# Torres Strait Scientific Technical Finfish Working Group

Meeting Record

6 April 2017

Teleconference 1400-1520

Note all meeting papers and record available on the PZJA webpage:

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## Meeting Participants

**Attendance**

|  |  |  |
| --- | --- | --- |
| **Name** | **Organisation** | **Declaration of interest** |
| Selina Stoute | A/g Chair AFMA | Nil |
| Andrew Trappett | AFMA, Meeting EO | Nil |
| Dean Pease | AFMA, EO support | Nil |
| Eva Plaganyi  | CSIRO  | Research funding.Principal scientist for TSSAC project to develop a harvest strategy for the Torres Strait Beche-de-mer Fishery. |
| Tom Roberts  | DAF QLD | Nil |
| John Ramsay | TSRA | Nil  |
| Mariana Nahas | TSRA  | Nil |
| John Mathews | TSRA | Nil |
| Jerry Stephen | TSRA, Fisheries Portfolio Member | TIB licence holder. Traditional Owner, Ugar Island. Member, Fisheries Quota Management CommitteeDeputy chair TSRA |
| Michael O’Neill | QDAF | Research funding. Principal scientist for TSSAC project to develop a harvest strategy for the Torres Strait Finfish Fishery. |
| David Brewer | Upwelling P/L  | Research funding. Principal scientist for TSSAC project to develop a harvest strategy for the Torres Strait Finfish Fishery.Previous CSIRO researcher for TSSAC project investigating traditional take of finfish in Torres Strait. |
| Kenny Bedford | Industry | TIB licence holder.President - Erub Fisheries Management Association |
| Tony Vass | Industry  | Nil. Does not own or operate a licence in Torres Strait. Holds Queensland East Coast quota for coral trout and ‘other’ finfish species.  |

## Action items

|  |  |
| --- | --- |
| **Number** | **Action** |
|  | AFMA and TSRA to provide the subsistence catch calculations drawn from *Busilacchi 2008* work out-of-session and confirm the final reported subsistence catch estimate. |

## Recommendations

|  |  |
| --- | --- |
| **Number** | **Recommendation** |
|  | Total Allowable Catch for the 2017/18 fishing season to remain at or below the 125 t RBC noting that:* due to uncertain catch estimates a precautionary approach should be adopted; and
* it is unlikely that Fishery will be meeting the agreed management target of building to B60 if catch is around 150 t. The 150 t catch scenario has a 30 per cent probability of reducing the stock below current estimated levels (B40) and it is unlikely the stock will rebuild towards the agree target reference point B60.
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## Preliminaries

The Scientific Technical Working Group (STWG) noted apologies from Andrew Tobin and Andy Bodsworth. Mr Bodsworth was scheduled to Chair the meeting, however he was unable to attend due to unexpected circumstances. The meeting was chaired by Selina Stoute.

The STWG noted that purpose of the meeting was to provide advice on the likely impacts of Spanish mackerel catches exceeding the Recommended Biological Catch (RBC) of 125 tonnes for the 2017/18 fishing season.

The STWG also noted that the TSRA had tabled paper on the meeting day titled ‘*Spanish mackerel subsistence catch and the proposed Total Allowable Catch limit*’ for discussion.

## Likely stock impacts from exceeding the Spanish Mackerel RBC in 2017-18

Meeting paper titled: *Spanish mackerel TAC for 2017-18* **(Attachment A)**.

The STWG noted the Finfish Working Group (FWG) recommended at its meeting on 16‑17 March 2017 that further advice be sought from the STWG on the impact of Spanish mackerel catch exceeding the 125 t RBC for the 2017/18 fishing season. The FWG advised that based on agreed that total catches in the upcoming season may possibly range between **131-144 t,** based on:

* best estimates of subsistence take by traditional inhabitants (12 t *Busilacchi 2008)*;
* the range of TIB commercial catch estimates (9 t reported by *Busilacchi et al 2012* and 22 t reported by *O’Neill & Tobin 2016*); and
* a sunset catch allocation of 110 t.

The STWG also noted and considered the risk profile provided by Dr O’Neill which charts the probability of the stock falling below the current estimated biomass of around B40 over the next four years with five different catch scenarios ranging between 100 t and 200 t.

The STWG noted that the five catch scenario risk profiles **(Attachment A, Figure 1)** were generated from stock analysis two and the analysis indicates that:

* catch scenarios over 150 t have a higher probability of reducing the stock below current estimated levels (B40), particularly after one year;
* the catch scenario of 150 t has a 30 per cent probability of reducing the stock below current estimated levels (B40) and it is unlikely the stock will rebuild towards the agree target reference point B60; and
* catch scenarios of 100 t and 125 t have a significantly reduced probability of the stock falling below current estimated levels (B40) and it is likely that the stock will rebuild towards the agreed target reference point B60.

TSRA questioned the reliability of the risk profiles given the predicted biomass level had not changed significantly since the *Begg et al 2006* assessment (maintaining around B40) despite a reported reduction in commercial catches.

TSRA advised that with reduced commercial catches, evidence of the stock rebuilding should have been detected in the same way the risk profiles forecast the stock rebuilding with catch scenarios of 100-125 t. TSRA also questioned whether or not the CPUE data series was reliable given that the CPUE data comprised only 3-4 operators. AFMA noted that the CPUE time series includes more than 3-4 operators.

Dr O’neill advised that:

* the updated stock assessment includes new data and is not strictly comparable to the Begg *et al* 2006assessment; and
* the standardised CPUE index has remained quite flat in recent years (while catch falls the standardised CPUE index has remained relatively constant) and it is unclear as to why this is occurring. Recruitment variation may explain some of the trends, however the extent of variation is uncertain. Similar uncertainties are being experienced for Spanish mackerel stocks on the east coast of Queensland.

TSRA recommended that the STWG consider the likelihood of catches actually being taken when considering overall risk (noting that risk is comprised of both consequence and likelihood). TSRA advised that on their review of *Busilacchi 2008* they found the report estimated subsistence catch for Spanish mackerel to be 7.86 t and not 12 t as presented at the FWG meeting on 16-17 March 2017.

AFMA advised that the previously agreed catch estimates for the various sectors are based on the best available information and that any alternate estimates must be evidence based. The STWG noted that when there is uncertainty around catch information a precautionary approach must be taken, particularly if considering potentially less conservative catch estimates.

The STWG **agreed** for AFMA and TSRA to provide the subsistence catch calculations drawn from *Busilacchi 2008* work out-of-session and confirm the final reported subsistence catch estimate.

Concern was raised that the *Busilacchi* work only included catch estimates for Mer, Erub and Ugar; however Spanish mackerel are caught by all Torres Strait communities and also by recreational fishers. AFMA agreed that further work is required to improve the catch estimate so it may be considered representative of catch for the region.

AFMA noted that it will be a high priority for the future RAG to provide advice on data needs and research priorities for the Fishery, building on the recommendations from the updated stock assessment and previous meetings of both the FWG and STWG. This includes investigating possible cost-effective options for developing a recreational catch estimate.

The working group noted the following comments from members:

* Catches should be managed in accordance with the best available science, if the science is showing catches should be 125 t then this is what the Fishery should stick to. Catches should not be increased above what the assessment is recommending.
* The risk profile indicates that the risk remains flat at 150 t, so having catches above 125 t but below 150 t may be acceptable for the next year only.
* Given the level of uncertainty raised even about the standardised CPUE data and if catch estimates are more uncertain than has been accounted for, the risk is likely to be larger than what is shown in the risk profiles **(Attachment A, Figure 1)**. From a scientific point of view there should be a more precautionary approach taken, the STWG agreed that 125 t is the recommendation at the time and it is based on the best available science.
* In light of uncertainty the precautionary principle should be applied.
* TIB finfish licence numbers have increased from 136 to 270. This suggest at least some level of increased TIB interest in the Fishery, this adds to the uncertainty in the estimates of likely TIB catch.
* Not taking the precautionary principle is in no-ones interest. Taking more than the RBC provides short-term gain with potential consequences. Even if the risk likelihood is low it would be unwise to go against the best available science and scientifically valid catch estimates. We need to first improve the data to support increasing the TAC.
* Effective and timely information sharing is required between the various advisory groups for the Fishery (FWG, STWG and the TSRA Quota Management Committee).
* Effective catch monitoring for the Fishery is required as a matter of a priority.
* It would be helpful for future meetings to be provided the figure of the total leased catch for each fishing season. The STWG noted that TSRA would need to review its confidentiality arrangements before providing this information.

Having regard for the views of all members the STWG **recommended the total allowable** catch for the 2017/18 fishing season remain at or below the 125 t RBC noting that:

* due to uncertain catch estimates a precautionary approach should be adopted; and
* it is unlikely that Fishery will be meeting the agreed management target of building to B60 if catch is around 150 t. The 150 t catch scenario has a 30 per cent probability of reducing the stock below current estimated levels (B40) and it is unlikely the stock will rebuild towards the agree target reference point B60.

## *Spanish mackerel subsistence catch and the proposed Total Allowable Catch limit* (TSRA paper)

Meeting paper titled: “*Spanish mackerel subsistence catch and the proposed Total Allowable Cath limit*” **(Attachment B)**.

TSRA advised that the paper was to be taken as read. No further discussion was had on the paper.