Australian Government
Australian Fisheries Management Authority

Southern and Eastern Scalefish and Shark Fishery - Great Australian Bight Resource Assessment Group (GABRAG)

Meeting Minutes

Date: 23 October 2015
Venue: AFMA, Canberra

Attendance

Members	Membership
Mr Lance Lloyd	Chair
Mr Jeff Moore	Industry Member
Mr Jim Raptis	Industry member
Dr Ian Knuckey	Scientific Member
Mr Andy Moore	Scientific Member
Dr Marcus Finn	AFMA member
Ms Giulia Porro	AFMA, RAG EO
Invited participants	
Dr Malcolm Haddon	Assessment scientist, CSIRO
Apologies	
Ms Marcia Valente	Industry member
Professor John Tisdell	Economic member

Agenda Item 1 – Preliminaries

Agenda Item 1.1 – Welcome and introductions / Apologies

1. Mr Lance Lloyd (Chair) opened the meeting at 9.05 am (AEST) and welcomed members.

2. The RAG noted apologies from Dr John Tisdell and Ms Marcia Valente.

3. Dr Rayns was invited to the RAG to give an overview of the strategic projects happening at AFMA. Dr Rayns and the RAG informally discussed the following matters:

    - Efficiency - AFMA is continuously becoming more efficient by increasing the use of technology (such as implementing e-monitoring) and moving towards self-service portals for its stakeholders.
    - Markets - AFMA understands industry is constantly searching for new markets and numerous fisheries are doing this by obtaining MSC certification. Another example of this is the South east Trawl Fishing Industry Association partnership with Coles and WWF. AFMA expects this trend to continue with other fisheries.
    - Co-management – AFMA is keen to keep pursuing co-management options with fishery industry associations. This will increase trust and confidence in the public.
    - Individual accountability: With new technologies becoming available, attention can be shifted on the individual rather than impacting the whole fishery.
    - One fishery management plan - AFMA currently has 12 fishery management plans which is expensive and inefficient. AFMA is thinking of shifting to a single plan model which ensures the status of all grants and SFRs and only has one set of conditions that can satisfy all fisheries. This will lead to greater flexibility amongst fisheries and sectors as well. It is expected that this process will take around five years.

- AFMA staffing profile – As new technologies are rolled out and industry take up a more responsible role for their fisheries, the AFMA staffing profile is decreasing.
- Profitability of fisheries and under-caught TACS – The cost of harvesting fish in Australian water is quite high and as the GAB is in such a remote part of Australia it is often economically in-efficient . Mr Raptis made the point that it is important to bring in foreign vessels under foreign flags utilising foreign crew. However public acceptability is needed.
- Risk catch cost – AFMA believes that there is currently no fishery that applies risk catch cost particularly well.
- Data collection– With the advent of newer technologies, AFMA and industry need to re-consider how data collection occurs and what the best way to verify it is. Industry should continue to be involved in data collection (as the data collection is extremely useful in assessments) however public acceptability is important. Furthermore consideration should be given to the need for stock assessments and multi-year TACs.
- Protected species – Protected species interactions and mortalities continue to be an issue. The Great Australian Bight (GAB) and the South East Trawl (SET) are currently focusing their attention on seabirds and AFMA is pleased to see industry is taking the lead on this. It is important to have tailored options for different vessels and AFMA should play a role in verifying and testing the devices and techniques as well as monitoring.

4. In summary, some of the issues to be raised and discussed with the CFA are: by-catch reduction and discard utilisation, engaging foreign boats and crews to ensure profitability of the boats and re-balancing open and closed areas of a fishery.

Dr Knuckey joined the meeting at 9.55am.

Agenda Item 1.2 – Declarations of interest

5. The RAG followed the conflict of interest declarations as outlined in the revised Fisheries Administration Paper (FAP12). A list of the full conflicts of interest declarations made by the RAG members and other participants is provided at Table 1 below.

6. Mr Raptis and Dr Knuckey both left the room in turn, while the RAG considered their declared conflicts of interest. The RAG agreed that their expertise in the fishery warranted them being allowed to participate in the meeting.

Table 1: Members' and invited participants' declared interests as at 23 October 2015.

Participant	Interest Declared
Mr Lance Lloyd, Chair	Director of Lloyd Environmental Pty. Ltd., SESSFRAG and GABMAC member, Research Fellow, Federation University Australia. Interest in projects involving fish and fisheries but not in the GAB. No pecuniary interest.
Dr Marcus Finn, AFMA Manager	Employed by AFMA, no pecuniary interest or otherwise, AFMA Member on Shelf and

Participant	Interest Declared
	Slope RAG.
Ms Giulia Porro, AFMA, GABRAG EO	Employed by AFMA, no pecuniary interest or otherwise.
Mr Jeff Moore, Industry Member, GABIA	Great Australian Bight Industry Association (GABIA) EO, board member of Commonwealth Fisheries Association, member of GABMAC, invited participant of SEMAC, invited participant of SESSFRAG, industry liaison officer for Commonwealth Marine Reserve consultative group, no pecuniary interest.
Mr Jim Raptis, Industry Member	Shareholder and employee of Raptis, 4 licences in GAB. GAB boat and quota SFR holder.
Dr Ian Knuckey, Scientific Member	Director Fishwell Consulting, interest in sources of funding for research purposes, research work for GABIA agent of electronic logbook systems, scientific adviser to GABIA and SETFIA, Chair of Australian Seafood Co-products, scientific member on various SESSF RAGs, Squid RAG and Scallop RAG, involved in undertaking the Fishery Independent Surveys for the SET and the GAB, involved in the SESSF Review, involved in various oil and gas projects undertaken in the area of the GAB and is involved in the Western Gemfish project, shortlisted for the AFMA observer market testing EOI. PI for project for utilizing GAB bycatch. Selected to provide scientific advice for the Gulf of St Vincent Prawn fishery.
Mr Andy Moore, Scientific Member	Employed by ABARES - Interest in sources of funding for research purposes, involved in the Gemfish stock structure project and the Western gemfish Tier 1 assessment, research fellow at University of Queensland, no personal pecuniary interest.
Dr Malcolm Haddon, Invited Participant	Employed by CSIRO – Interest in sources of funding for research purposes however, salary does not depend on this membership, involved in the SESSF

Participant	Interest Declared
	Review, Sub Antarctic RAG, Sub Antarctic MAC and Northern Prawn RAG.

Agenda Item 1.3 – Adoption of agenda

7. The RAG adopted the draft agenda.

Agenda Item 1.4 – Actions arising from previous meeting

8. The RAG reported on outcomes arising from action items from the previous GABRAG teleconference meeting. A list of outcomes is provided at Attachment A.

Agenda Item 2 – Management items

Agenda Item 2.1 – Managers update

9. Dr Finn presented the written AFMA manager's report. The RAG noted the following:

- Change in Minister - Assistant Minister The Hon. Anne Ruston has replaced Senator The Hon. Richard Colbeck.
- Observer market testing – Following market testing of the observer program, AFMA has decided to conduct a limited tender process with those applicants who have been shortlisted for the observer.
- 2015/16 season catch and effort - 1% of the TAC for bight redfish has been caught so far and 10% of the TAC for deep water flathead has been caught so far. 2015 effort data is not included in the graphs as it is incomplete. Overall effort data matches the pattern of effort for the main method in the fishery (bottom otter trawl). Effort has increased since 2010 but decreased slightly in 2014. Low catches of trigger species mean that trigger levels have not been met.
- Monitoring and data collection – 2015 is a crew collected year (alternates with ISMP) and for the first half of 2015 the number of crew collected samples is low.
- TEP interactions - Two shy albatrosses and one shearwater have been reported as interactions in Q4 2014, Q1 and Q2 2015.
- Seabirds –SETFIA, GABIA and AFMA are currently working together to propose a series of interaction reduction measures (including offal management techniques) to meet an appropriate reduction target for seabird interactions and further reduce seabird interactions.
- ABARES status report – No changes to the GAB.
- ERA/ERM – The current ERA/ERM revitalisation project is focussed on improving species based ERA with potential changes to ERA for habitats and communities being prioritised to a later date.

Agenda Item 2.2 –Industry update

10. Mr Jeff Moore and Mr Raptis presented the GABIA/industry report. The RAG noted the following:

11. There has been a significant amount of effort removed from the fishery due to boat breakdowns (around 25%).

12. Flathead catches dropped to their lowest level between February and April and this coincided with a seismic survey. Catches recovered in May and this coincided with the end of the seismic survey. Catches are currently going OK (over 1 tonne a day) and prices for flathead are currently around $10 per kilo.

13. The FV Territory Pearl is currently fishing as a prawn trawler in the NPF, the FV Silver Phoenix has been out of action for three months. This means that most weeks there has only been one boat coming in per week.

14. Industry has been working to improve the quality of the fish delivered to markets by undertaking early plate counts and adopting techniques such as freezing fish as quickly as possible. This has improved the quality of the fish, improving demand and consequently prices.

Action Item: Dr Knuckey to send Mr Raptis some literature on plate counts.

15. Fuel prices have decreased in the GAB from 98 cents to 68 cents and this has had a positive impact on industry profitability. For two trawlers the decrease in fuel price is worth about half a million dollars. Furthermore the fuel bills have been reduced by the introduction of thinner and finer mesh on the nets. This reduces drag and reduces fuel consumption. As the twine gets thinner, the diamond diameter gets larger which means better water flow which improves quality of the fish (the fish come aboard alive).

Agenda Item 3 – Tier 1 – Bight redfish

16. Dr Haddon presented the updated Tier 1 assessment for bight redfish. The stock assessment updates the 2011 assessment to provide estimate of stock status in the GAB.

Input data

17. The data available this year were more extensive than were available for the previous assessment.
18. The ISMP provided new samples of age distribution data as well as length frequency data. The fishery independent survey (FIS) provided another data point for the fishery independent relative abundance index and the length frequency samples from the FIS were included for the first time.
19. Mr Raptis requested that Mr Haddon examine CPUE data either side of the 2015 FIS, to see whether there was a shift of fish to shallower waters due to the seismic survey.

Action Item: Dr Haddon to examine CPUE data on either side of the 2015 FIS.

20. The otolith samples taken during the FIS were processed but were unable to be separated from those taken in the ISMP sampling, they were thus combined in this preliminary base-case analysis but will be separated in the final version. Five years of on-board length frequency data were also made available from crew collected samples. All of these data were influential in changing the outcome from the assessment from those predicted in 2011.

21. The new data and related additional changes were added sequentially to the old assessment so as to better characterize which data series was driving any observed changes to the predicted biomass and fishing mortality time series.

22. Dr Haddon noted that length frequency data can be unreliable because long lived animals can be the same length from age 20 to 55. Dr Haddon noted the importance of collecting age information and suggested that otoliths from 2005 – 2009 be aged. The RAG noted the importance of continuing to collect and age otoliths.

23. Dr Haddon questioned whether otoliths from the 2005 FIS are available and could be aged.

Recommendation: The RAG recommended continuing otolith collection and ageing.

Action Item: Fishwell to send any otoliths from the 2005 to Fish Ageing Services to be aged.

<u>Catch and CPUE data</u>

24. There were four years of extra catches to include in the model as well as four years extra standardized CPUE data (2011-12 – 2014-15). Both catches and CPUE have declined in recent years.

25. Dr Haddon noted there had been a small change in depth behaviour (could be due to a shift of the stock to the east).

<u>New base case</u>

26. Twelve sequential changes were made to the 2001 assessment. Some had only very minor effects, others had rather large effects.

27. The overall result was that most scenarios that had an influence on the outcome led to declines in the estimated unfished spawning biomass. The reduction in biomass implied that the catches that had been removed imposed a higher fishing mortality rate than previously suggested so the final depletion level ended up closer to the target reference point of 41 per cent.

28. The use of the more recent version of SS3 led immediately to reduced (improved) variation (a smaller CV), which continued to decline as more data and options were added.

29. The relatively low catches in the most recent years have led to a small degree of stock building since 2009/2010 or 2010/2011.

30. The overall fit to the combined ageing data was relatively good. Within the length frequency composition data there were some years of excellent fit and some with relatively poor fit. To obtain an unbiased fit to the FIS length frequency composition data it was necessary to have a separate selectivity curve.

31. The length frequency composition data from the FIS were larger on average than those fish from the commercial fishery. Bight redfish are only selected at about 25cm and above implying that they can be 10 years or older before they are strongly selected by the fishery. This is about the same size and age at which they mature, which implies there is a proportion of the mature population not selected by the fishery and this should give the population an extra degree of resilience.

Conclusions

32. Previous estimates of B_0 and stock depletion have been recognized as being uncertain.

33. A further four years of data were added, plus the introduction of FIS ages and length frequencies, and industry length frequency data.

34. The new data are all consistent and have been informative about B_0 and stock status.

35. The base-case estimate of B_0 is 5441 tonnes and the base-case estimate of depletion is 63 per cent.

Next steps

36. Prior to the second GABRAG meeting, Dr Haddon will be applying some sensitivities to the model including natural mortality, altering the relative emphasis on different data streams and removing the last FIS abundance index.

37. Dr Knuckey suggested only using FIS relative abundance indexes from trip 2 of the 2015 FIS.

38. The RAG thanked Dr Haddon for his work so far and look forward to receiving the final base case at the second GABRAG meeting later in the year.

Agenda Item 3 – Western gemfish

39. Mr Andy Moore from ABARES gave a presentation on the western gemfish stock structure project currently underway.

40. The final report is not yet available and the interpretations of the results are not considered to have been finalised.

41. Gemfish are caught in the Commonwealth and GAB trawl fisheries and are managed as a western and eastern stock bounded by a line at Lat 47°S.The western gemfish Tier 1 has

been hampered in the past by fisheries in the GAB and the SET having different fishing histories and when analysed separately gave difference results compared to treating both fisheries as a single stock. An earlier study by Colgan and Paxton (1997) indicated that there was clear separation between eastern and western stocks, though it wasn't clear where the boundary between the two was. The study used limited samples in some locations and older genetic markers and it was unclear if these differences were biological or a sampling artefact. The current study was designed to 1) replicate the original 1997 study using some of the same genetic markers (mitochondrial D-loop control region) and biological samples (stored at the Australian Museum); 2) collect additional contemporary samples from across the distribution and screen with modern day markers with much high levels of discriminatory power (microsatellites and Single Nucleotide Polymorphisms SNP); and collect some information on the spawning locations of western gemfish. The use of genetic information to determine stock structure is required to allow development of sound management strategies to underpin sustainable management of the gemfish resource.

42. Gemfish were sampled off:
    - Great Australian Bight
    - Kangaroo Island
    - Robe – Beachport
    - Portland
    - Western Bass Strait
    - Southwest Tasmania
    - East coast between Sydney and Flinders Island.

43. Methods
    - Used mitochondrial (mtDNA D-loop), and nuclear DNA (microsatellites, SNP) markers
    - Collected information on gonad stage and length frequency.

44. Summary from nuclear genome analyses:
    - confirmed genetically distinct east and west stocks
    - defined location of the boundary between east and west with an overlap zone (hybrid zone) off western Bass Strait
    - identified migrant fish in both east and west (i.e. western fish in the eastern stock and vice versa). Migrants carried the nuclear DNA from one population and the mtDNA from the other. Given the high level of genetic separation between both populations these data suggest that the migrants are first generation hybrids that cannot back cross with either parental stock.

45. Summary from mtDNA analyses:
    - The project found similar results to the nuclear DNA but with additional stocks off western Tasmania and western Bass Strait. However, further analysis suggests that two stocks are more likely, with the same stock boundaries as the nuclear DNA.
    - Comparison of contemporary and historical samples demonstrates changes in haplotypes (not just haplotype frequency but fixed differences) over the last 25 years. The likely explanation for this pronounced change is genetic drift, which suggests that the genetically effective population size in some gemfish populations is far smaller than expected. This result is not expected in large populations like gemfish and is usually only

seen in very small populations. These data were analysed to determine the effective population size of several gemfish locations. The results did indeed show small effective population sizes in some locations. Genetic drift is caused by a small effective population size. The population decline observed as a result of historical heavy fishing in the east may explain this change in haplotypes, though there may be other reasons. Further investigation seems warranted.

46. Gonad and length frequency analyses:
    - based on limited gonad staging data there is some evidence for spawning populations off Kangaroo Island and the west of the Great Australia Bight
    - there is limited evidence of spent fish off western Tasmania.

47. Project summary:
    - there appears to be several reproductively isolated populations of gemfish
    - the Portland/Robe and GAB fisheries should be managed as a single stock. Western Tasmania and the east coast should be managed as another stock
    - there is evidence for hybridization between both stocks but not backcrossing with parental lineages
    - there appears to be evidence for a small effective population in some gemfish stocks.

Agenda Item 5 – GAB orange roughy

48. The RAG discussed orange roughy in the GAB and highlighted the following key points:
    - In the 2014-2015 season, two scientific permits were issued and approximately 12,300 kg of orange roughy were caught under the research quota.
    - No scientific permits have been issued for the 2015-2016 season and no research quota has been taken.
    - No orange roughy has been caught under the bycatch TAC for the 2015-2016 season.

Recommendation - The RAG recommended maintaining a research allowance of 200 tonne for GAB orange roughy research zones for 2016-2017. The RAG agreed that it is important to continue collecting biological information.

Recommendation – The RAG recommended maintaining a 50 tonne bycatch TAC for the orange roughy (Albany and Esperance) quota zone for the 2016-2017 season as it poses little or no risk to the stock.

49. The RAG discussed the importance of applying for scientific permits in advance as the applications were submitted quite late in 2014.

Action Item: GABIA to inform industry that scientific permit applications for orange roughy need to be submitted by May and last several months once granted.

50. The RAG agreed that if the interest in GABTS orange roughy increases, the RAG should consider a research project to analyse historical orange roughy data available.

Action Item: Dr Knuckey to check whether Fishwell holds any orange roughy otoliths and send them to Kyne – Fish ageing services.

Action Item: Mr Jeff Moore to send AFMA any length frequencies.

Mr Andy Moore left the RAG meeting at 4pm.

Agenda Item 6 – Research

Agenda Item 6.1 - –Update on GAB Annual research plan

Dr Ian Knuckey declared a conflict of interest with two FRDC research projects related to the GABTS. The RAG noted that the agenda item is for information only and agreed that Dr Knuckey should be a part of the discussion.

51. The RAG noted the GABTS research priorities identified for 2016-2017 that were submitted to the AFMA research team and presented to the AFMA Research Committee (ARC) and ComFRAB at their October meeting. There were no newly identified priorities for the GABTS.

52. ComFRAB supported the EOI relevant to the GABTF Identification of factors which impact on the profitability of individual operators, fishery sectors and the GABT Fishery. FRDC will advise successful applicants following FRDC Board consideration of proposals at its mid November meeting with applicants required to submit their proposals by mid Feb for final consideration by ComFRAB at its March 2016 meeting.

53. The RAG confirmed that any research to determine the impact of seismic surveys on target species would be considered only once the economics of the fishery improved.

54. The RAG confirmed that a FIS will be scheduled only once the review of the FIS project has been completed.

55. The RAG discussed whether a Tier 1 stock assessment is needed for western gemfish and agreed that it would consider this research priority at next year's GABRAG research meeting.

56. Mr Raptis wished to discuss the issue of decreased flathead catches between February and May 2015 as it is the most economically important species for the GABTS. The RAG discussions highlighted the following points:

    - The catch rate data for flathead should be further investigated and in particular compare the February-May 2015 catch compared to 2016 and previous years.
    - It is important to further analyse catch standardisation data for deepwater flathead to understand whether the catches in the 2015 months were an anomaly.
    - In particular, it would be interesting to compare the catch standardisations for years prior to 2015 as well as 2016.
    - The data will not be used to make a decision as to whether a FIS should be run.

Action Item: Mr Haddon to characterise flathead catch rate standardisations and break down the data by month to have a look at the variability in catches.

Action Item: Mr Haddon to compare flathead catch rate standardisations for early 2015 and early 2016.

Agenda Item 6.2 –GAB Australian Bight Research Program

57. The RAG noted the fact sheets from the GAB Australian Bight Research Program provided and that there are a few fisheries related projects going on.

Agenda Item 7 – Close of meeting

58. The RAG wished to thank Dr Rayns for dedicating time to GABRAG.

59. CSIRO and the RAG also wished to thank industry for providing high quality crew collected data.

60. The Chair thanked everyone for their participation and closed the meeting at 16.45.

61. The next GABRAG meeting will be held on 23 November in Adelaide.

Action Items arising

Action Item	Action	Action person
1	Dr Knuckey to send Mr Raptis some literature on plate counts.	Ian Knuckey
2	Dr Haddon to examine CPUE data on either side of the 2015 FIS.	Malcolm Haddon
3	Fishwell to send any otoliths from the 2005 to Fish Ageing Services to be aged.	Ian Knuckey
4	GABIA to inform industry that scientific permit applications for orange roughy need to be submitted by May and last several months once granted.	GABIA
5	Dr Knuckey to check whether Fishwell holds any orange roughy otoliths and send them to Kyne – Fish ageing services.	Ian Knuckey
6	Mr Jeff Moore to send AFMA any orange roughy length frequencies.	Jeff Moore
7	Mr Haddon to characterise flathead catch rate standardisations and break down the data by month to have a look at the variability in catches.	Malcolm Haddon
8	Mr Haddon to compare flathead catch rate standardisations for early 2015 and early 2016.	Malcolm Haddon

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Attachment A: Actions arising from GABRAG teleconference 29 July 2015

Item	Meeting	Action	Actioning member	Status
1	July 2015	Dr Malcolm Haddon to provide a list of questions to Mr Jeff Moore to request from the seismic survey acquisition company. This will allow for an analysis of fish catch rates before and after the resource survey took place.	Dr Malcolm Haddon & Mr Jeff Moore	Complete
2	July 2015	Dr Ian Knuckey to include details of the seismic survey vessel operations (overlay of location and timing if possible) and a mention of potential impacts on catch rates in the final report.	Dr Ian Knuckey	Complete
3	July 2015	Dr Ian Knuckey to have a look at effect of sea temperature on the resource survey relative biomass estimates when finalising the report.	Dr Ian Knuckey	In progress
4	July 2015	The RAG to provide any other comments on the resource survey draft report by COB 30 August 2015 to allow Dr Ian Knuckey to finalise the report.	All	Complete
5	July 2015	Dr Ian Knuckey to provide final FIS data to AFMA as soon as possible, but at least one month prior to the October GABRAG meeting.	Dr Ian Knuckey & AFMA (data team)	Complete
6	July 2015	AFMA to provide crew-collected data (as well as logbook and observer data and FIS data) to CSIRO as soon as possible, but at least one month prior to the October GABRAG meeting.	AFMA (data team)	Complete
7	July 2015	CSIRO to examine crew-collected data closely and advise the RAG if more than 10% of the data is unsuitable to use in the stock assessment or if the data needs to be 'cleaned'.	Dr Malcolm Haddon	Complete - 2009 data has been excluded
8	July 2015	Dr Malcolm Haddon and Dr Ian Knuckey to review existing age data and determine whether it is sufficient for the stock assessment. If it is not, otoliths collected through the FIS and port samples could be aged, but Fish Ageing Services needs to be advised asap in order for the data to be with CSIRO in time for the stock assessment.	Dr Malcolm Haddon & Dr Ian Knuckey	Complete - Kyne sent through some additional otoliths.
9	July 2015	AFMA to ensure that the AFMA database project look at how to incorporate additional sources of data (eg. the FIS data).	AFMA	In progress
10	July 2015	CSIRO to prepare a thorough data characterisation (spatial and temporal) for	Dr Malcolm Haddon	In progress -

		both target species prior to doing the standardisation for the bight redfish stock assessment and review of the catch rate standardisation for deepwater flathead.		Catch rate standardisations to be done at next GABRAG meeting in November 2015.
11	July 2015	Dr Malcolm Haddon to have a detailed look at discard rates for western gemfish and provide a break down by strata for consideration at the October GABRAG meeting.	Dr Malcolm Haddon	In progress
12	July 2015	Dr Malcolm Haddon to develop two CPUE standardizations for western gemfish for consideration by GABRAG in October – one with discards and the other without discards.	Dr Malcolm Haddon	In progress
13	July 2015	ABARES to present the outcomes of western gemfish research at the October GABRAG meeting.	Mr Andy Moore	Complete - Presentation at GABRAG meeting 23 October
14	July 2015	Mr Andy Moore to let Mr Jeff Moore and Mr Jim Raptis know what samples he needs and where from (latitude and longitude).	Mr Andy Moore & Mr Jeff Moore & Mr Jim Raptis	Complete
15	July 2015	AFMA to develop a scope for a review of the GABTS FIS and circulate to GABRAG for comment ASAP.	AFMA	Complete – project scope sent to GABRAG on 14/08/15
16	July 2015	AFMA to clarify how a review would be funded and let GABIA know.	AFMA	Complete – email sent to GABRAG on 14/08/15
17	July 2015	AFMA to circulate the final scope for the project *Examining factors which impact on the profitability of the GAB* to the RAG.	AFMA	Complete – scope sent to GABRAG with minutes on 26/08/15
18	July 2015	AFMA to clarify where the ERA with respect to habitats and communities	AFMA	Complete –

		work is up to and if there are any potential research priorities for the GAB flowing from that work.		update in Managers report
2	Nov 2014	AFMA, CSIRO, GABIA and Fishwell Consulting to negotiate on the form future data summaries will take based on requests from the RAG and what is covered under the current contract with CSIRO.	AFMA, GABIA, CSIRO and Fishwell Consulting	In progress
11	Nov 2014	Dr Malcolm Haddon to work with Dr Robin Thomson to check where early length data and length data from 2006-08 is and why it is not included in the data summary	Dr Malcolm Haddon	In progress, Malcolm to look at by next GABRAG meeting
14	Nov 2014	Dr Malcolm Haddon to look at catch composition of Western Gemfish shot next year.	Dr Malcolm Haddon	In progress, Malcolm to look at by next GABRAG meeting
17	Nov 2014	Dr Marcus Finn to inform AFMA Executive of GABRAG's intention to categorise discards.		In progress – the potential for categorizing discards is also being explored more broadly for SESSF trawl sectors. It has been discussed at SESSFRAG, and more recently in Slope/ShelfRAG where concerns were raised. The proposal is still being progressed at a SESSF scale
18	Nov 2014	AFMA to follow up the legal requirements of reporting of discards and that appropriate CAAB codes are available for the proposed discard groupings.	AFMA	
19	Nov 2014	AFMA and GABIA to update the Boat Operating Procedures Manual with agreed discard categories and produce a one pager of instructions to crew on discard reporting.	AFMA/GABIA	
20	Nov 2014	Fishwell Consulting to update Olfish for appropriate discard categories.	Fishwell Consulting	

				and is still to be finalized. GAB groupings are ready to be implemented in elogs but worth reviewing groups with wider SET project and e-log improvement program.
22	Nov 2014	ABARES to consult with Professor John Tisdell about what they intend to do with the economic survey and what information they intend to collect.	ABARES	Not complete
23	Nov 2014	AFMA to obtain economic data incorporated into next RAG in the form of a data summary	AFMA / ABARES	Not complete – AFMA no longer has an economist; AFMA will investigate whether the data can be summarized from other sources and incorporated into the ABARES fishery economic survey.
26	Nov 2014	Professor John Tisdell to obtain a summary of Sean Pascoe's economic work of the Great Australian Bight.	John Tisdell	Not complete