

OCEAN TRAWL MANAGEMENT ADVISORY COMMITTEE MEETING

AGENDA

9 and 10 DECEMBER 2010

9AM

NATIONAL MARINE SCIENCE CENTRE
COFFS HARBOUR, NSW

Chairperson

Neil Ward

Management Advisory Committee Representatives

Shane Castle	Region 1 – upper north coast
Robert Toyer	Nominee for region 2 – Clarence region
Darren Ward	Region 3 – north coast
Greg Parker	Proxy for region 4 – central coast
Richard Bagnato	Region 5,6,7 – metropolitan, upper south coast and lower south coast
Paul Bagnato	Regions 5,6,7 – metropolitan, upper south coast and lower south coast
Peter Plunkett	Recreational representative
Anissa Lawrence	NCC nominee for conservation
Fiona Hill	Director-General's nominee

	Welcome and Apologies	Chairperson
	Agreement on agenda for 9 and 10 December 2010	Chairperson
	Confirmation of draft outcomes for OTMAC meeting on 18 & 19 May 2009	Chairperson
	Correspondence received and sent	Chairperson
1	Business arising from the previous meeting	Chairperson
2	Updates	All members
3	Deepwater dogfish	CSIRO
4	Trip limits for certain species of dogfish	I&I NSW
5	Workshop: Development of consultation paper on reforms for the Ocean Trawl Fishery	I&I NSW
6	Other Business	
7	Chairpersons summary	Chairperson

Chairperson**Issue**

Welcome and apologies

Outcome**Chairperson****Issue**

Agreement on agenda

Background

Notice of the meeting and a request for agenda items was circulated to committee members, Regional Industry Convenor, Fishermen's Co-operatives, other interested parties and regional offices of Industry & Investment NSW on 12 November 2010.

Outcome**Chairperson****Issue**

Confirmation of draft outcomes from the previous MAC meeting on 18 & 19 May 2009.

Background

Draft outcomes for the OTMAC meeting on 18 & 19 May 2009 were circulated amongst MAC members for comment prior to being distributed to Regional Industry Convenor, Fishermen's Co-operatives, other interested parties and regional offices of Industry & Investment NSW. Comments were received from Mr Harrison, industry representative, and the outcomes were amended accordingly.

Outcome**Chairperson****Issue**

Correspondence received and sent

Background

A list of correspondence received is attached for the committee to note.

Outcome

OTMAC CORRESPONDENCE LIST

Date	From	Issue	To	Action
12 May 2009	I&I NSW	Industry Development Initiative	OTMAC	Information
22 May 2009	I&I NSW	Emergency fishing closures	OTMAC	Information
22 May 2009	I&I NSW	Emergency fishing closures – round 2	OTMAC	Information
22 May 2009	I&I NSW	Media release regarding emergency fishing closures	OTMAC	Information
5 June 2009	I&I NSW	Extension to temporary fishing closures	OTMAC	Information
11 June 2009	I&I NSW	OTMAC comment on proposed Marine Parks Regulation 2009 and RIS	OTMAC	Comment
15 June 2009	MPA	Marine Parks Advisory Council membership call for Expression of Interest	OTMAC	Information
1 July 2009	I&I NSW	Ocean Trawl MAC – Draft Outcomes May 2009	OTMAC	Comment
2 July 2009	I&I NSW	UN Praises Australian prawn fisheries	OTMAC	Information
13 July 2009	I&I NSW	Out of Session Agenda Item – Prawn Counts and Incidental Catch Ratios	OTMAC	Comment
13 July 2009	I&I NSW	Seafood CRC – Marketing Master Class	OTMAC	Information
13 July 2009	I&I NSW	Industry letter	Chair	Information
16 July 2009	John Harrison	Amendments required for OTMAC Outcomes	I&I NSW	Action
31 July 2009	I&I NSW	OT MAC Chairs Report	Chairperson	Comment
17 Aug 2009	Biosecurity Australia	Biosecurity Australia Advice – Prawns and Prawn Products Import Risk Analysis Update	OTMAC	Information
8 Sept 2009	I&I NSW	Out of Session (OOS) Agenda Item – EIS for marine fish stocking in NSW	OTMAC	Comment
8 Sept 2009	I&I NSW	OOS Agenda Item – Dogfishes	OTMAC	Comment
9 Oct 2009	I&I NSW	OOS Agenda Item – Wobbegong Sharks	OTMAC	Comment
13 Oct 2009	I&I NSW	Threatened species listing – public comment period open now	OTMAC	Information
28 Oct 2009	I&I NSW	Notification of Seafood Directions	OTMAC	Information
11 Nov 2009	I&I NSW	OOS Agenda Item – HMAS Adelaide	OTMAC	Comment
11 Nov 2009	DAFF	Update on the EU Catch Certification	OTMAC	Information
18 Nov 2009	I&I NSW	Ocean Trawl Workshop	OTMAC	Information
18 Nov 2009	I&I NSW	OOS Agenda Item – Cook Islands closure	OTMAC	Comment
18 Nov 2009	I&I NSW	OOS Agenda Item – HMAS Adelaide	OTMAC	Comment
20 Nov 2009	DEWHA	Update on the East Bioregional Planning Process	OTMAC	Information
7 Dec 2009	Sydney Water	Sydney Water Desalination Plant update	Chairperson	Information
9 Dec 2009	I&I NSW	OOS Agenda Item – Proposed Cephalopod FRDC Research	OTMAC	Comment
23 Dec 2009	I&I NSW	Australian Council of Prawn Fisheries Matters and AGM	OTMAC	Information
20 Jan 2010	I&I NSW	OOS Agenda Item – Proposed increase to minimum shareholding	OTMAC	Comment
28 Jan 2010	SSA	Branding Seafood – Industry Information Package	OTMAC	Information
4 Feb 2010	I&I NSW	Closures	OTMAC	Information
5 Feb 2010	I&I NSW	In-possession limits for certain Dogfish species	OTMAC	Information
16 Feb 2010	I&I NSW	Letter of advice re: Dogfish catch limits	OTMAC	Information

17 Mar 2010	I&I NSW	Consultation paper – Commercial Fisheries reform	OTMAC	Comment
24 Mar 2010	I&I NSW	Extension to comment period for the Consultation Paper – Fisheries Reform	OTMAC	Comment
25 Mar 2010	DEWHA	Areas for Further Assessment for the East Marine Region	OTMAC	Information
7 April 2010	I&I NSW	OOS Agenda Item – Proposal to increase boat capacity via share surrender in the OTF & information on teleconference.	OTMAC	Comment
8 April 2010	I&I NSW	Shark Meshing Program Alert	OTMAC	Information
14 April 2010	I&I NSW	Changes to Fisheries Legislation April 2010	OTMAC	Information
19 April 2010	I&I NSW	Marine Bioregional Planning (MBP) Bulletin	OTMAC	Information
20 April 2010	I&I NSW	Draft Interim Guidelines for Boat Replacements in the OTF & information on teleconference.	OTMAC	Comment
22 April 2010	I&I NSW	Invasive colonial sea squirt – public update of Industry & Investment NSW No. 1	OTMAC	Information
22 April 2010	I&I NSW	Offshore Constitutional Settlement – Southern Fish Trawl Fishery	OTMAC	Comment
30 April 2010	I&I NSW	Global stock assessment/catch allocation paper	OTMAC	Comment
30 April 2010	I&I NSW	Permit authorising the use of diamond mesh codends	OTMAC	Information
3 May 2010	I&I NSW	Interim Guidelines – Boat replacements in the OTF (In-confidence)	OTMAC	Comment
28 May 2010	I&I NSW	2010/11 Commercial Fishing Fees and Charges: Instalment Arrangements	OTMAC	Information
2 June 2010	I&I NSW	FishOnline Information Page on web site	OTMAC	Information
7 June 2010	I&I NSW	Public notice of exhibition	OTMAC	Information
18 June 2010	I&I NSW	Request for comments on research priorities	Chairperson	Comment
21 June 2010	I&I NSW	Important Industry Information	OTMAC	Information
5 July 2010	I&I NSW	Exit Grant paper information mail out	OTMAC	Information
7 July 2010	I&I NSW	Promoting NSW Seafood	OTMAC	Information
7 July 2010	I&I NSW	Review of closures	OTMAC	Comment
28 July 2010	I&I NSW	OT – closures review	OTMAC	Comment
4 Aug 2010	I&I NSW	Exit Grant Share Trading Notice Board	OTMAC	Information
4 Aug 2010	I&I NSW	Marine Bioregional Planning Update	OTMAC	Information
4 Aug 2010	I&I NSW	Gemfish trip limit	OTMAC	Information
19 Aug 2010	I&I NSW	Fish Records letter to commercial fishers and fishing business owners	OTMAC	Information
24 Aug 2010	I&I NSW	Studies on the growth and mortality of school prawns	OTMAC	Comment
26 Aug 2010	NSW Maritime	Marine Safety (Commercial vessels) Regulation 2010	OTMAC	Comment
10 Sept 2010	I&I NSW	Notification of Fish Records not received – letter sent to fishing business owners	OTMAC	Information
1 Oct 2010	I&I NSW	Text to OTMAC members advising Cover Letter and 'Interim Guidelines – Boat replacements in the OTF' sent to all OT fishers	OTMAC	Information
11 Oct 2010	I&I NSW	OOS Agenda Item – Boat replacement proposals under the Interim Guidelines & notice of teleconference	OTMAC	Comment
29 Oct 2010	I&I NSW	OOS Agenda Item – Interim Guideline Proposals 1 Nov 2010 & Draft Outcomes – OTMAC phone conference 27 Oct 2010	OTMAC	Comment
8 Nov 2010	NSW Maritime	Oil Spill Contingency Plans for the Ports of Eden and Yamba	OTMAC	Information
12 Nov 2010	I&I NSW	Notice of OTMAC meeting 9, 10 Dec & Draft Outcomes of Teleconference 1 Nov 2010	OTMAC	Comment
25 Nov 2010	I&I NSW	Revised Interim Guidelines – Boat replacements in the OTF	OTMAC	Information

Agenda Item 1	Chairperson
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Issue

Business arising from the previous meeting.

Background

An action status list is attached for the committee to note.

Items complete and previously noted by the OTMAC have been removed from the list.

It is recommended that the OTMAC reviews the Action Status List with a view to removing those actions that are not a priority or are no longer relevant.

Outcome

Action Status List for the OTMAC – Updated December 2010

Recommendation/Resolution/Action	Meeting	Responsibility	In Progress	Pending	Complete	Ongoing
I&I NSW to assist where practical with industry representatives meeting prior to the formal MAC meeting so that consolidate industry views can be presented at the MAC.	December 2007	I&I NSW /Industry				✓ Subject to practicality. As the current MAC meeting is being held over 2 days, it allows industry to discuss the agenda papers on the Thursday night.
I&I NSW to review nomination provisions related to the OT share management plan (SMP) to determine if further efficiencies can be achieved. Timing subject to resources and priorities.	December 2007	I&I NSW			✓ Industry wide issue. Consultation was undertaken in the FishOnline and Pymont Pact Consultation Paper March 2010. Final consultation with MACs and SIAC will be undertaken in the near future.	
I&I NSW to consider commercial bag limit of 2 lobsters per trawler.	December 2007	I&I NSW			✓ I&I NSW is in the process of developing a <i>Review of species restrictions – Decision Tree</i> and accompanying guidelines. The OTMAC request for 2 lobsters per trawler will be assessed under the broad review following finalisation of the Decision Tree and Guidelines.	
MAC members to arrange port meetings to map with constituents designated whiting grounds. I&I NSW to work with OTMAC members to transfer data to C-plot and prepare descriptions suitable for regulation by the end of March 2008.	December 2007	Fish trawl industry/ I&I NSW		✓ I&I NSW notes the importance of mapping whiting grounds with respect to the fish trawl sector remains.		

Recommendation/Resolution/Action	Meeting	Responsibility	In Progress	Pending	Complete	Ongoing
Metropolitan and South coast representatives and I&I NSW to monitor progress of research relating to sweeps in the deepwater prawn trawl fishery. Research results to be distributed and matter listed for discussion at future meeting.	December 2007	I&I NSW and Industry			✓ AFMA has advised that a small number of trips were undertaken in an attempt to observe deepwater prawn trawl boats, however no robust recommendations could be provided due to a minimal amount of data. AFMA has advised they are willing to work with industry to undertake further research.	
All members to consider potential solutions to reported trevally dumping due to the introduction of a minimum size limit.	December 2007	All				✓ I&I NSW and MAC members to continue to consider ways to improve the selectivity of fish trawl gear and related operations to reduce the capture of undersize trevally.
I&I NSW to investigate industry members' recommendation to remove the size limit on sole.	December 2007	I&I NSW			✓ Regulation amendment removing the Minimum Legal Length on Sole came into force on 1 September 2010.	
I&I NSW to consider MAC advice that all trip limits should be removed other than that for gemfish which should be reviewed as part of the development of a recovery program for gemfish.	December 2007	I&I NSW	✓ Will be discussed in the workshop portion of this 2 day meeting, (agenda item 5).			
I&I NSW and MAC Chair to raise optimum size at first harvest for king prawns with other MACs and assign some priority to the matter.	December 2007	I&I NSW and MAC Chair		✓ This will be raised at the appropriate MAC meetings when held in the future.		

Recommendation/Resolution/Action	Meeting	Responsibility	In Progress	Pending	Complete	Ongoing
Central, Metropolitan and South Coast representatives to assess the <i>National Strategy to address interactions between Humans and Seals</i> for any implications arising for management of the OT fishery.	December 2007	Industry		✓ I&I NSW awaiting industry response.		
I&I NSW to replace draft MAC outcomes on the I&I NSW website with the final outcomes.	May 2009	I&I NSW			✓	
I&I NSW and metropolitan, south coast industry representatives to contact Greenwall Point fishers regarding southern trawl grounds	May 2009	I&I NSW/ Industry			✓	
I&I NSW to re-send Bouddi National Park extension details to MAC members	May 2009	I&I NSW			✓ Information was re-sent to MAC members with the Draft Outcomes from the May MAC meeting on 1 July 2009.	
I&I NSW to invite NSW Maritime to the next MAC meeting to discuss the industry proposal for a deckhand trial period.	May 2009	I&I NSW		✓ Will be progressed at a subsequent meeting as progressing Pymont Pact initiatives is a priority.		
I&I NSW to provide Committee members with a link to the NCC 'Nice Choice' page.	May 2009	I&I NSW			✓ Information was sent to MAC members with the Draft Outcomes from the May MAC meeting on 1 July 2009.	
I&I NSW to provide the MAC with information regarding any dogfish/gulper shark assessments being undertaken.	May 2009	I&I NSW			✓ See agenda 3 for presentation from Dr Ross Daley, CSIRO. Further, copies of relevant reports were emailed and posted on request.	

Recommendation/Resolution/Action	Meeting	Responsibility	In Progress	Pending	Complete	Ongoing
I&I NSW to provide Industry MAC members with a summary of the structural adjustment presentation.	May 2009	I&I NSW			✓ A summary of the presentation was sent to all shareholders prior to the initial round of port meetings.	
Industry members to further review the package for reform within their regions and provide comment to I&I NSW as soon as possible.	May 2009	Industry			✓	
Effort unit transfer policy to be placed on agenda at the next MAC meeting. Background information to include advice on the number of OT businesses with QLD trawl endorsements and assessment of the association risks.	May 2009	I&I NSW			✓ I&I NSW recently removed the policy on licence splitting; as such the effort unit transfer policy is also rendered obsolete.	
I&I NSW to discuss the changes to the South West Rocks juvenile king prawn closure previously agreed with the Region 3 MAC representative.	May 2009	I&I NSW			✓ I&I NSW discussed this with the Region 3 representative and the misunderstanding was resolved.	
I&I NSW to send nominated Committee members guidelines for Code of Practice's and an example from another fishery.	May 2009	I&I NSW			✓ Sent to Mr John Harrison of the PFA and Mr Gordon Farrell along with the Draft Outcomes on 1 July 2009.	
Committee members to draft an OT Code of Practice and provide to I&I NSW for review.	May 2009	Industry		✓ To date, no draft has been provided to I&I NSW.		
I&I NSW to review earlier research undertaken by AFMA (Crispian Ashby?) regarding the Deepwater Square-Mesh Panel BRD and provide comment at the next meeting.	May 2009	I&I NSW				✓

Recommendation/Resolution/Action	Meeting	Responsibility	In Progress	Pending	Complete	Ongoing
Minimum shareholding requirements for OT to be an agenda item at the next MAC meeting.	May 2009	I&I NSW			✓ This was discussed at the Workshop held in December 2009, subsequently an OOS agenda item was sent to non-industry MAC members. Full support for an increase to 40 for Inshore prawn, Offshore prawn and Northern fish trawl.	

Issue

Updates

Background

Opportunity is provided for members to provide an update on contemporary issues relating to the management of the Ocean Trawl fishery. Following are updates by I&I NSW on issues that may be of interest to stakeholders.

MANAGEMENT UPDATE**Offshore Constitutional Settlement (OCS)/Catch sharing arrangements and joint stock assessments**

An update on recent discussions with the Commonwealth Government regarding OCS arrangements, the Restricted Southern Fish Trawl Fishery and catch sharing and joint stock assessments will be provided at the meeting.

Mulloway Resource Planning

A Resource Planning Group (RPG) was formed to assist in developing effective management arrangements for mulloway. The first meeting of the RPG was held in June 2010, involving a range of stakeholders. The major new actions to assist with the recovery of mulloway as recommended are set out below:

1. Minimum legal size set at 75 cm for both commercial and recreational fishers.
2. Recreational fishing bag limit set at 2 fish.
3. Restriction on retaining mulloway in beach hauling nets during summer.
4. Encourage use of appropriate release techniques and gear for both recreational and commercial fishers.
5. Refine program of closing areas after floods and when excessive bycatch is detected.
6. Seek funding to undertake targeted research to develop trawl bycatch reduction devices which maximise escape and/or exclusion of juvenile mulloway.
7. Seek funding to develop program to evaluate and monitor the mulloway population.

If you wish to know more about this process, please contact Mr Darryl Sullings on darryl.sullings@industry.nsw.gov.au or speak to the Ocean Trawl industry representative on the RPG, Mr Shane Castle.

Update to Changes to Fishing Business Charges

Industry members were recently informed of the changes to fishing business management charges effective from 1 January 2011 apply to the five general share management fisheries. Under the changes a flat management charge is to be applied to each fishery within a fishing business and an annual restructure charge is being applied per fishing business.

A decision has been made to defer the introduction of the flat management charge until 1 July 2011. The annual restructure charge for the 2010/2011 period will however be applied from 1 January 2011 as planned.

As such each fishing business will be levied charges for the period 1 January to 30 June 2011 as follows:

- All shareholders as at 1 January 2011 will be invoiced \$420 per fishery plus \$52 for each subsequent fishery – that is 1 fishery = \$420, 2 fisheries = \$472, 3 fisheries = \$524, 4 fisheries = \$576 and 5 fisheries = \$628, per fishing business;
- Plus the \$500 restructure charge per fishing business;
- Instalment terms will be by two equal instalments due 28 February 2011 and 31 May 2011.

Invoices will be issued towards the end of January 2011.

Pyrmont Pact Update

A verbal update will be provided at the meeting.

Exit grant update:

- Initially 51 registrations for the exit grant process; 27 proponents have progressed with the program and 9 of those have received exit grant payments.
- For those remaining the share trading period for the program has been extended to the 31st of March 2011.

RESEARCH UPDATE

An update provided by Dr Kevin Rowling and Dr Steve Montgomery will be tabled at the meeting for discussion.

COMPLIANCE UPDATE

Mr Glenn Staples, District Fisheries Officer, I&I NSW will provide a verbal update on compliance related issues at the meeting.

Outcome

Issue

Presentation of results from CSIRO's east coast deepwater dogfish shark survey

Background

Following a report by the Bureau of Resource Sciences in 2009 (FRC Report No.2008/065) highlighting significant depletion in the populations of some dogfish species, the Commonwealth Scientific and Industrial Research Organisation (CSIRO) was commissioned by AFMA to undertake sampling surveys along the eastern coast of Australia with the aim of mapping the distribution of gulper shark species (dogfish) between the northern NSW border and the east coast of Tasmania.

Ross Daley, CSIRO Scientist, will attend the meeting to present the outcomes of the surveys and some of the tagging work that has been undertaken over the last year. The survey results demonstrate the need to implement additional management measures in State and Commonwealth waters to reduce the risk of fishing to certain deepwater shark species, and will be a sound basis for continuing with discussions on proposed short term and medium term management changes.

See Attachment 1 for further background information.

For the Committee's information and discussion.

Outcome

Issue

Trip limit for certain dogfish species

Background

The OTMAC has previously supported the introduction of a trip limit for four key dogfish species (Endeavour, Harrison's and southern dogfish and greeneye spurdog), to be complementary with the Commonwealth arrangements. A 65 kg trip limit for these species has been in place for the OT and Ocean Trap & Line fisheries since 5 February 2010.

On 1 May 2010, the Commonwealth amended their trip limit to a 15 kg daily limit, or no more than 90 kg over a six day trip.

Considerations:

1. Ocean Trap & Line MAC were consulted on the proposal at the MAC meeting on 27 September 2010, and did not support the reduced trip limit. Notwithstanding this, the issue of a reduced trip limit will be followed up with OTL MAC once the risk assessment has been finalised.
2. I&I NSW are currently undertaking a risk assessment of commercial and recreational methods and areas with a view to make recommendations on potential spatial closures to reduce the risk of fishing-related mortality on dogfish. The trip limits in place for each sector will be taken into account in the risk assessment process.

I&I NSW is seeking advice from the Committee regarding the proposed amendment to the current trip limit to be complementary with the Commonwealth.

Outcome

Issue

Workshop: Development of consultation paper on reforms for the Ocean Trawl Fishery

Background

Background information and data will be presented at the OTMAC to facilitate discussions and assist in the development of a consultation paper on reforms for the Ocean Trawl Fishery.

Outcome

Agenda Item 6	Other Business
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Issue Other Business

Outcome

Agenda Item 7	Chairperson
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Issue Chairperson's summary

Outcome

Dogfish Background Information

Historically around 14 species of dogfish have been commercially caught in southern Australian waters, primarily for their liver oil. In NSW commercial fisheries dogfish are typically retained as byproduct when targeting other species. Dogfish species have a slow growth rate, late onset of sexual maturity and low fecundity. These life history characteristics place them at high risk of stock depletion and can prevent them from rapid recovery once depleted.

Dogfish and all deepwater sharks in general, have been described by the International Union for Conservation of Nature (IUCN) Shark Specialist Group as being more vulnerable to over-exploitation than any other marine species group. In Australia, the main source of data that demonstrates significant declines to the species level for upper-slope dogfish is from the fishery independent surveys undertaken by the NSW *FRV Kapala* over a 20 year period (Graham et al. 2001).

Graham et al. (2001) reported a dramatic decline in the catch rate of dogfish in the 20 years since inception of trawling. In the 1976/77 surveys the mean catch per unit effort (CPUE) for *Centrophorus spp.* was reported as 139 kg/hour (126.3 kg/hr for Harrison's and southern dogfish combined; 12.3 kg/hour for Endeavour Dogfish). In the 1996/97 surveys, the CPUE for *Centrophorus spp.* was reported as 0.6 kg/hour (0.4 kg/hour and 0.2 kg/hour for Harrison's and southern and Endeavour dogfish respectively). This equates to declines between 1976/77 and 1996/97 of between 98.4 and 99.7 percent.

In recognition of the declines reported for dogfish, Harrison's dogfish, southern dogfish and Endeavour dogfish have been nominated for listing as a threatened species under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*. The assessment of these species is due to be completed by 30 September 2010. Further, the Australian Fisheries Management Authority (AFMA) undertook an Ecological Risk Assessment for the Southern and Eastern Scalegfish and Shark Fishery, which identified that greeneye spurdog was also in the high risk category.

IUCN has listed these upper-slope dogfish species as: Harrison's dogfish – Critically Endangered and Endeavour Dogfish – Data Deficient. Southern dogfish and greeneye spurdog have not been assessed since their taxonomy has been clarified. However, *Centrophorus cf uyato*, which until recently included *C. zeehani* (southern dogfish), was listed as Critically Endangered and *Squalus mitsiyurii* (now *S. chloroculus* greeneye spurdog, and *S. motalbani* Philippine spurdog) as Data Deficient.

See below for more information regarding the four species of concern.

- Harrison's dogfish (*C. harrissoni*), found in waters off eastern Australia from northern NSW to south eastern Tasmania in depths between 300 – 600m.
- Southern dogfish (*C. zeehani*), which is endemic to south-eastern Australia from Shark Bay in Western Australia to Forster in NSW in depths between 201 – 700m.
- Endeavour dogfish (*C. moluccensis*), occurring in the western Indian Ocean and eastern Pacific Ocean including Australia in depths between 125 – 820m.
- Greeneye spurdog (*S. chloroculus*), occurring in south-eastern Australia from Jervis Bay in NSW to Eucla in Western Australia in depths between 216 – 1360m.

Since the nomination of the species, the CSIRO has undertaken sampling surveys along the eastern coast of Australia. Below is a summary of the initial findings of the CSIRO survey for the three nominated species of Dogfish:

Harrison's Dogfish

The surveys undertaken by CSIRO found several important grounds for Harrison's dogfish in northern NSW, particularly the upper slope region in waters from Sydney north to Byron Bay. Specifically waters from Port Stephens to south of Coffs Harbour has good representation of

juveniles and mature males and females. Outside State waters, Taupo Seamount, Cape Barren and North Flinders (north east of Tasmania) were identified as important sites for Harrison's dogfish.

Southern Dogfish

The upper slope region close to Browns Mountain off Sydney was the only surveyed site on the east coast with representation of juvenile and mature males and female southern dogfish. These waters are currently closed to trawling (under the "Endeavour Dogfish Closure") as the waters fall under Commonwealth jurisdiction for trawl operators. Other important sites for southern dogfish were identified off the coast of South Australia, which also falls under Commonwealth jurisdiction.

Endeavour Dogfish

The CSIRO surveys found that Endeavour dogfish, within State managed waters, were found at the same sites as southern and Harrison's dogfish, particularly the upper slope region in northern NSW from Sydney north to Byron Bank.

Due to the nature of the methods, bottom setlining and demersal trawling are considered high risk fishing methods for upper-slope dogfish. Drop line methods are also believed to be high risk; however this is yet to be confirmed. Over the next 6 months I&I NSW will be undertaking a risk assessment, which will focus on specific waters identified in the CSIRO survey and fishing methods used by both commercial and recreational fishers in State managed waters.

It is important to be conscious of the potential ramifications for commercial and recreational fisheries off the east coast of Australia if any or all of these species are listed as higher than 'Conservation Dependent'.

In recognition of the importance of reducing the impact of fishing operations on these at risk species, and in response to the nomination of the 3 species of dogfish and the high risk assessment of greeneye spurdog, a 65 kg trip limit was introduced in the OT and Ocean Trap and Line fisheries, with a further reduced trip limit proposed.

I&I NSW has also been working closely with AFMA and CSIRO to identify appropriate management arrangements in both jurisdictions. These agencies have requested that I&I NSW introduce a range of area closures to all methods to protect the four high risk species of dogfish. At this stage, I&I NSW's position is to wait for the completion of the risk assessment of methods and areas to inform any decision regarding fishing closures to protect upper-slope dogfish.

References

Graham KJ, Andrew NL and Hodgson KE (2001) Changes in relative abundance of sharks and rays on Australian South East Fishery trawl grounds after twenty years of fishing. *Marine and Freshwater Research* 52:549-56.