changes than others, and that efforts should be made to consult with them.

FRAG Comments

The Minister will receive responses from the consultation period that are not based on science and in the view of the FRAG, these should not carry weight i.e. decisions should be evidence rather than anecdote based.

Having three size limits in Bass Strait is not good management and the change is logical.

Management arrangements for the North West (Block 5 and 6) are under consideration.

Noted that Bass Strait and Hogan Islands are fishing well.

The proposed new zone boundary change between Blocks 6B and 6C will be over hard rock and it was proposed that the boundary be moved back to the boundary between 6C and 6D at Wild Wave River.

Block 6 has been overfished and the FRAG asked what strategies will be put in place to rebuild. DPIPWE responded that a catch cap with a lower TAC and a 140mm size limit should achieve sustainability in 6C.

The Board agrees with the current proposal that for Block 6C (132mm) be in the Western Zone.

Temporary lowering the TAC for (2) years to establish a rebuild.

Addressing seasonal closures and pulse fishing:

The matter of a reverse cap (least preferred fished first before opening area of higher value fish) was re-opened despite agreement at the FRAG and FAC 2. There was substantial discussion concerning the number of areas to open sequentially, as well as a suggestion that all areas should be open to allow effort to spread without constraint.

After extensive discussion it was agreed to trial a reverse cap, notwithstanding the danger that quota owners may not release quota at the start of the year. After the 12 month trial the process can be reviewed and changes made as necessary.

It was noted that the reverse cap proposal will allow divers to fish greenlip in the Central North and the islands.

The proposed arrangements for greenlip will be confirmed at the next FAC

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

Two issues were discussed prior to the presentation of catch and catch rate summaries; The structure of the Harvest Control Rule, and, whether an annual or biannual response should be made in this fishery.

The Harvest Control Rule represents an objective approach to decision-making. The Harvest Strategy identifies explicit targets for i) CPUE, ii) CPUE gradient over the last four years and iii) CPUE gradient over the last year. Each spatial management unit (SMU) has its own target and HCR option '5' was used throughout 2016. Any score less than 4 or more than 6 indicated that action should be taken.

The SAFS process requires a limit reference point, which was set at a score of 1 for the CPUE Target performance measure in the 2016 SAFS edition.

On reflection, all of the Control Rules (1 – 5) fail to take action when the score drops below the target.. A new Control Rule HCR Option 6 addresses this weakness by specifying that action is take when performance of the fishery drops below the target."

All of the existing HCR rules have similar performance during model testing to recover depleted SMU. HCR 6 will act more conservatively than the existing 5 HCR options, but still failed to deliver the magnitude of reduction the FRAG agreed to for the Eastern Zone in 2010, and offered a greater increase in the Eastern Zone in 2008. In the long-run, the model simulations do however show the HCR will recover a depleted fishery, primarily by acting earlier when the resource is in decline. sho.

Comparison of different Control Rules;

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%

HCR Option 6

Score	<1	1 -2	2 – 3	3 – 4	4 – 5	5 – 6	6 – 7	7 – 8	8 – 9	> 9

TACC Adjust	-75%	- 25%	-20%	-15%	-10%	NC	5%	10%	15%	20%

A number of overarching rules (Meta Rules) govern the application of the HCR. These are: -

1. Only reduce TACC if zone change is >5%
2. Annual vs bi-annual TACC change: two options
    a. Annual change in TACC based on HS recommendations (Malcolm's preference)
    b. Biannual change (using)

    IMAS noted that if the two year option was to be adopted, it is essential that a risk factor be included to account for no change in the previous year. Model simulations showed that a biannual change led to greater variability and uncertainty, and was slower to recover a depleted stock. Responded annually to HS recommendations risks reducing the TACC marginally more than might be required, and can be considered precautionary. Biannual responses to the HS recommendations maximise short-term economic returns, but increases risk of longer-term damage to the fishery if stocks continue to decline through the second year.
3. Limit reference point: MCDA combined score below 1 triggers the 'Freycinet principle' (~75% TACC reduction, consider temporary LML increase)
4. When there is clear evidence of recovery in a block, but the HS recommends further reductions, the HS recommendation is waived.
    a. If the extent of recovery is deemed insufficient the FRAG may choose to implement the HS recommendation.
    b. Further discussion is required to establish precise guidelines defining what constitutes recovery and over what time period.

IMAS preferred option for HCR and Meta Rules -

1. **Use Harvest Control Rule (HCR) 6**
2. **Apply the HCR annually,** noting reduced risk in the face of increasing pace and extent of environmental change, less volatility in recovery.

The FRAG agreed to the IMAS proposal

Western Zone:

Catches are up overall
Block 7 stock recovery, increase according to the MCDA
Block 9 needs action taken at FRAG #4 if no evidence of rebuilding
Block 10 close to cap, below target but is rebuilding
Block 11 close to cap
Block 12 close to target ¾ caught
Block 13 positive improvements, ½ way to cap

TAC Forecast for WZ (note provisional - to be finalised at FRAG 4):

Application of the MCDA HCR 6 results in a NZ TAC of 665t (a reduction of 48t, NB suggested no change necessary **)**

Harvest Strategy summary;

MCDA 2018 = 665t

Eastern Zone:

Centrostephanus is making an impact,
Block 13 catch rates increased, juveniles seen

Block 14 improving, stable
Block 16 lower since the 2016 heatwave, action required
Block 17 action required
Block 19 not a lot of catch
Block 20 tracking down
Block 21 improving, stable
Block 22 not a lot of catch, down since the heatwave
Block 23 decline in catch and catch rate
Block 24 stable
Block 27 trending down
Block 28 marginal catch and catch rates
Block 29 trending down, stable
Block 30 not a lot of catch,
Block 31 trending down, stable catch rate, urgent action required

TAC Forecast for EZ (note provisional - to be finalised at FRAG 4):

Application of the MCDA HCR 6 results in an EZ TAC of 360t (a reduction of 84t)

FRAG Comments:

Discussion on a boundary change in block 31.
Northern part could be fished at 132mm. North of Cod Bay in the Northern Zone Processors would take the smaller fish as the water temperature is still lower in January. It was noted that discussion of this boundary has occurred at several previous FRAG meetings, without resolution. Notwithstanding, it was agreed to seek a boundary change north of Cod Bay for 2018

Action: Progress a boundary change for the area north of Cod Bay for 2018

IMAS noted that Centrostephanus continues to have a significant effect on the east coast and needs to be addressed. IMAS is undertaking a project to look at the effect of Centrostephanus on the productive abalone areas. It was noted that; Centrostephanus removal allows the seaweed to recover and the return of abalone bottom and this has been extensively demonstrated in Tasmania and Victoria.

The whole of the East Coast ecosystem being effected by Centrostephanus, with implications for all coastal fisheries there, both recreational and commercial, as well as the community. Funds to address this significant issue are required. It was suggested that the abalone levy of 7% returns a considerable benefit to the Government and that it was appropriate that application to apply a portion of these monies should be made.

Action: Chair to write to the Minister on the effect of Centrostephanus on the East Coast.

Dean Lisson has discussed harvesting with the commercial divers, with the Government paying the divers $1.50/$2 per kg, with nil cost of urchin to the processor.

Ralphs Tasmanian Seafoods is researching a business model which is based on harvesting urchins for roe or as fertiliser, vs culling.

Tasmanian Seafoods is undertaking a program to manage Centrostephanus, either by culling or processing. It was noted that smashing the urchins is 2 ½ times more efficient per kg than removal.

I was again noted that the commercial abalone sector is currently taking the financial brunt of the issue.

The FRAG agreed that a coordinated management plan, incorporating all sectors and possible removal mitigation/removal measures, be developed/

Action: Dean to write to the Government to develop a management plan involving all marine sectors to target the Centrostephanus issue

It was suggested that a temporary reduction on the TACC to 100kg per unit be explored to allow for the inevitable flow of fishing pressure that would be applied to the Actaeons, given the status of the resource in other parts of the zone.

Northern Zone:

There have been many changes and a declining catch rate.
Block 31 declining, catch taken in 1st quarter
Block 39 stable
Block 48 small amount of catch
Block 49 trending up
Block 5 cap has been reached, trending down, long period of decline
Block 1 small amount of catch, trending down
Block 2 small amount of catch
Block 3 catch up, deeper patches fishing well
Block 4 ok but variable

TAC Forecast for NZ (note provisional - to be finalised at FRAG 4):

Application of the MCDA HCR 6 results in a NZ TAC of 128t (a reduction of 20t)

There is concern over King Island – when the catch reaches 80% DPIPWE, IMAS and the TACL Board will review and close the zone prior to exceeding the cap.

Central West:

Boundary adjustment.
Block 6 serious decline, reduce the catch

TAC Forecast for CZ (note provisional - to be finalised at FRAG 4):

Application of the MCDA HCR 6 results in a CZ TAC of 26t (a reduction of 9t NB suggested that a cap of 10t be considered**)**

Bass Strait;

Catch stable
Block 32 marginal catch
Block 33 closed
Block 37 ok
Block 38 falling away rapidly, Centrostephanus in shallow water
Block 41 stable
Block 43 stable
Block 51 stable

Block 53 stable

TAC Forecast for Bass Strait (note provisional - to be finalised at FRAG 4):

Application of the MCDA HCR 6 results in a Bass Strait TAC of 64.2t (a reduction of 12.8t)

Greenlip;

Fishery stable, catch rates are trending down
King Island - trending up
North West - trending down
Perkins Bay - stable, selective fishing
North East - closed, catch rates lower
Furneaux Group - stable
Central North - small amount of fishing

TAC Forecast for Greenlip (note provisional - to be finalised at FRAG 4):

Application of the MCDA HCR 6 results in a Greenlip TAC of 126t (a reduction of 14t)

FRAG comment;

Perkins Bay CPUE is declining due to increased selective fishing for greenlip larger than the LML of 132mm.

If IMAS can capture the information on selective fishing, the data can be standardised, however this has proved to be problematic. There is an expectation that this pattern will stabilise, and the CPUE decline should level out.

RAG report and related research issues:

Top priority:

1. The SAFS process – status of the fishery. IMAS developed a 'Biomass proxy', for use in the 2016 SAFS edition. IMAS believes the Biomass proxy is only a partial representation of Biomass, and is not happy with the expectation from SAFS that CPUE is an index of biomass. CPUE appears to be informative about performance of abalone fisheries, but the reasons for this are still unclear.
2. Understanding the quality of abalone in summer and winter. Mortality in the processing tanks in early summer, and when is the optimum time to harvest.
3. Spraying of developed hand raised larval over formerly productive grounds from a bio-secure fishing vessel.

General Business:

Biosecurity Tasmania Importation of Live Abalone – importation of live brood stock by Craig Mostyn Group from their Victorian facility to a Dunalley aquaculture farm.

Concerns;
There have been issues in recent years with the Dunalley facility, as it is not a closed loop system, larval and escapees and can be flushed out of the pipes into the river.
Tasmania does not need a Victorian AVG strain (Vic1) as part of their 'superfish' in Tasmania.

Action: TACL Submission by September 15, on concerns of 'Vic1' abalone being released into the wild

Meeting closed 4.00pm

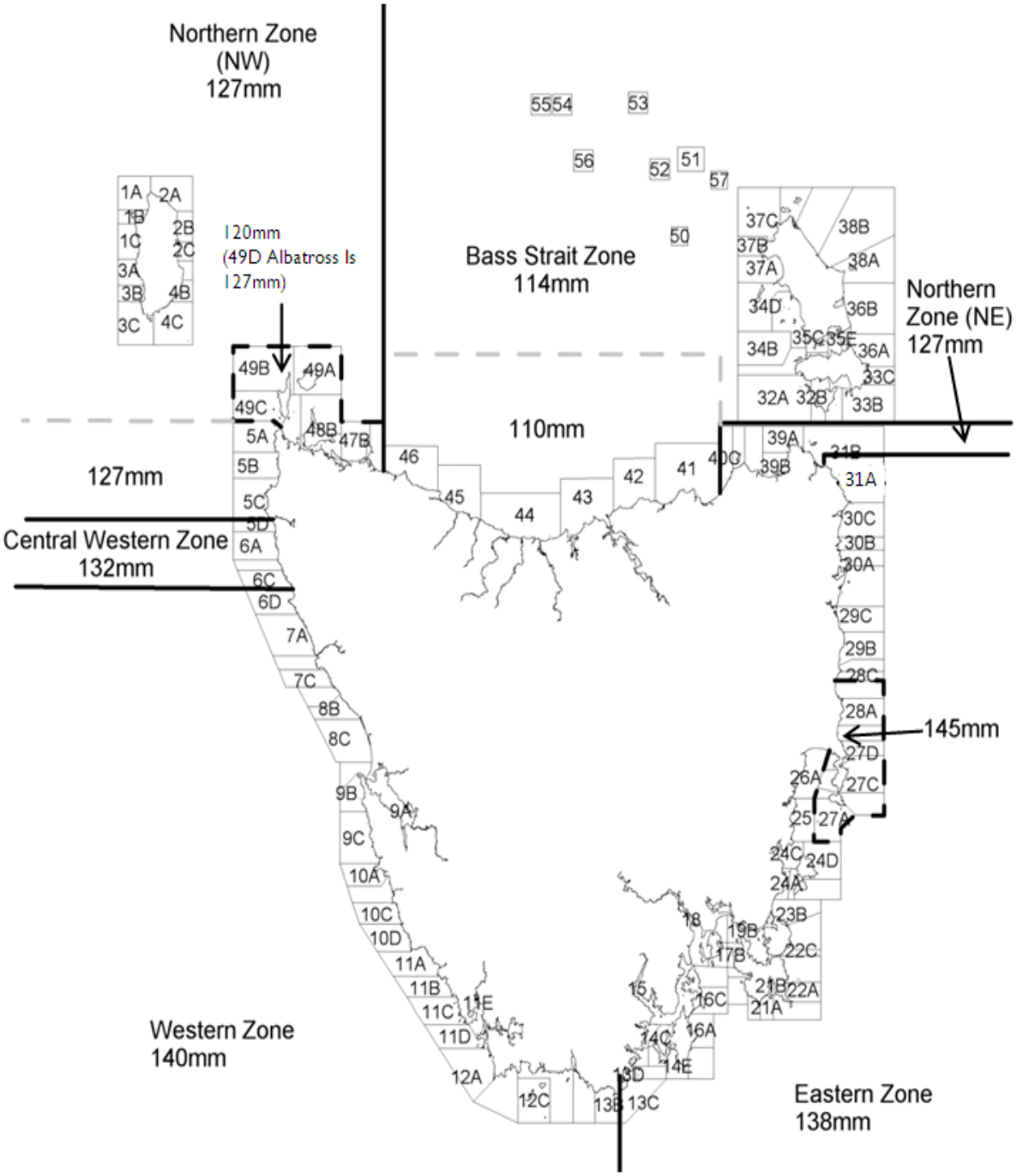
New Actions:

1. Finalise the size limit paper and distribute it, including to FRAG members, prior to FRAG 4.
2. Progress a boundary change for the area north of Cod Bay for 2018
3. Letter to the Minister on the effect of Centrostephanus on the East Coast.
4. Letter to DPIPWE to develop a management plan involving all marine sectors to target the Centrostephanus issue
5. Submission re biosecurity of importation of live broodstock

Actions

1.	Research proposal – spawn and hand raise larval on bio-secure vessel	Dean Lisson/IMAS
2.	Finalise report on Size limit and boundary paper	IMAS
3	Boundary change north of Cod Bay	DPIPWE
4.	Write to Minister re Government funding to address Centrostephanus incursion	Ian Cartwright
6.	Write to Minister re Government funding to address Centrostephanus incursion	Dean Lisson
7.	Submission re biosecurity of importation of live broodstock	Dean

Blocks - Area	TAC 2017	Kgs/unit
Bass Strait Blacklip		
Blocks 32-38 Furneaux Group		
Blocks50-56 Bass Strait Islands		
Blocks 42-46 Central North		
Total Bass Strait TAC	**77**	**22**
Central Western Zone		
Blocks 6A-6C Couta 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**


Northern Zone
(NW)
127mm
120mm
(49D Albatross Is
127mm)
Bass Strait Zone
114mm
Northern
Zone (NE)
127mm
110mm
127mm
Central Western Zone
132mm
145mm
Western Zone
140mm
Eastern Zone
138mm
1A
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