

ESTUARY GENERAL MANAGEMENT ADVISORY COMMITTEE MEETING AGENDA

27 November 2009

9:00 am to 5:00 pm

Cronulla Fisheries Centre
Cronulla, NSW 2230

Chairperson

Mr Patrick Appleton

Management Advisory Committee Representatives

Mr Ben Markwell	Region 1
Mr Glenn Dawson	Region 2
Mr Geoff Blackburn	Region 3
Mr Peter Ragno	Region 4 (North)
Mr Jim Drinkwater	Region 4 (South)
Mr Ted Allen	Region 5
Mr Scott Massey	Region 6
Mr John Hine	Region 7
Mr Malcolm Poole	Recreational
Mr Leif Lemke	Nature Conservation Council
Mr Darren Reynolds	Director-General's nominee

	Welcome and Apologies	Chairperson
	Agreement on agenda for 27 November 2009	Chairperson
	Confirmation of draft outcomes for EGMAC meeting on 26 & 27 March 2009	Chairperson
	Correspondence received and sent	Chairperson
1	Business arising from the previous meeting	Chairperson
2	Updates – Research, Compliance, Resource Management	I&I NSW
3	Presentation - <i>Habitat Makes Fish Happen: Loss of habitat along NSW estuaries</i>	I&I NSW
4	FRDC project – Empowering the Fishing & Seafood Industry	Mr Chris Calogeras, Dr Ian Knuckey
5	Introduction and overview of new FishOnline System	I&I NSW
6	Industry Reform Program for NSW Commercial Fisheries	I&I NSW
7	Review of draft Prawn (set pocket) priority guidelines	I&I NSW
8	Other Business	Industry/ I&I NSW
9	Chairperson's summary	Chairperson

Chairperson**Issue**

Welcome and apologies

Background

The Committee welcomes members who have recently been elected to industry representative positions. Specifically, Mr Glenn Dawson was elected to the Region 2 position, Mr Scott Massey for Region 6 and Mr John Hine for Region 7. Cabinet approval has been sought for confirmation of appointments following the recent elections and expression of interest processes.

The Committee would like to thank outgoing members Mr Russell Massey and Mr Paul Stanford for their contributions to EGMAC.

Outcome**Chairperson****Issue**

Agreement on agenda

Background

Notice of the meeting and call for agenda items was circulated to committee members, Regional Industry Convenor, Fishermen's Co-operatives, other interested parties and regional offices of I&I NSW on 29 September 2009.

Outcome**Chairperson****Issue**

Confirmation of draft minutes from the previous meeting on 26 & 27 March 2009.

Background

Draft outcomes for the EGMAC meeting on 26 & 27 March 2009 were circulated amongst MAC members for comment prior to being distributed to the Regional Industry Convenor, Fishermen's Co-operatives, other interested parties and regional offices of I&I NSW.

Outcome**Chairperson****Issue**

Correspondence received and sent

Background

A list of correspondence is attached.

Outcome

EGMAC CORRESPONDENCE LIST (since April 2009 – October 2009)

Date	From	Issue	To	Action
7/04/2009	I&I NSW	EGMAC Contact List	EGMAC	Information
24/04/2009	I&I NSW	EG & OT extension for square mesh - 1 Nov 2009	Industry	Information
6/05/2009	I&I NSW	Smart Gear Competition information	EGMAC	Information
7/05/2009	I&I NSW	Cultural Fishing consultation	EGMAC	Information/comment
7/05/2009	I&I NSW	EGMAC Meeting Draft Outcomes – 26 & 27 March meeting 2009	EGMAC	Comment
12/05/2009	I&I NSW	MPAC – Membership call for expression of interest	EGMAC	Information
12/05/2009	I&I NSW	Communication to Industry regarding grants and programs to facilitate growth etc.	EGMAC	information
26/05/2009	I&I NSW	Wallagoot Lake Caulerpa closure comments	EGMAC	Comment
12/06/2009	I&I NSW	Hawkesbury Brisbane Water, Pittwater & Tributaries closure renewal	EGMAC	Information
13/07/2009	I&I NSW	Out of Session item - Prawn counts and incidental catch ratios	EGMAC	Comment
15/07/2009	Chairperson	Chairperson summary from EGMAC meeting 26 & 27 March 2009	Minister	Comment
17/08/2009	Biosecurity Australia	Advice re prawn and prawn products import Risk analysis	EGMAC	Information
8/09/2009	I&I NSW	EIS for Marine Fish Stocking in NSW	EGMAC	Information
9/09/2009	I&I NSW	Market Power – NSW Workshops	EGMAC	Information
29/09/2009	I&I NSW	Meeting Notice & call for agenda items EGMAC – 27 November 2009	EGMAC, Industry	Comment
21/10/2009	I&I NSW	Advice regarding the extension of the implementation of square-mesh codends	EGMAC, Industry	Information

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 EGMAC as complete have been removed from the list. Only action items included in the outcomes for the EGMAC meeting on 26 & 27 March 2009 are included in the attached Action Status List.

It is recommended that the EGMAC reviews the Action Status List with the objective of removing those actions that are not a priority or are no longer relevant.

Outcome

Action Status List for the EGMAC – Updated September 2009

	Recommendation/Resolution/Action	Meeting	Responsibility	In Progress	Pending	Complete	Ongoing
1	Advise the Committee of possible costs associated with the implementation of RFGs at the next meeting as per the FMS	November 2004	DPI		✓		
2	DPI to review the number of hoop/lift nets and crab traps that may be used at one time, authorised times of operation and species that can be retained by mud crab trapping endorsement holders.	June 2005	DPI		✓		
3	Region 7 fishers to liaise with relevant stakeholder groups regarding the partial opening of certain RFH's to commercial fishing.	October 2005	Industry		✓		
4	Consult with fishers regarding the resolution of crab trapping issues.	March 2007	Industry	✓			
5	Provide advice on high priority closures for consideration by SIAC.	March 2007	Industry		✓		
6	Industry to liaise with DPI regarding the potential to amend some specific fishing closures on a priority basis, particularly those that may no longer serve their original intent.	March 2007	DPI/Industry		✓		
7	Provide MAC with most recent fisher numbers at each meeting.	March 2001	DPI				✓
8	The relevant representative from DECC be invited to attend the next EGMAC meeting to discuss their policy regarding beach access via National Parks.	March 2007	NSW DPI		✓		
9	Industry to liaise with stakeholders and DPI regarding the potential to limit access to the EG fishery to licensed commercial fishers only.	December 2007	Industry		✓		
10	DPI to increase the maximum mesh size in eel traps from 40mm to 50mm.	December 2007	NSW DPI	✓			
11	Industry representatives to consult with their relevant constituents and DPI regarding the potential for Industry managed prawn set pocket net priority determinations.	December 2007	Industry	✓			
12	DPI to provide Industry with a lay summary of the structural adjustment presentation.	March 2009	I&I NSW	✓			
13	Industry to review the package for reform and provide comment to DPI as soon as possible.	March 2009	Industry	✓			

	Recommendation/Resolution/Action	Meeting	Responsibility	In Progress	Pending	Complete	Ongoing
14	DPI provide the Committee with expenditure from the Commercial Fishing Trust.	March 2009	I&I NSW	✓			
15	NSW DPI to provide the MAC with details about how the more detailed catch and effort information will be utilised.	March 2009	I&I NSW	✓			
16	DPI to provide the exploitation status (and an explanation of the terminology) of species taken in the EG fishery that are overfished to some extent and require assessment and/or development of a recovery program.	March 2009	I&I NSW	✓			
17	Industry to provide comment on any proposed amendments to the EGCoP as soon as possible.	March 2009	Industry		✓		
18	DPI to meet with Shellfish Biotxin Plan Manager's to discuss a potential minimum size limit for pipis.	March 2009	I&I NSW		✓		

Issue

Updates

Background

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

Management Update**Departmental Structure**

Formed in July 2009, the Department of Industry & Investment, trading as Industry & Investment NSW, brings together a number of former NSW Government departments and authorities. These former agencies included the Department of Primary Industries (including Forests NSW), Department of Water and Energy, Rural Assistance Authority and the NSW Food Authority.

The Deputy Director General Primary Industries, George Davey, has approved a new Branch structure for the Fisheries and Compliance Division within the Primary Industries Group. Mr Paul O'Connor is now the Principal Director of Fisheries and Compliance.

The Branches within this division are, namely:

the Fisheries Resource Management Branch (which manages the sustainability of our fish stocks, and the commercial and recreational fishing harvest);

the Conservation & Aquaculture Branch (which manages threatened species, habitat protection & restoration, and aquaculture issues);

the Compliance Operations Branch (which manages agricultural and fisheries compliance activities, and the shark meshing program); and

the Fisheries Strategic Review Branch (which coordinates all review activities, including the revamp of IT infrastructure related to share-management).

Extension of the implementation of square mesh codends

Commercial fishers have recently be advised that the advisory period regarding the mandatory requirement to use square-mesh codends in Estuary General prawning gear has been extended until the 30 April 2010, to provide sufficient time to try and resolve some of the remaining issues. Permits have been issued to EG prawn endorsed fishers permitting the continued (interim) use of conventional diamond-mesh codends until 30 April 2010.

Regulation Amendments

A number of changes to the EGSMP have recently been finalised, including the conversion of the remainder of fishing closures into regulation. Some closures applying to the share managed fisheries will remain as section 8 notifications as they are not considered to be appropriate for inclusion in regulation or are being kept under review.

Seafood Industry Advisory Council (SIAC)

SIAC met on the 28 October 2009 primarily to discuss the outcomes from recent port meetings facilitated by SIAC representatives on the Industry Reform Program of NSW commercial fisheries known as the Pyrmont Pact.

The EGMAC representative on SIAC will provide an update.

Marine Bioregional Planning

There are currently 4 Marine Regions identified for planning by the Australian Government: North, North-west, South-east, and East. The East Marine Region encompasses Commonwealth waters ranging from the northern tip of Cape York to the southern NSW town of Bermagui.

There are four key stages in development of the East Marine Bioregional Plan:

Stage 1 - The Regional Profile was released in May 2009 and can be found online at www.environment.gov.au

Stage2 - The Draft plan

Stage 3 – The Final Plan

Stage 4 – Implementation and Review

The draft marine bioregional plan is likely to be released for public comment (60 days) in mid 2010.

The draft plan will include policies and programs for the management of priority marine conservation issues in the region.

For further information please go to www.environment.gov.au/coasts/mbp/east/index

Draft Carp Control Plan

A draft carp control plan has been developed by I&I NSW and released for public comment. The plan consolidates the most up-to-date information about the biology and impacts of this species and outlines appropriate strategies to restrict the spread of carp, control the size of carp populations, better understand the species and increase the understanding and involvement of the community.

The plan is available on the I&I NSW website. Submissions can be forwarded by email to aquatic.pests@industry.nsw.gov.au or by mail to Aquatic Biosecurity Unit, Port Stephens Fisheries Institute, Locked Bag 1, Nelson Bay 2315. The closing date for submissions is **29 January 2010**.

Proposed determination - *Posidonia australis*

The Fisheries Scientific Committee (FSC) has reviewed available scientific information on the distribution of *Posidonia australis* in NSW and found that the populations in Port Hacking, Botany Bay, Sydney Harbour, Pittwater, Brisbane Waters and Lake Macquarie have undergone both a very large reduction in abundance and geographical distribution. The FSC also found that these populations are effectively isolated populations given the low level of dispersal of fruit and seeds.

The FSC lists direct physical damage from dredging, sand mining, reclamation, boat moorings and boat propellers as well as changes in physical environment and water quality as causes for decline. Introduced species such as *Caulerpa taxifolia* may also act as threatening processes for *Posidonia australis* populations. In light of this information, with reference to the criteria for listing endangered populations in Part 11B of the *Fisheries Management (General) Regulation 2002*, the FSC is recommending that these populations be listed as endangered populations (see the attached paper for further details and implications of the listing).

Research Update – An update will be provided at the meeting.

Compliance Update - An update will be provided at the meeting.

Conservation Update – An update will be provided at the meeting.

Outcome

Issue

Presentation Habitat Makes Fish Happen: Loss of habitat along NSW estuaries

Background

Estuaries are critical for the survival of many species. Tens of thousands of birds, mammals, fish, and other wildlife depend on estuarine habitats as places to live, feed, and reproduce. Hundreds of marine organisms, including most commercially valuable fish species, depend on estuaries at some point during their development.

In NSW, coastal catchments have undergone extensive modification as a result of agricultural, urban and industrial development. Such development has had many detrimental impacts on aquatic habitat such as loss of riparian vegetation, wetland destruction, alteration of river flows, damage to seagrasses and mangroves, loss of snags or reefs, the introduction of exotic species, an increase in general water pollution and barriers to fish passage and flow. The cumulative effect of these impacts on fish habitat, which to date has not been fully documented or understood, is to reduce considerably populations of commercially important species.

What we do know however for example is that between 1967 and 1989 there was a 100% loss in saltmarsh and mangroves and a 37% loss in paperbark from the Tuckean swamp in the Richmond River. This equates to a loss of 306ha of mangroves. Studies in Moreton Bay in Queensland have revealed the value of mangroves in monetary terms to be equivalent to \$13 600 per annum of marketable fish per hectare. If we look at figure in terms of the loss of mangroves from Tuckean swamp alone this equates to approximately \$4M! In addition it has been calculated that in the US that 1000ha of coastal vegetation (back swamps, mangrove, salt marsh, floodplains etc) can produce 100 tonnes of shrimp. In the Richmond River it is estimated that 26,400 ha of coastal vegetation is affected by altered drainage. This potentially could equate to a loss of 2600 tonnes of prawns.

The coming decades will see NSW experience extensive change to its marine and coastal environment. Large-scale changes in population are expected, regional development in primary, secondary and service industries will continue and impacts from climate change are forecast to occur. Simultaneously and, in some respects in conflict with these changes, community demands for healthy and robust ecosystems will continue to grow.

Therefore protection and restoration of the widest possible range of estuarine habitats is recognised as essential for the long term viability of our estuaries and the commercial fisheries they support. Considerable work has been completed to restore fish habitat along the NSW coast, however there is still much more work to be done to protect remaining good habitat and restore degraded areas.

Outcome

Agenda Item 4**Mr Chris Calogeras and Dr Ian Knuckey****Issue**

FRDC project – Empowering the Fishing & Seafood Industry

Background

Chris Calogeras, C-AID Consultants and, Dr Ian Knuckey, Fishwell Consulting, are undertaking a FRDC funded project titled: “Empowering Industry R&D: Developing an Industry driven R&D model for the Australian fishing and seafood Industry - partnerships to improve efficiency, profitability and performance (FRDC Project#2009/300).” The aim of the project is to capture industry RD&E ideas, especially those that will improve the ‘value’ of industry, and link them with the most appropriate RD&E providers or researchers to develop projects through a range of funding sources.

As part of the project, a series of workshops are being run in all major cities and a number of regional centres across Australia. The workshops are being run separately for the commercial, recreational and indigenous fishing sectors to ensure the key RD&E needs for each are understood. Following these workshops the coordination of themes and project development across sectors on a national and regional RD&E scale, will be undertaken.

Industry project ideas, R&D providers and potential funders will be linked through an easy to use website to allow projects to be developed in partnership between those involved.

Chris and Ian will provide further information and encourage discussion on commercial fishing RD&E needs at the meeting.

Outcome**Agenda Item 5****I&I NSW****Issue**

Introduction and overview of new FishOnline System

Background

The purpose of the CFSA – Year 1 Project is to establish a commercial fishers online self service system to be known as FishOnline so that revised management arrangements can be implemented that provide enhanced services to industry at reduced cost.

The specific objectives of the CFSA Systems Reform Year 1 project are:

1. Provision of a commercial fishers’ online self service system to be known as FisherDirect that is used by external clients and supports quota transfers and catch and effort reporting and that is extensible to other transaction types in the future.

2. Provision of an Interactive Voice Response (IVR) system to be known as FisherIVR that support pre and post commercial fishing landing reports.
3. Expansion and enhancement of the existing CRQMS system to be known as FisherAssist that is used by I&I NSW staff to provide assisted service to clients and to manage the overall system.

The suite of applications developed under this project will be generically known as FishOnline.

Outcome

Agenda Item 5

I&I NSW

Issue

Industry Reform for NSW Commercial Fisheries

Background

The industry reform and structural adjustment package (Pymont Pact) was recently discussed at a series of port meetings along the coast. Members of the Seafood Industry Advisory Council (SIAC) structural adjustment presented these information sessions which were well received.

Components of the reform program as presented are:

1. Creating a range of tools to provide for tradable input and output controls
2. Providing for initial restructuring with minimum shareholdings and exit grants
3. Reviewing industry regulatory requirements and streamlining administrative systems
4. Reviewing cost recovery
5. Reviewing fishing closures
6. Moving the focus toward risk-based resource management
7. Initiating an industry development program
8. Enhancing industry's voice to government

In summary comments received through the consultation process indicated:

- Overall support for the reform package
- Tools for tradeable controls supported if optional. Regional options were considered important and many fishers expressed the view that quota would not work in multi-species fisheries.
- Exit grant structure generally well received.
- Risk focus for management priorities generally supported. Need to consider "whole of environment" risks and develop a transparent process was emphasised.

- Strong support for review of closures and concern about concentration of effort through previous buy-outs/closures.
 - Need for cost recovery understood, however no one wants higher fees. Industry would be seeking increased influence on expenditure with the introduction of cost recovery.
 - General support for industry development program.
 - Single industry voice supported. There was a general willingness to pay despite substantial concern that it might not work and political issues.
 - Other issues raised included
 - Impact of illegal fishing on viability e.g. interfering with traps, deepwater species bag limit and black market
 - Clear that communication strategy with industry will be important and there were some complaints about MAC members' communication.
- SIAC is now considering its advice to the Minister on whole of industry issues and has provided advice on priorities for implementing the reform program. Fishery-specific suggestions made during the meetings or in submissions will however require consideration from individual fishery MACs.
- Advice is sought from the MAC on fishery specific priorities for implementing the industry reform agenda and the tools for tradeable input or output "units", which industry feels could be suitable for use if needed.

Outcome

For discussion by the Committee

Agenda Item 6

I&I NSW

Issue

Review of draft Prawn (set pocket) priority policy

Background

The rights of priority between commercial fishers using a prawn net (set pocket) are set out in the relevant clauses of the General Regulation. The regulated process offers no flexibility in terms of any industry initiated adaptive management of the determinations and is resource intensive for I&I NSW to administer.

It is the intention to remove the requirement for I&I NSW to determine rights of priority between commercial fishers using prawn set pocket nets. As such, it is proposed to remove the bulk of the provisions under Division 4 of the General Regulation and to instead require priority determinations for the prawn set pocket net to be conducted in a manner approved by the Director General. Authority will remain vested in FOs to determine the number and location of set pocket net sites and to enforce priority determinations made by Industry.

I&I NSW will work with industry over time to simplify and streamline the process for determining rights of priority between commercial fishers using prawn set pocket nets. As a consequence the policy governing prawn set pocket net priority determinations will be revised and amended when necessary.

The Committee's input is sought to provide feedback on the draft policy.

Outcome

Agenda Item 7

Industry

Issue

Other Business

Specific issues raised by each MAC representative follow for discussion.

1. Minimum legal weight for eels
2. Square-mesh codends
3. Fishing closure review
4. Catch & Effort logbooks
5. Species harvested in the EG fishery

Outcome

Agenda Item 8

Chairperson

Issue

Chairperson's summary

Outcome

Estuary General Management Advisory Committee Chairman's Report

The Estuary General Management Advisory Committee (EGMAC) held a 2 day meeting on the 26 & 27 March 2009 at the South Cronulla Surf Club (day 1) and the Cronulla Fisheries Centre (day 2). A number of observers attended on Day1 including Mr George Davey, Deputy Director General DPI and some SIAC members. Below is a summary of the main issues discussed at the EGMAC meeting.

1. Structural adjustment

Committee members indicated that there were many challenges facing their industry including the following:

- Changes in access to fishing grounds;
- Increasing operational costs;
- Competition from imports; and
- Excess catching capacity.

and that there was an urgent need to make changes to enhance industry viability.

The Department provided EGMAC with a presentation that included background, principles to guide restructuring and reform objectives ending with a package of suggested reforms termed the 'Pymont Pact'. EGMAC supported in principle the following 8 points in the package of reforms:

1. Create a suite of tools to provide for tradeable input and output controls
2. Provide for initial restructuring with minimum shareholdings and exit grants
3. Comprehensive review of regulatory requirements and streamlining DPI administrative systems
4. Review cost recovery
5. Comprehensive review of fishing closures
6. Move focus toward risk-based resource management
7. Initiate an industry development program
8. Enhanced industry voice to government

SIAC members present at the meeting emphasised that these points were only tools for consideration and each fishery would need to choose which tools were appropriate to their fishery. DPI emphasised that any reforms adopted would be on the advice of industry.

The Committee acknowledged DPI's commitment to industry. They also appreciated the opportunity provided by the Minister to tackle the key issue of industry restructuring to provide greater flexibility and viability into the future.

2. Catch records reform project

The Committee were presented with the new catch reporting system that will commence in July 2009. Committee members were given the opportunity to ask questions from the Project Leader and were advised that a help team would be set up to assist with the transition.

3. Regulation Reform

EGMAC noted the changes to the EG Share Management Plan including moving fishing closures currently notified under Section 8 of the *Fisheries Management Act 1994* into the Plan.

4. Prawn set pocket ballot determinations

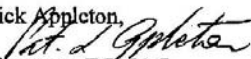
The Committee agreed to repeal the majority of prawn (set pocket) ballot provisions from the General Regulation and instead provide for a policy to be approved by the Director General to allow for flexibility in how these ballots are conducted.

5. Code of Practice (CoP)

The Committee agreed to review the EG CoP and makes changes as appropriate.

Committee members were disappointed that this was the first meeting of EGMAC in over 18 months. They acknowledged however that the Manager has been available for local discussions on a range of matters. MAC meetings were delayed due to a raft of factors arising out of the deliberations of SIAC/SAWG on structural adjustment issues whose outcome is the 'Pymont Pact'.

Patrick Appleton,


Chairperson, EGMAC

EGMAC Paper – Proposed determination - *Posidonia australis*

Introduction

Posidonia australis (strapweed) is a type of seagrass that occurs in several coastal embayments and sheltered estuaries from Port Stephens south in NSW.

Seagrasses are particularly valuable as nursery, feeding and shelter areas for many aquatic animals, including commercially and recreationally important fish, mollusc and crustacean species. For example, early indications from NZ research experiments in Whangapoua Estuary suggest a strong positive correlation between increasing seagrass blade densities and the abundance of juvenile snapper and other fish species (Science Alert 03/03/09). Degradation and loss of seagrass leads to degradation and loss of fisheries resources.

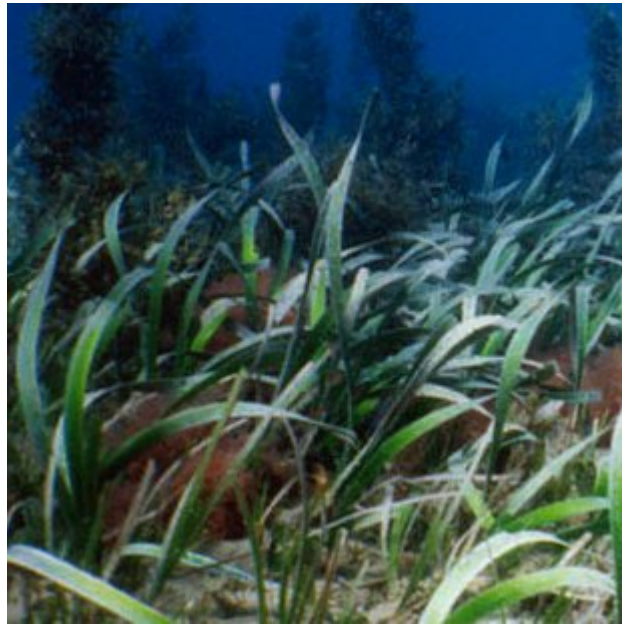


Figure 1: Strapweed (*Posidonia australis*). Photo: David Harasti

Seagrasses contribute organic matter to estuarine food chains. They also baffle water currents, causing them to drop their sediment loads and thus maintaining water quality. Seagrasses also prevent erosion by stabilising sediments and assist to remove nutrients from the water.

Posidonia australis is of particular concern as it is susceptible to damage, and is very slow to regrow or recolonise areas. For example, damage from seismic testing to determine the stability of a proposed nuclear power station at Jervis Bay in the 1960's is still clearly visible 40 years later (Figure 2) and based on the rate of recovery, the damaged areas will not fully recolonise until sometime between 2025 and 2060 (Meeham, 1999 in Fisheries NSW, Autumn 1999).

EGMAC Paper – Proposed determination - *Posidonia australis*

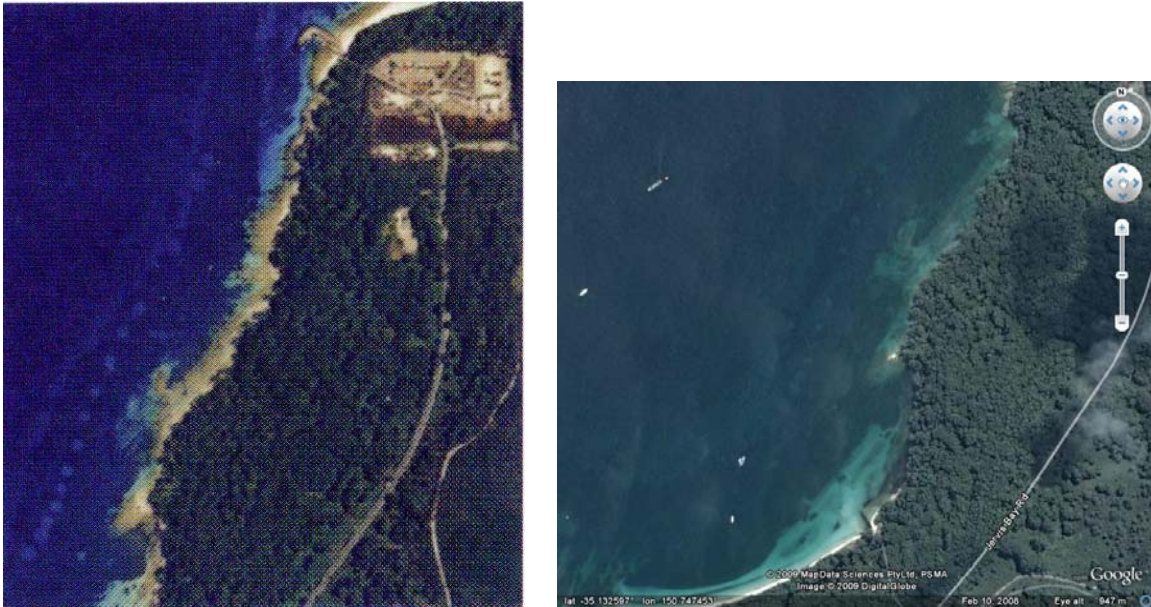


Figure 2: Damage to *Posidonia australis* beds from seismic testing in the 1960's still clearly visible in the 1990's (above left) and in 2008 (above right).

In recognition of its value and sensitivity, marine vegetation (including seagrass) is protected by the *Fisheries Management Act 1994* (FM Act), and it is an offence to gather, cut, pull up, destroy, poison, dig up, remove, injure, prevent light from reaching or otherwise harm the marine vegetation. A permit is required to undertake works or activities that may harm marine vegetation and current policy and guidelines for aquatic habitat management and fish conservation ordinarily do not permit works that will harm *Posidonia australis*.

Despite the fact that seagrass is protected, damage from a range of sources has occurred historically and continues, particularly in areas that have undergone extensive development. While the FM Act allows the regulation of direct harm to seagrass, and indirect harm from shading, it does not provide for protection against other indirect impacts from changes to water quality, tidal prisms and sedimentation and erosion associated with both minor and major developments. The FM Act also does not effectively regulate direct and indirect impacts from boating associated with the use of existing moorings and propeller and anchor damage from boats travelling over and temporarily anchoring in seagrass beds.

EGMAC Paper – Proposed determination - *Posidonia australis*



Figure 3: Aerial view of damage to seagrass caused by boat moorings in Lake Macquarie.
Image: Google Earth

Fisheries Scientific Committee

The Fisheries Scientific Committee (FSC) is responsible for assessing threatened species nominations, and for maintaining and amending the schedules of threatened species. The FSC consist of 7 scientists with expertise in one or more of the following areas:

- (a) fish biology,
- (b) aquatic invertebrate biology,
- (c) marine vegetation biology,
- (d) population dynamics,
- (e) aquatic ecology,
- (f) genetics of small populations

The FSC is not subject to the control or the direction of the Minister and is an independent body. Their role is to determine, on a scientific basis, whether nominated species, populations or ecological communities are threatened. The listing process is separate to the management response. Listing criteria are established in the *Fisheries Management Act 1994* and the *Fisheries Management (General) Regulation 2002*, and generally do not include social or economic factors.

Current situation

The FSC has reviewed available scientific information on the distribution of *Posidonia australis* in NSW and found that the populations in Port Hacking, Botany Bay, Sydney Harbour, Pittwater, Brisbane Waters and Lake Macquarie have undergone both a very large reduction in abundance and geographical distribution. The FSC also found that these populations are effectively isolated populations given the low level of dispersal of fruit and seeds.

The FSC lists direct physical damage from dredging, sand mining, reclamation, boat moorings and boat propellers as well as changes in physical environment and water

EGMAC Paper – Proposed determination - *Posidonia australis*

quality as causes for decline. Introduced species such as *Caulerpa taxifolia* may also act as threatening processes for *Posidonia australis* populations. In light of this information, with reference to the criteria for listing endangered populations in Part 11B of the *Fisheries Management (General) Regulation 2002*, the FSC is recommending that these populations be listed as endangered populations.

Implications of the listing

Should the FSC make a final determination to list the relevant *Posidonia australis* populations it would no longer be regulated under Part 7 (harm marine vegetation), but under Part 7A (threatened species conservation) of the Act. This would have several implications:

- Offences are established for harming endangered populations or their habitats.
- The Director-General may prepare a recovery plan for the endangered population.
- I&I NSW's draft Priorities Action Statement would be amended to set out the strategies to recover the endangered populations of *Posidonia australis*.
- The Minister may declare the whole, or any part of the habitat of the endangered population to be critical habitat. This would create an offence to damage critical habitat, and an ability to regulate actions on critical habitat.
- Consent and determining authorities (generally councils and government department's respectively) will have to consider the impact of any development or activities that they approve on the endangered populations, and have regard to any recovery plan. This is generally done by an assessment of significance (7-part test). In the event that a significant impact is likely, an Environmental Impact Statement or Species Impact Statement may be required. Note that these obligations also apply to activities that I&I NSW approves (e.g. s.37, Part 7 permits etc). A significant impact finding also triggers consultation and/or concurrence requirements with I&I NSW's Director-General/Minister depending on the individual circumstances.
- Endangered populations must be considered in the development of local environmental planning instruments and state environmental planning policies and establishes consultation requirements between the plan making authority and the Director-General.

In practical terms, this listing is most likely to impact NSW Maritime in granting approvals for moorings and planning of mooring blocks. The listing will also affect the environmental assessment and approval of works that involve dredging, reclamation, residential or industrial developments adjoining or immediately upstream of estuarine areas, stormwater management, activities harming riverbank vegetation, or any other activities with the potential to directly or indirectly harm the endangered populations.

A range of practical measures can be implemented to reduce damage to seagrass. I&I NSW in association with the Sydney Metro Catchment Management Authority, NSW Maritime and Manly Council have been trialling a new form of seagrass friendly mooring to reduce the impact moorings may have on seagrass beds. Similarly, I&I NSW has been undertaking research on removing and replanting *Posidonia australis* from proposed development sites e.g. before and after a cable is laid, as well as research into transplanting, seeding, and establishing *Posidonia australis*.

In relation to commercial fishing the Estuary General Fishery Management Strategy included a management action to "specifically prohibit the use of all hauling nets used in the Estuary General Fishery over beds of strapweed seagrass (*Posidonia australis*). The listing of *Posidonia australis* as an endangered population will not affect the current Fishery Management Strategy. However, the listing would remove the need to comply

EGMAC Paper – Proposed determination - *Posidonia australis*

with s.205B (activities harmful to marine vegetation) of the FM Act in the estuaries to which the listing applies.

The listing is unlikely to directly affect recreational fishing activities. Damaging marine vegetation is already an offence under the FM Act, and existing policy prevents the establishment of recreational fishing infrastructure such as artificial reefs over *Posidonia australis* meadows. The FM Act also does not effectively regulate impacts from boats travelling over and temporarily anchoring in seagrass beds, however existing education, awareness and advisory materials deal with this issue, and may be expanded if areas of specific concern are identified.

Summary:

Strapweed is critically important to underpin the productivity of recreational and commercial fisheries. Populations of strapweed in Port Hacking, Botany Bay, Sydney Harbour, Pittwater, Brisbane Waters and Lake Macquarie have undergone very large reductions in abundance and distribution, and may be at risk of extinction in the future. Listing endangered populations:

- Improves their protection,
- Ensures appropriate planning and assessment of works to reduce or eliminate potential impact,

Provides a focus for improved management and recovery of the affected populations