



23 May 2022

Chris Padovani

A/ Director Fisheries Management, Science, Policy, Licensing and Communications Division
Victorian Fisheries Authority
2A Bellarine Highway
Queenscliff 3225
Via email: chris.padovani@vfa.vic.gov.au

cc. Travis Baulch

Via email travis.baulch@vfa.vic.gov.au

Dear Chris,

Re: 2022/23 Draft Further Abalone Quota Order and Size Limit Fisheries Notices

Thank you for your communication of the 9th May, requesting feedback from all stakeholders on the proposed TACC and management arrangements. This letter contains comments from the AVCZ Board.

Firstly, I thank the VFA for its continued support of the AVCZ as we transition through a challenging period that includes significant change in board composition, the aftermath of COVID, continued concerns about the status of the resource and the appointment of a new CEO. I can report that our CEO recruitment process has gone well, with a strong field of candidates and an imminent appointment. The Board is also appreciative of the position of VFA with respect to the strong commitment to rebuild abalone stocks and improved management decision-making in the central abalone zone. Please be assured that the AVCZ Board is also dedicated to rebuilding the resource, to the benefit of all stakeholders.

Before addressing the Total Allowable Commercial Catch (TACC) and management arrangements for the central abalone zone, I would draw your attention to some of the remarks contained in the current MRAG stock assessment. These include:

"Overall, the Draft Harvest Strategy indicates another decrease in TACC is required, which may continue to maintain stocks at status quo. However, it is noted that with current carry-over rules in place for the Central Zone, increases in catch between years may alter this assessment. Also, catches at the current levels are unlikely to promote stock recovery. On the evidence provided in this report, the most recent Status of Australian Fish Stocks assessment of a "depleting stock" remains an appropriate definition for stock status" (page 1).

"This (TACC setting) process has highlighted several deficiencies in the current Draft Harvest Strategy..."(page 70):

"The decision rules to determine limit, threshold and target values appear limited in their effectiveness with seven of the 11 SMUs being above the threshold range despite the assessment indicating that stocks have declined substantially over the last two decades" (page 70).

Given the trend of biomass depletion over the last decade, our view is that there is an increasingly urgent need to review the current approach to assessing and managing the fishery.

Catches at current levels set using the current harvest strategy appear unlikely to result in stock recovery. We note that setting optimal catches at the lower level of catch in each of the Harvest Strategy-suggested catch target ranges increases the likelihood of significant stock rebuilding.

Ground Floor | 23 Milton Parade | Malvern VIC 3144
ACN 607 659 709
chair@abalonevictoria.com.au

Page 1 of 3

Every year that stock depletion is not corrected, the necessary action to rebuild the stocks is made more urgent, which, in turn will require greater catch reductions.

These observations are of great concern to the Board, and, combined with the personal knowledge and experience of Board Members, have informed our feedback on your proposals.

1. A blacklip abalone TACC of 227 tonnes (234.7t with additional quota carry over) subject to industry managing its catches within the target ranges specified for each SMU.

The Board is generally supportive of this TACC recommendation and associated SMU catch distribution for this quota year. The only exception is the Flinders SMU. This SMU is historically the most important and productive area of the fishery and with considerable potential for stock rebuilding. MRAG's view of the status of this SMU is provided below:

Clearly, the status of the Flinders SMU is poor in an historic context and current measures are the lowest or among the lowest recorded for CPUE, recruit and pre-recruit abundance. While recent years have shown modest increases in recruit abundance, pre-recruit measures are currently at their lowest historical levels. Maintaining catches at current levels may be sustainable but does not appear to be promoting recovery of the stock.

We also note that the MRAG preference was to generally place SMU targets at the more conservative end of the harvest strategy ranges to reflect past declines, the present stock status and uncertainties associated with the fisheries assessment.

Based on the MRAG assessment and a number of the views expressed at the TACC forum, the Board is of the view that a larger reduction (15% rather than the current recommended 5%) for the Flinders SMU should be considered.

We note the condition that catches should be managed within the target ranges and assure VFA that every effort will be made to achieve this.

2. Greenlip abalone TACC of 3.4 tonnes

The Board is supportive of the proposed greenlip abalone TACC and accepts the requirement for the Collection of size data from greenlip harvested, together with the other conditions. We are also part way through a greenlip survey that was commenced under the previous CEO. It will be important to clarify the precise requirements for greenlip data and assessment for next year and this matter will be discussed with VFA.

3. Mandatory closures when the upper limit for a spatial management unit is reached per the attached Fisheries Notice;

We welcome the determination of VFA to implement mandatory closures when catches reach the upper limit. We also intend to review spatial management arrangements for the fishery as we believe there are improvements that can be made given the mandatory use of VMS by divers.

4. Setting of legal minimum sizes (LMLs) for blacklip and greenlip abalone

Other than for blacklip in the Flinders SMU (see below) we have no additional comments of size limits at this time. The Board is, however, mindful of a recent study by IMAS on the scientific basis for setting abalone LMLs, including experience from a range of fisheries. We intend to consider this study in the context of the Central Zone and discuss with VFA options for a thorough review of LMLs in the central zone. This review would have the objective of ensuring LMLs are correctly set to promote productivity, stock rebuilding and sustainability.

5. Increase of 3mm in the Flinders SMU to address significant concerns expressed by divers.

We are supportive of the current approach towards achieving an LML of 115mm for the Flinders SMU. Given the likely pressure on stock in this area, we would suggest consideration of a 2mm (rather than 3mm) increase this year, with a further 1mm increase in the following year. The reduction in TAC for the Flinders SMY suggested above would, in our view, be a useful and complementary measure.

Given that the Flinders and Philip Island SMUs are interconnected in terms of diver operations, we consider an increase to 114 this year for Philip Island would also be appropriate. As noted under 4. above we intend to discuss a review of size limits with VFA.

6. Carry-over

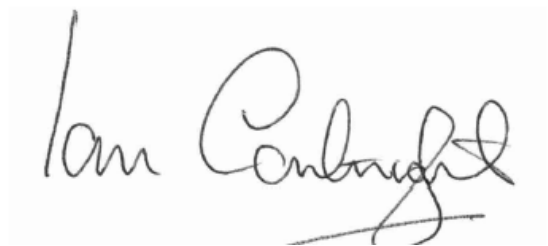
We note the agreed 2019-20 quota year carry over of 7.7 tonnes. While we are supportive of this carry over, which we believe was a result of the COVID pandemic, we would strongly suggest that the practice of carry-over of uncaught quota not be continued past this upcoming quota year (2022-23). Institutionalising general carry-over of uncaught quota is not considered appropriate in most quota fisheries. There is also the matter of ongoing uncertainty for divers and quota holders, which would be addressed by early and clear advice on the matter of carry-over. MRAG have indicated that allowing for the carry-over in the assessment increases uncertainty. Finally, and as discussed above, there is the status of the resource to consider. Shifting quota forward to future years is non-precautionary and we believe inappropriate given our responsibility to promote rebuilding of the resource.

7. Data and assessment

We will seek ways to work closely with the VFA this year and innovating the way data is collected throughout the fishery, while pursuing continual improvements in management of the resource. There appears to be a disconnect between the ACV-driven diver data collection initiative run by Duncan Worthington, the MRAG stock assessment and VMS/other data held by the VFA. We consider that better linking these sources of data to produce the best possible fisheries assessment should be a priority activity for the coming year. It would also make full use of industry data and achieve greater acceptance of stock assessment recommendations. In this regard we would like to thank Travis Baulch for his positive approach and support for rationalising and hence improving the data/stock assessment process. We believe it is very much the role of VFA to provide leadership in coordinating and improving what appears to be a somewhat fractionalised process.

In conclusion, the AVCZ board looks forward to working with the VFA, and where appropriate the ACV, to improve the assessment, management and status of the abalone resource in the Central Zone.

Yours sincerely

A handwritten signature in black ink, reading "Ian Conbridge". The signature is written in a cursive, flowing style with a long horizontal line extending from the end.

FW: 2022/23 TACC consultation Response



Kaz <Kaz@kansom.com>

To: Travis J Baulch (VFA)

Cc: Travis J Dowling (VFA)

Reply

Reply All

Forward



Fri 20/05/2022 4:17 PM

Hi Travis

This email is sent on behalf of quota owners Kansom Australia, Ocean energy Investments, MC Alameda Investments, C & Z Family Super Fund and F. Glasbrenner.

It goes without saying that our prime objective is the protection of the resource. Not only to be sustainable but to be rehabilitated.

We see no change, no improvement in the science and therefore question the VFA recommendation to further cut quota for this coming season. If we are truly determined to protect our resource we need to get the best science NOW, not when it is too late!

Since becoming Victorian Central Zone Quota Holders I personally have been critical of the TAC setting process. Our group believes that the current system of regular quota cuts sends a clear message that the so-called science has failed to halt a perceived decline in the resource and failed to rebuild. I say 'perceived' as no valid evidence is available to quantify the actual state of the resource. This in itself is a most serious failure.

The FIS has been roundly condemned by many in the scientific community as well as the dive community. Its data is considered invalid when determining biomass.

Current use of CPUE is invalid. It has not taken into consideration shifts in LML's and more importantly it has not taken into consideration the major market impacts of the last 2 years forcing a change in fishing practice targeting larger abalone. Nevertheless VFA hold (should hold) daily catch rates by diver by reef code for at least the last 20 to 30 years. An analysis would show that daily catch rates have not declined and are currently trending slightly upward. I presented such evidence in the form of data from Kansom's records (10 years) at the TAC meeting in Queenscliff. No mention of this data was included in the minutes of that meeting. Actually the minutes did not record the opposition expressed to the process. Even John Hawkins, a scientist from the recreational sector criticised the process and his comments were not mentioned in the minutes.

Statistically 20 to 30 years of daily catch data accounts for most variables and becomes one of the most valid sets of data available indicating the state of the resource.

The current reduction of 8.2 tonnes proposed by you for Cape Otway contradicts both anecdotal evidence that catches have actually improved and the fact that divers have been instructed to focus on larger fish thereby placing greater demands on their time and impacting on their CPUE.

We recommend that you make no quota cuts until you have reviewed the science and put in place a process which is as close to irrefutable as possible.

Continuing with the same process will only destroy this industry.

Kind Regards,

Kaz Bartaska

Maomao Chen

Fred Glasbrenner

20/5/2022

Central Zone TACC

Dear Travis Baulch and VFA,

I am writing to you in regards to the TACC and the outcome of the meeting.

Cape Otway:

This area is an area that always fishes well and normally meets its quota. The size limit change in this area in 2020 to 125mm was a good idea, however, as mentioned in the meeting, East of the lighthouse should be reverted back to 123mm to take some effort off from West of the lighthouse

where most of the effort is currently going. I disagree with the quota reduction due to the quota not being met in 2021 and it is still unknown whether the quota will be met this year, therefore, it seems this has not taken into account. Additionally, the effects of the size limit increase in 2020 will take 4-5+ years to see bio mass and pre-recruits increase.

Quota 52.2

Size Limit 125mm West of lighthouse, 123mm East of lighthouse

Back Beach:

In 2020 this area had a size limit increase so we will not see the effects of the size increase for 4-5+ years, as stated above. I do not understand how little things like this are not taken into account. This area I have no problem with, the population will come back with the size limit change to 119mm. In 2014 the size limit was changed to 117mm, in my opinion this has done this area a lot of damage, if it was left at 120mm it would most likely be getting a quota increase now. This is all due to a small minority of divers wanting a smaller size and these are the same divers now pushing for a size increase.

No Change

Phillip Island:

Another area where the size limits were changed in 2014. If this was not changed, this area could be in the building stages and getting quota increases. We will start to see a difference in the area in a few year's time, we just need to let the size limit increase do its work. I also believe that this area could do with some translocation of fish from other areas from the Phillip Island zone.

Quota 32.3

Prom West:

When the mainland was increased to 120mm in 2019, the 5mm increase was too large and resulted in no diving effort that year. As the fish were able to grow and were left on the bottom, the size limit change back to 115mm in 2020 after a year of no diving effort, should have been made 117mm to help maintain the area.

No Change

Flinders:

Flinders area has always caught its quota and will always do so, therefore, a 2mm increase would be sufficient here. We will see the effects of the 2mm increase in 2020 in a few year's time, as I have stated above.

Quota 23 Size Limit 114mm

Shipwreck:

No comment, looking good and size limit for this along with the weather will protect this area.

No Change

Cape Liptrap:

No change

Kilcunder:

Size limits have been changed to 110mm and 115mm, the fishing effort will be back to 110mm areas. This area would be fine where the quota is.

Quota 10.8

Prom East:

This area has always been slow, just needs some fishing effort there and will meet all the quota.

Quota 5.4

Cliffy Group:

Slow area again, not much effort goes there and a lot of the islands have a large amount of bio mass, but they just seem to not grow larger than 110mm or are just very slow growing.

Quota 4.7

Surf Coast:

I have dived there for the last 3 to 4 years and I find the fish to be good. 2021 a \$1 incentive was given by the AVCZ and more divers went there and the upper limit was reached, there was no need to have transferred quota from this area to Cape Otway a few years ago. The area fishes well when diving effort is presented.

No Change

Every year there are changes to areas with quota or sizes and the year after there is still a quota drop. In one year, we are not going to see the effects of the changes we do and we have to take that into account as there is a minimum 4-5 years before we will start to see bio mass and pre-recruits increase. We have to be more proactive in helping the industry as quota drops and size changes should not be our only defense in helping the stocks. Translocation of Abalone within the zoned areas should be a start as this will help to boost the breeding stocks in some areas that were very productive.

In my opinion there should be a time throughout the season where we need to have a closure for spawning, other fishing industries do this and it has worked very well for example, WA crays where there now is no need for a closed season over there anymore, and can be fished all year round as the bio mass has restored from the closures. If abalone farms can spawn twice a year, we could also work out when the wild stocks spawn. In my experience when I have been diving, you can see when the Abalone are grouping together and getting ready to spawn. This needs to happen sooner rather than later and will help the Abalone wild stock population for all zones.

I believe that there should be no quota drop what so ever as there has been fish left in the water due to covid.

Yours sincerely,

Owen Shannessy

Response re: Draft Further Quota Order, Draft Fishery Notice 2022/23 and TACC setting process

Travis Baulch,
Abalone Fishery Manager,
2A Bellarine Hwy.
Queenscliff. 3225
By Email: travis.baulch@vfa.vic.gov.au

Dear Travis,

It goes without saying that the prime objective of Industry stakeholders is the protection of the resource. Not only to be sustainable but to be rehabilitated. Given the progressive reduction in quota since 2001 from a level of 700 tonnes to 244 tonnes in 2022 it is time the repeated questions were answered.

- a. Is the science valid?
- b. What has the science achieved?
- c. Could it be done better?

This response is necessarily quite similar to last years' response. Nothing has changed. The so-called science remains the same and the outcome of further proposed quota cuts strengthens the view that it's 'business as usual'. On the trajectory of the last 20 years, we can predict that continuing to do the same thing over and over again will see the Industry no longer commercially viable. It is now time to stop what we are doing. We must review the science, determine the most scientifically accurate state of the resource, determine whether it can be rebuilt and then decide how we manage it.

At a cost to the industry of no less than \$10m over the last 20 years, have the scientists stabilised or rebuilt the resource? Continuous quota cuts should suggest not. However the burning questions are: What is the actual state of the resource? Are we getting value for money from our scientists?

This submission once again provides evidence of the following:

- **A deeply flawed Stock Assessment.**

- • **Erroneous utilisation of the Harvest Strategy.**
- • A very poor workshop decision making process.
- • A very poor LML setting process

Flawed Stock Assessment

The Stock Assessment relies heavily on data produced by the Fishery Independent (stock abundance) Surveys (FIS) to demonstrate trends in abalone pre-recruits and abalone recruits.

Over recent years however, a growing number of scientists with expertise in the field of abalone and fishery research have advised that the current surveys simply cannot provide the level of data required for the stock assessment or harvest strategy processes.

In a paper provided to Industry by Dr. Paul Mc Shane titled: Central Zone 2016/17 Summary Assessment, he concluded the following:

*..... The notion that you can estimate spawning stock biomass by extrapolating counts from fixed sites (as presented in the current assessment) is seriously flawed. Density of abalone on a typically heterogenous coastal reef is extremely patchy (particularly for blacklip abalone *Haliotis rubra*);*

Pre recruit metrics are clearly invalid and should not be used as a recruitment forecasting measure;

A Science Group comprising of Dr Cathy Dichmont, Dr Harry Gorfine and Dr Duncan Worthington was put together by VFA to advise the Abalone Working Group, tasked with the development of the Victorian Abalone Harvest Strategy. The Science Group produced a paper titled: Discussion Points for the Victorian Harvest Strategy Meeting May 2017: Some Options.

In the Executive Summary they wrote the following in relation to the ability of the FIS to produce indicators suitable for use in the assessment in the Harvest Strategy:

..... There are no consistent relationships among the possible indicators investigated at the scale of SMUs, and so no clear secondary indicators that can be consistently used at the scale of SMU to contribute to the assessment in the HS. Indeed, there seems to be great variability in trends and significance of the relationships with the different indicators against recruits or CPUE by SMU. This would be required to develop some empirical harvest control rules using primary and secondary indicators across the board. No clear trigger levels are shown either i.e. some cut off point above or below which there is a clear break from previous relationships.

In 2016 Dr Anthony Hart also carried out a review of the FIS in Victoria.

His 40 Page report is titled: 'Review of fixed sites surveys used by the Victorian Abalone Science Program'.

In his executive summary he states the following:

A number of issues were raised and investigated, resulting in 18 recommendations for changes to the FIS program. Significant enough issues exist in most elements, from the in-water sampling procedures to the sampling design and assessment outputs that maintaining the status quo is not considered viable.

Nearly all of Dr Harts recommendations call for the redesign of one aspect or another of the FIS, which in total would result in virtually a complete re-design to render them fit for purpose.

Further to this, as far back as 2011, the Fisheries Research Branch published a report titled 'Victorian Abalone Assessment Project'. Under the heading 'Fishery Independent Abundance' they report the following:

Analysis

Abundance estimates are effectively a measure of density, however the number of sites would need to be at least 100 fold greater to enable estimates to be scaled to abundance per reef code for instance.

It is a fact that the current number of survey sites is significantly smaller than in 2011. They now have even less ability to extrapolate data out to the scale of reef-code or SMU.

The above by no means captures all the flaws in the current stock assessment but simply covers some of the obvious.

Quota Holders collectively are charged hundreds of thousands of dollars each year for seriously flawed Stock Assessments. This money could be far better utilised by the Central Zone engaging Dr Duncan Worthington to produce annual stock assessments along parallel lines to those that are utilised in the Western Zone of Victoria. These Stock assessments utilise the valuable data from the data loggers and are considered by most, to be "gold standard".

The Central Zone under AVCZ operates one of the most comprehensive GPS data logger programs in any abalone fishery worldwide. This follows the initial development of loggers in the Central Zone of Victoria in the late 1990s, in direct response to the challenges of inadequate abundance survey data. We use three types of Data Loggers, the Boat (GPS loggers) the Diver (Depth and temperature) loggers and the shell measuring loggers.

The resistance we have encountered over the years in having the valuable logger data included in the stock assessment process is incomprehensible.

Errors in utilisation of Harvest Strategy

Toward the latter part of the Abalone Working Group sessions developing the Harvest Strategy, it was realised that the HS would not function correctly in SMUs or areas where the fishing effort had been altered or affected by recent changes in size limits or LMLs. The science group determined that threshold settings within the HS would need to be amended for those affected SMUs. This principle was accepted by the AWG, so Dr. Worthington then provided modified threshold settings to be used in SMU's where LML changes had occurred in recent years. Page 4 | 6

A number of further LMLs changes have taken place since that time, which would require further input from Dr Worthington to achieve the correct functioning of the Harvest Strategy. As presented, the Harvest Strategy does not utilise modified thresholds in SMUs where LMLs have been altered. Dr. Worthington, who was not present at the 2020/21 workshop, picked up the error immediately on perusal of the workshop report. What could exacerbate this issue even further is that the LML changes implemented the previous year were not based on any scientific data, just some opinions that LMLs in certain SMUs needed to be increased.

There was no consideration given to the change in spatial distribution of effort caused by the larger LMLs, including the detrimental effect of focussing effort onto smaller areas of larger fish, thereby preventing the spread of effort over greater area. How do we compensate for LML alterations which are not based on any calculations involving the science of abalone biology or the dynamics of spatial distribution? This important issue was raised in last years' response, and the same errors were repeated again in this years' presentation.

Overtly Negative Mindset of the Assessors

A strong example of this was evidenced when MRAG were put the following question by a workshop participant: Had any assessment had been done regarding the positive affect on the resource of less quota being harvested over the past two years due to the market devastation caused by Co-Vid, as well as the fact that an extra three months had been added into the previous quota year when the finish date was extended?

In answer MRAG responded as follows: *"this just creates further uncertainty, so we need to be more conservative when setting Optimum Targets for the fishery"*. This response demonstrates a totally un-necessary negative mindset. Clearly if less fish is taken out over a quota year and more time is added onto a quota year then the net result is a positive for the resource. This is only one example of an un-necessarily negative approach, that we see applied through the entire process.

Poor decision-making process at FRAG workshop

The continued use of un-corroborated opinions being used to make final decisions is not science. Decisions pertaining to our Fishery are required to be evidence-based, as prescribed by the VFA Act. Further to this The Terms of Reference for the FRAG are also designed to create structure to its decision-making process. The following is an extract from the FRAG terms of reference:

3.6 Observers and Advisors

Observers and Advisors can attend the meeting at the discretion of the Chairperson. Requests to attend should be sent to the chair in advance of the meeting and state the reasons for attending and any issues of particular interest.

Participation at the FRAG will be at the invitation of the Chairperson. Page 5 | 6

The FRAG has never been run in the manner prescribed. Basically, anyone turns up and speaks on anything they like in an unstructured manner. It doesn't help that there is no requirement for corroborating evidence to support their views.

Poor LML setting process

At every FRAG meeting LML changes are pushed through based simply on the loudest opinion, with no regard for research or science.

Between 2019 and 2022 several LML changes were implemented without supporting science. The Victorian Abalone Management Plan makes it quite clear that changes to the LML are to be based on Scientific data. Under Strategy 1 it states the following:

Size limits are an essential tool in ensuring sustainable harvesting of abalone, in conjunction with quota management. Size limits are best set at a level that conserve sufficient mature abalone to replenish where appropriate the available stock. The minimum legal size limits for abalone will be adjusted, based on scientific data, to reinforce the strategy to enhance stocks and simplify access.

Un-fortunately the Central Zone abalone fishery has been peppered with LML changes over the past 16 years, all on a non-scientific basis.

It is undeniable that our harvest strategy, which uses CPUE as its primary indicator, requires consistency over the years to function as designed. What this fishery requires more than anything is a sustained period of stability, where we can evolve our harvest strategy and stock assessment processes into something we can trust and all be proud of. Page 6 | 6

Recommendations

- A Black-lip TACC of 240.8 tonnes - No change to the current TAC.
- A Green-lip TACC of 3.4 tonnes.
- The Current Stock Assessment program with MRAG to be terminated.
- Industry to engage Dr. Worthington to produce a Central Zone Stock Assessment utilising the best science to determine appropriate indicators and make best use of Data from the Logger Program.
- Dr Worthington to modify the Harvest Strategy consistent with the W.Z. model which measures biomass.
- Terms of Reference for the FRAG to be strengthened to ensure an evidence/data-based approach.
- LMLs only to be altered based on proper analysis of the science of abalone biology and the spatial dynamics of abalone.
- All LMLs to remain unchanged until data is received from the current Size at Maturity and Annual Growth Increment surveys.
- All LMLs to remain unchanged until the appropriate LML benchmarks and proper LML assessment process have been put in place.
- FRAG to run process to agree on LML benchmark such as L50 +3 (or other) as determined utilising the biological science of size at maturity and annual growth increment data.
- Complete a comprehensive review of the Science and Stock Assessment methods with the view of establishing a standardised methodology covering all Victorian Zones.

Regards,
Peter Johnston
Allan Buck
Kaz Bartaska

This document has been circulated amongst quota unit holders as previously provided by us to VFA.

Good morning Travis, just reading through the latest size limits I've noticed that the flinders SMU has had a large size increase for this next season.

While I'm happy with size increases, I feel a 3mm jump is a bitter pill to swallow. Also feel that the Phillip Island SMU should share the same increases and size limit as the Flinders SMU as sometimes we do work both areas on the same day.

Do you think a jump to 114mm on both SMU's be fair for the following season and a look to move to 115mm the season after next?

This would bring the area (Flinders, Phillip Is. , and Kilcunda) under the same size limits which I feel would be better allround for enforcement and the industry .

As this would allow for us to 'chance' going down to Kilcunda SMU but if not fishing we'll be able to come back to Phillip Is. SMU.

Cheers Aaron