## **Planning Proposal - Waterways Zoning**

Sutherland Shire Council

Revised June 2013

## Planning Proposal - Section 55 of the Environmental Planning and Assessment Act, 1979

#### LOCAL GOVERNMENT AREA

Sutherland Shire Council

#### NAME OF PLANNING PROPOSAL

Sutherland Shire – Waterways Zoning

#### **ADDRESS OF LAND**

The proposal applies to the waterways of Sutherland Shire proposed to be zoned W1 Natural Waterways and W2 Recreational Waterways in Draft Sutherland Shire Local Environmental Plan 2013 as exhibited.

#### INTRODUCTION

Draft Sutherland Shire Local Environmental Plan 2013 (DSSLEP2013) was exhibited from 17 March 2013 to 1 May 2013. As exhibited, Zone W1 - Natural Waterways applies to most waterways and Zone W2 - Recreational Waterways applies only to the commercial marinas.

Mayoral Minute No. 29/12-13 (25 March 2013) considered the proposed zoning of the Shire's waterways in the DSSLEP2013 and resolved to amend the proposed zoning. A further report (CCL039-13) resolved to amend the extent of the changes proposed for the Georges River. Council intends for these proposed changes to amend the controls proposed in the exhibited DSSLEP2013.

This proposal seeks to amend the waterways maps to apply Zone W2 Recreational Waterways to Gunnamatta Bay, Burraneer Bay, Dolans Bay, Yowie Bay and a section of the Georges River from Tom Ugly's Bridge to the north-western point of Kangaroo Point. It also seeks to amend the objectives and land use table for the W1 Natural Waterways Zone as well as the objectives for the W2 Recreational Waterways Zone.

Copies of Mayoral Minute No. 29/12-13 and CCL039-13 are included as Attachment 1.

#### **DETAILS OF THE PLANNING PROPOSAL**

### Part 1 - A statement of the objectives or intended outcomes of the proposed local environmental plan. [Act s. 55(2)(a)]

Council is yet to consider a report on the submissions received in response to the exhibition of the DSSLEP2013. As exhibited, the DSSILEP2013 proposes to zone most of the Shire's waterways W1 Natural Waterways, with the exception of commercial marinas, which are proposed to be zoned W2 Recreational Waterways and waterways of recognised environmental significance which are proposed to be zoned E1 National Parks and Nature Reserves.

The primary objective of this planning proposal is to refine the application of the waterways zones in the DSSLEP2013 to permit a wider range of development in the waterways to allow waterfront landowners and boat owners to enjoy the waterways, whilst remaining mindful of the potential impacts of such development. Therefore it

proposes extending the application of the W2 Recreational Waterways Zone to include Gunnamatta Bay, Burraneer Bay, Dolans Bay, Yowie Bay and a section of the Georges River from Tom Ugly's Bridge to the north-western point of Kangaroo Point.

The land use tables for the W1 and W2 zone in the DSSLEP2013 are very similar. The differences between the zones can be more clearly articulated in the objectives of the zones to clarify that in the W2 zone there is greater development potential, while in the W1 zone the development potential is informed by locality and site specific characteristics. Also, in the W1 zone, there may be opportunity for watercraft berthing, but the zone should not include new commercial marinas. Including the possibility for new commercial marinas would suggest that there are locations in the zone where a commercial marina would be acceptable, while in reality it is unlikely that a commercial marina is appropriate anywhere in the zone.

While it is Council's intention to permit a wider range of development in the waterway, in the W1 zone the cumulative impact of numerous structures or inappropriate concentration of structures in one section of the waterway may in some cases destroy the very character and scenic quality which nearby residents and the wider public value. In the W2 zone the use of the waterway and views of the waterway from public and private areas must be considered.

The planning proposal also seeks to amend the objectives and land use table for the W1 Natural Waterways Zone as well as the objectives for the W2 Recreational Waterways Zone. These additional objectives are therefore necessary to ensure that Council's decisions appropriately acknowledge the differing character of different parts of the Shire's waterways.

## Part 2 - An explanation of the provisions that are to be included in the proposed local environmental plan. [Act s. 55(2)(b)]

The Planning Proposal seeks to amend the provisions of DSSLEP 2013 by

- Amending the Zoning Maps to include Gunnamatta Bay, Burraneer Bay, Dolans Bay, Yowie Bay and a section of the Georges River from Tom Ugly's Bridge to the north-western point of Kangaroo Point in Zone W2 Recreational Waterways.
- 2. Amending the Land Use Table for the W1 Natural Waterways Zone as follows:
  - Replacing the final objective for the W1 Natural Waterways Zone with the following objective:
    - To allow permitted water based structures where appropriate having regard to:
      - a) the cumulative impact of man-made structures and their concentration within a section of the waterway;
      - b) the natural character and natural scenic quality of the waterway; or
      - the established recreational use and functionality of the waterway;
         or
      - d) the views of the waterway and land/waterway interface from the public and private domain;
      - e) appropriate water based facilities to serve private properties.

- b) Inserting the following additional objectives:
  - To allow suitable mooring facilities having regard to the established character of an area, recreational uses, the functionality of the waterways and the cumulative impact of man-made structures or the concentration of development within a section of the waterway.
  - To allow for multiple mooring pens to be attached to a water recreation structure in Zone W1 Natural Waterways.
- c) Adding the following uses as 'Permitted with consent: mooring pens, and boatsheds.
- 3. Amending the Land Use Table for the W2 Recreational Waterways Zone by adding the following objective:
  - To allow suitable mooring facilities having regard to the established character of an area, recreational uses, the functionality of the waterways and the cumulative impact of man-made structures or the concentration of development within a section of the waterway.

## Part 3 - Justification for those objectives, outcomes and provisions and the process for their implementation. [Act s. 55(2)(c)]

#### A. Need for planning proposal

1. Is the planning proposal the result of any strategic study or report?

The planning proposal was initiated by Mayoral Minute No. 29/12-13 (Appendix 1) which outlines a need to refine the application of the waterways zones as proposed in the Draft Sutherland Shire Local Environmental Plan 2013 to clarify the development potential in each bay. The proposed changes seek to recognise the different character of each bay in the Shire and promote clarity and assurance for land owners.

2. Is the planning proposal the best means of achieving the objectives or intended outcomes, or is there a better way?

Council is currently exhibiting its draft standard instrument LEP – DSSLEP2013. As the desired outcomes require amendment to the Land Use Tables, a planning proposal is the most expedient method to achieve this without hindering the progress of preparing the Standard Instrument LEP. It is Council's intention that the amendments will be incorporated into Sutherland Shire Local Environmental Plan 2013 when that plan is made by the Minister.

#### B. Relationship to strategic planning framework

3. Is the planning proposal consistent with the objectives and actions contained within the applicable regional or sub-regional strategy (including the Sydney Metropolitan Strategy and exhibited draft strategies)?

The planning proposal is consistent with the objectives in the Sydney Metropolitan Strategy and the South Subregion Draft Subregional Strategy relating to improving and protecting environmental assets, especially actions to improve and promote the health of the waterways and protect biodiversity from loss.

4. Is the planning proposal consistent with the local council's Community Strategic Plan, or other local strategic plan?

The planning proposal is not contrary to Council's community plan known as *Our Shire Our Future: Our Guide for Shaping the Shire to 2030.* This planning proposal will provide opportunities to deliver the desired outcomes of balanced development and diverse leisure opportunities.

5. Is the planning proposal consistent with applicable State Environmental Planning Policies?

The planning proposal is does not contravene any state environmental planning policies (See Appendix 2).

6. Is the planning proposal consistent with applicable Ministerial Directions (s.117 directions)?

The planning proposal does not contravene any Ministerial Directions (see Appendix 3).

- C Environmental, social and economic impact.
- 7. Is there any likelihood that critical habitat or threatened species, populations or ecological communities, or their habitats, will be adversely affected as a result of the proposal?

The planning proposal aims to permit mooring pens and boatsheds in the waterways and rezone bays from W1 to W2. This will provide more opportunities for permanent boat moorings in the Shire's waterways.

There are populations of the threatened species *Posidonia australis* in Port Hacking and Botany Bay. Appendix 4 includes the DPI factsheet on *Posidonia* australis which includes maps indicating the extent of seagrass in the Sutherland Shire waterways<sup>1</sup>.

Permanent boat moorings are one of the main causes of mechanical disturbance to seagrass, almost always producing scoured areas within seagrass meadows<sup>2</sup>. Seagrasses favour locations which are suited to anchoring vessels where water movement and wave action are reduced<sup>3</sup> and hence the ideal site for moorings is often in seagrasses. In addition to direct impacts from mechanical damage, seagrasses also suffer from the impacts of shading associated with permanent moorings. Several studies have noted

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<sup>&</sup>lt;sup>1</sup> Department of Primary Industries (DPI) 2012 Endangered populations in NSW: *Posidonia australis* in Port Hacking, Botany Bay, Sydney Harbour, Pittwater, Brisbane Waters and Lake Macquarie *Aquaculture, Conservation and Marine Parks Unit Fact sheet* <a href="https://www.dpi.nsw.gov.au/factsheets">www.dpi.nsw.gov.au/factsheets</a>

<sup>&</sup>lt;sup>2</sup> Demers M-C , Davis A and Knott N 2013 A Comparison of the impact of 'seagrass-friendly' boat mooring systems on *Posidonia australis Marine Environmental Research* 83: 54-62.

that shading of seagrass results in lower growth rates, shoot density, weight and productivity of seagrass, potentially leading to collapse of those seagrass meadows<sup>4,5</sup>.

Damage to seagrass will diminish stocks of important commercial and recreational fish, molluscs and crustaceans<sup>6</sup> as seagrass provides important feeding and refuge areas. Seagrass meadows also support a large number of rare and threatened species, many of which rely on seagrass habitat for survival<sup>7</sup>.

Seagrass, especially *Posidonia australis* has not responded well to efforts at transplanting and/or remediation, it is very slow growing and very sensitive to changes in environmental conditions. Studies have shown that *Posidonia australis* communities have taken over 25 years to recolonise an area of 0.4ha and could take over 100 years to repair completely (assuming no further damage occurs)<sup>8</sup>. In areas such as Botany Bay where *Posidonia australis* beds have sustained significant damage recovery times may be even longer<sup>9</sup>. This shows the extreme sensitivity of *Posidonia australis* to shading and its lack of ability to recover at a reasonable rate and the necessity for its strict protection.

Although this planning proposal intends to provide more opportunities for permanent boat mooring, these will only be permitted with development consent. Before development approval can be granted, an assessment of the likely impacts of the proposed development will be undertaken. Development in the waterways also requires approval from the Department of Primary Industries Fisheries. DPI Fisheries has indicated that areas containing seagrasses are not suitable for mooring pens and applications for structures which shade seagrass will not be supported by DPI Fisheries staff<sup>10</sup>. It is therefore likely, that despite these uses being listed as permissible in the land use table, there will be locations where they will not be approved.

8. Are there any other likely environmental effects as a result of the planning proposal and how are they proposed to be managed?

While the impact of shading from permanently moored boats on the endangered sea grass *Posidonia australis* is by far the most significant impact of the proposed changes to the waterways zone, there are a range of other impacts that will flow from the proposed changes. While *Posidonia* is the most sensitive to changes in light availability, other sea grasses, in particular *Zostera* and *Halophila* will be similarly impacted, reducing in density and productivity, and reducing nursery and food resources for young and juvenile fish. The mooring of boats in the shallower waters closer to the shore, as opposed to deeper areas occupied by swing moorings, also increases the potential for propeller and hull scour, which increases turbidity of water and mobilises sediments into the water column. These sediments may contain

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<sup>&</sup>lt;sup>4</sup> Fitzpatrick, J. and Kirkham, H. 1994 Effects of prolonged shading stress on growth and survival of seagrass *Posidonia australis* in Jervis Bay, New South Wales, Australia. *Marine Ecology Progress Series* 127: 279-289.

<sup>&</sup>lt;sup>5</sup> Gordon, D.M., Grey, K.A., Chase, S.C. and Simpson, C.J. 1994 Changes to the structure and productivity of a *Posidonia sinuosa* meadow during and after imposed shading. *Aquatic Botany* 47: 265-275.

on Posidonia australis Marine Environmental Research 83: 54-62.

<sup>&</sup>lt;sup>8</sup> Meehan A and West R 2000 Recovery time for a damaged *Posidonia australis* bed in south eastern Australia *Aquatic Biology* 67: 161-167.
<sup>9</sup> Ibid.

<sup>&</sup>lt;sup>10</sup> C Ganassin DPI Fisheries *email* 2013

nutrients or pollutants, which can have adverse impacts on marine life. Additionally, the stability provided by a permanent berthing area or mooring pen tends to provide a more stable platform under which increased boat maintenance can take place. Servicing of motors, cleaning of hulls, and other boat repairs become possible under these scenarios, which result in increased release of pollutants into the aquatic environment. These activities are best undertaken on slipways and service yards, where adequate pollution control mechanisms are in place to capture and treat pollutants.

9. How has the planning proposal adequately addressed any social and economic effects?

This planning proposal reflects Council's intention to balance the reasonable aspirations of land owners to enjoy waterfront properties with the rights of the public to enjoy the recreational amenity the waterways provide.

One of the key issues considered in Council's decision to prepare the planning proposal is the permissibility and location of moorings. There is significant pent-up demand for swing and fixed moorings. Providing opportunities for more fixed moorings provides one mechanism to address some of this demand, but there is likely to still be a demand for swing moorings - moorings will still be in demand from boat owners who are not waterfront owners as without moorings or expanded marinas their boats must be stored on land. This planning proposal therefore addresses a social expectation for opportunities for mooring.

#### D State and Commonwealth interests.

10. Is there adequate public infrastructure for the planning proposal?

Not applicable to this planning proposal.

11. What are the views of the State and Commonwealth Public Authorities consulted in accordance with the gateway determination, and have they resulted in any variations to the planning proposal?

Not applicable at this stage.

## Part 4 – Maps to identify the intent of the planning proposal and the area to which it applies.

The maps on pages 9 to 15 identify the specific areas proposed to be rezoned from W1 to W2. These maps also indicate the known locations of *Posidonia australis* and illustrate how the southernmost boundary of the proposed W2 zone in Gunnamatta Bay and Burraneer Bay are informed by the locations of beds of *Posidonia australis*.

Maps indicating the current zoning of these bays as well as a map providing an overview of the context of the proposed zone changes are also provided.

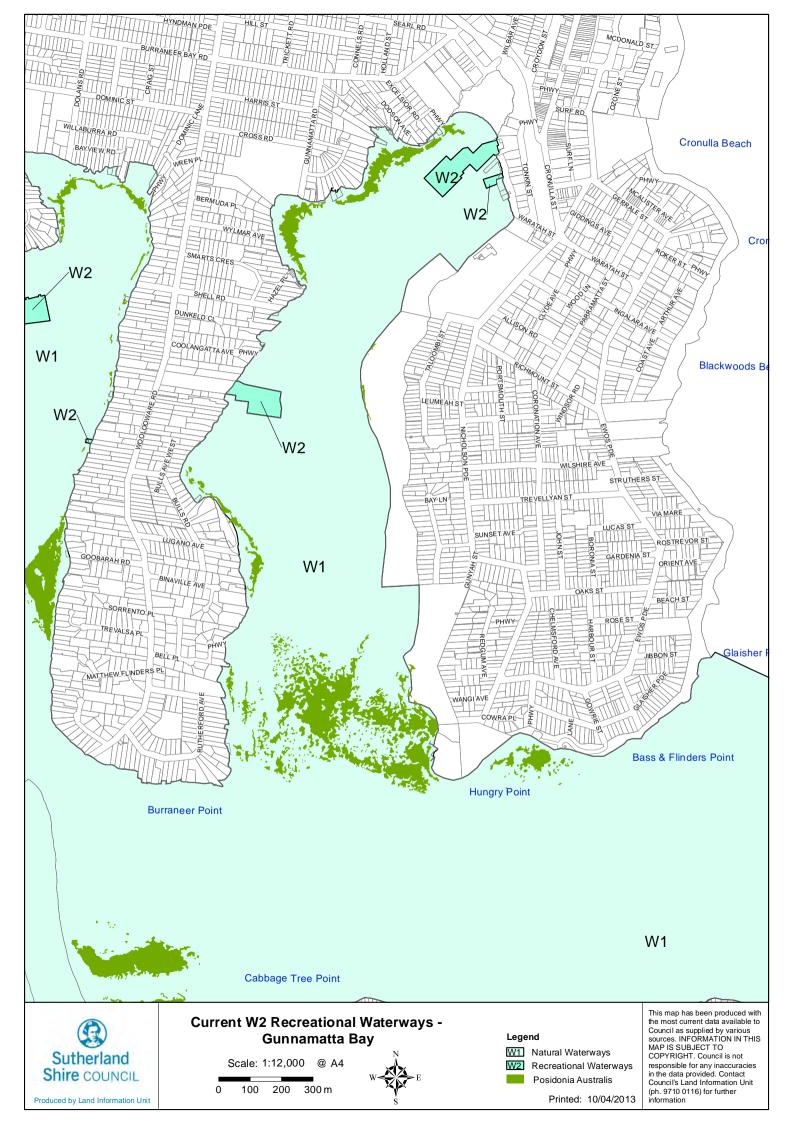
## Part 5 - Details of the community consultation that is to be undertaken on the planning proposal. [Act s. 55(2)(e)]

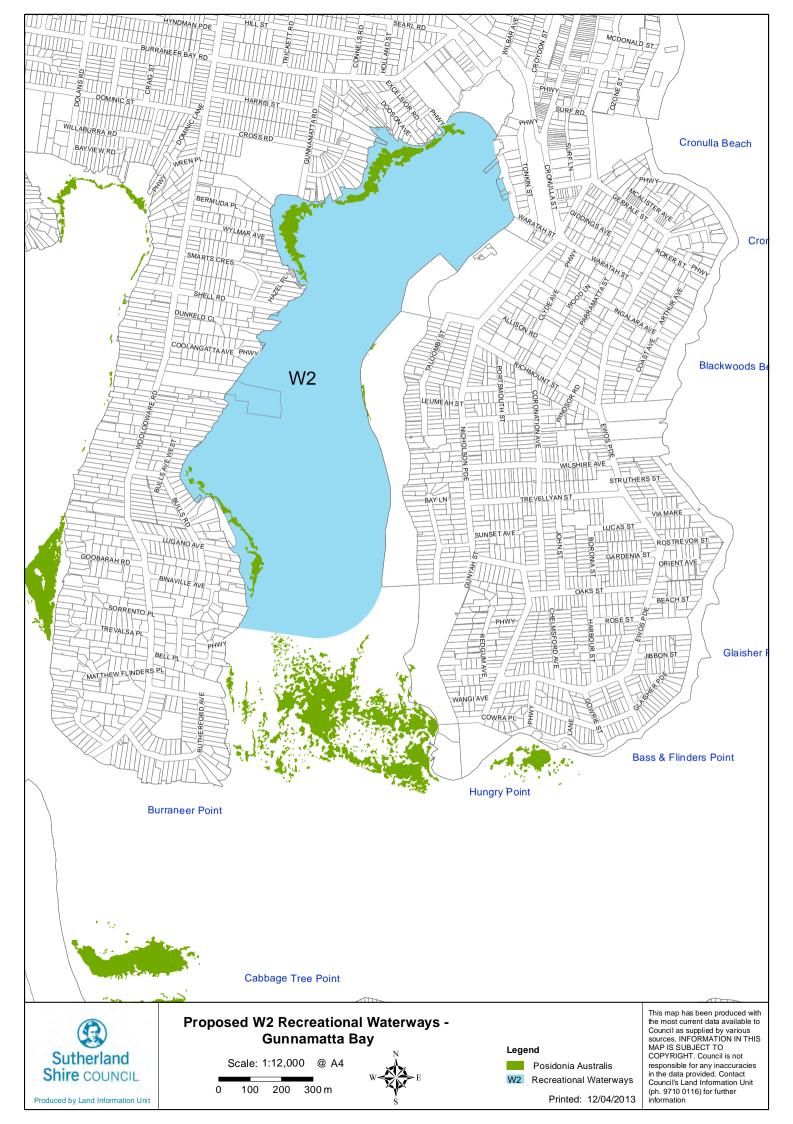
Council proposes that the planning proposal be exhibited in accordance with any requirements as determined by the gateway process and the requirements of Section 29 of the Local Government Act, 1993 and Section 57 the Environmental Planning and Assessment Act, 1979.

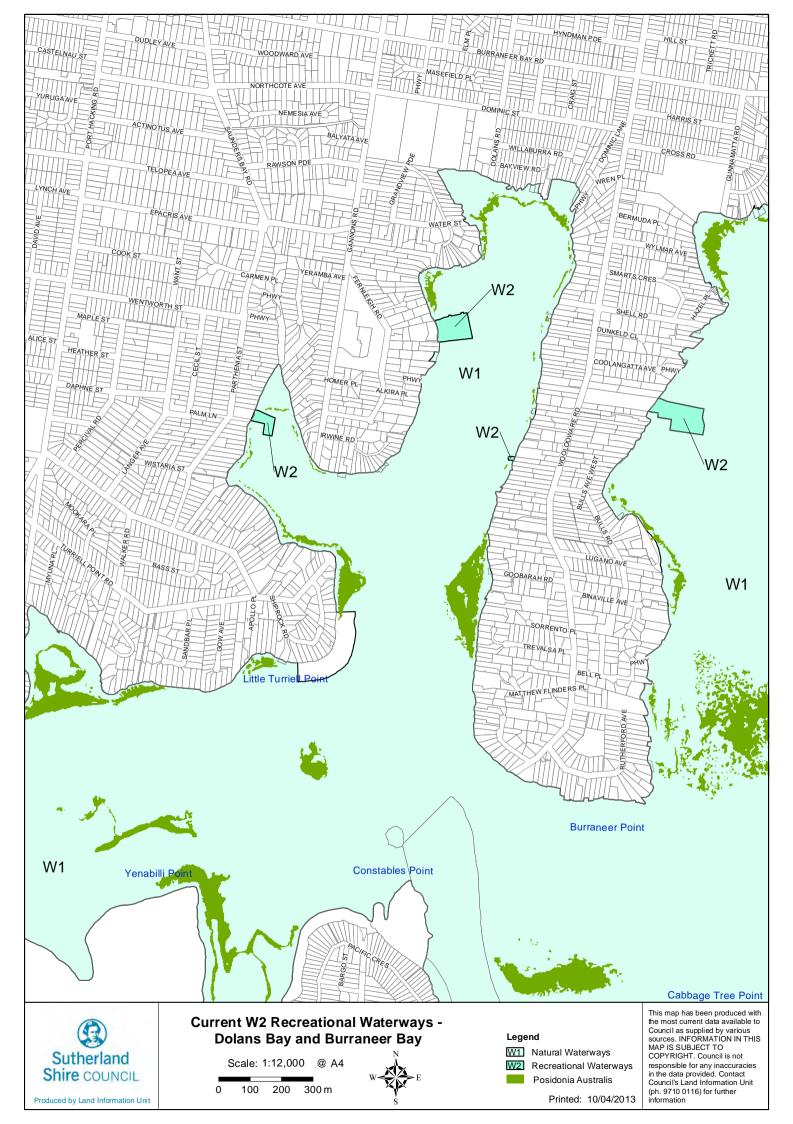
Council proposes to give notice of the public exhibition of the planning proposal:

- in the local newspaper (The St George and Sutherland Shire Leader and The Liverpool City Leader) and;
- on Council's web-site.

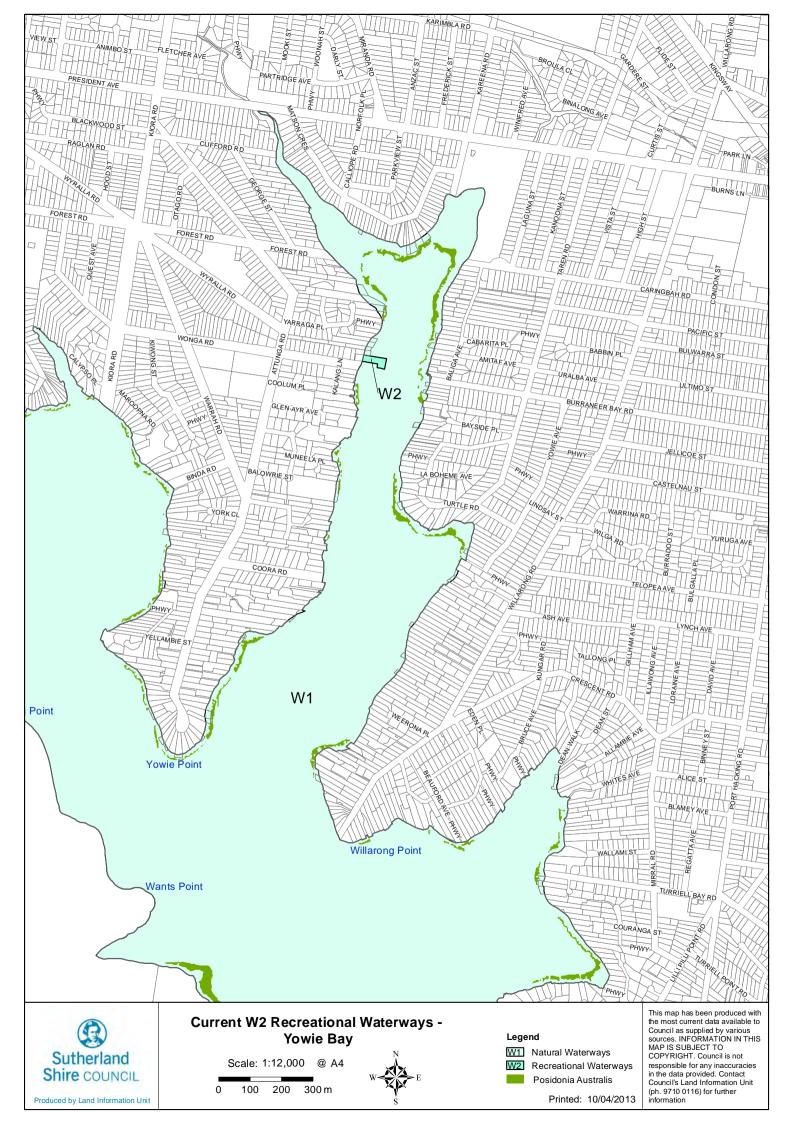
In accordance with the Gateway Determination, the planning proposal will be publicly available for a minimum of 28 days, from 18<sup>th</sup> June 2013 to 17<sup>th</sup> July 2013.

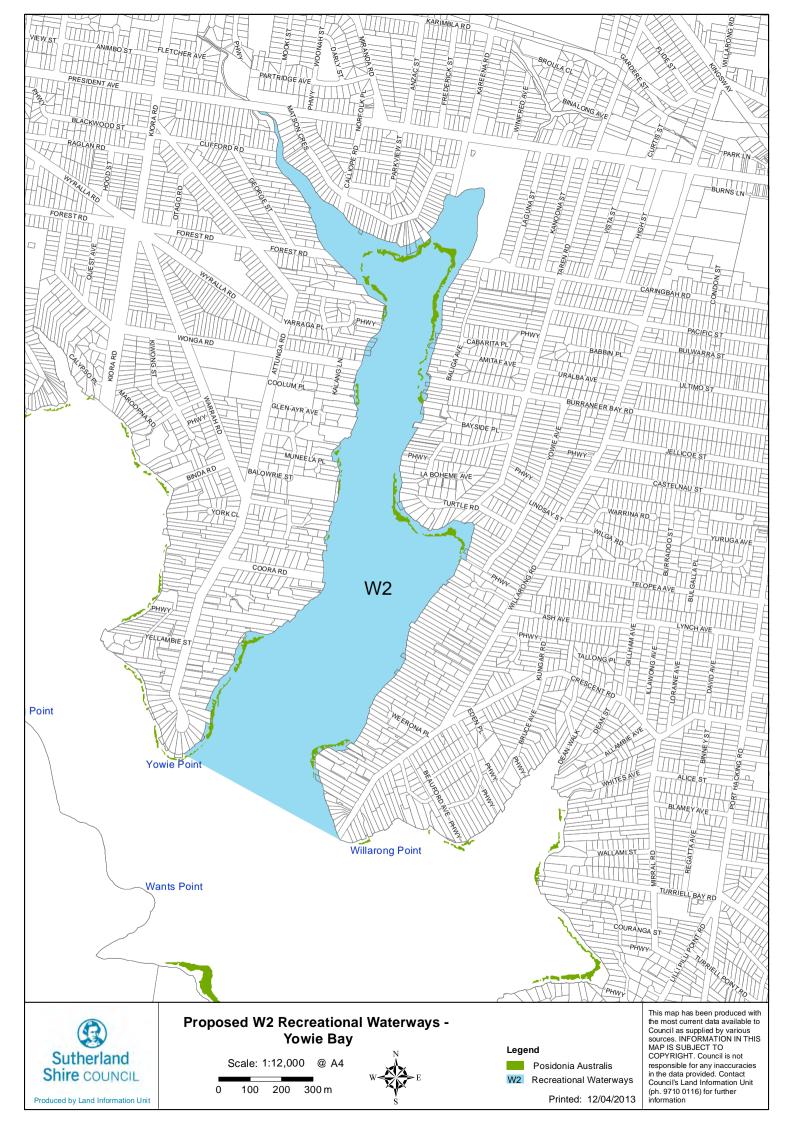


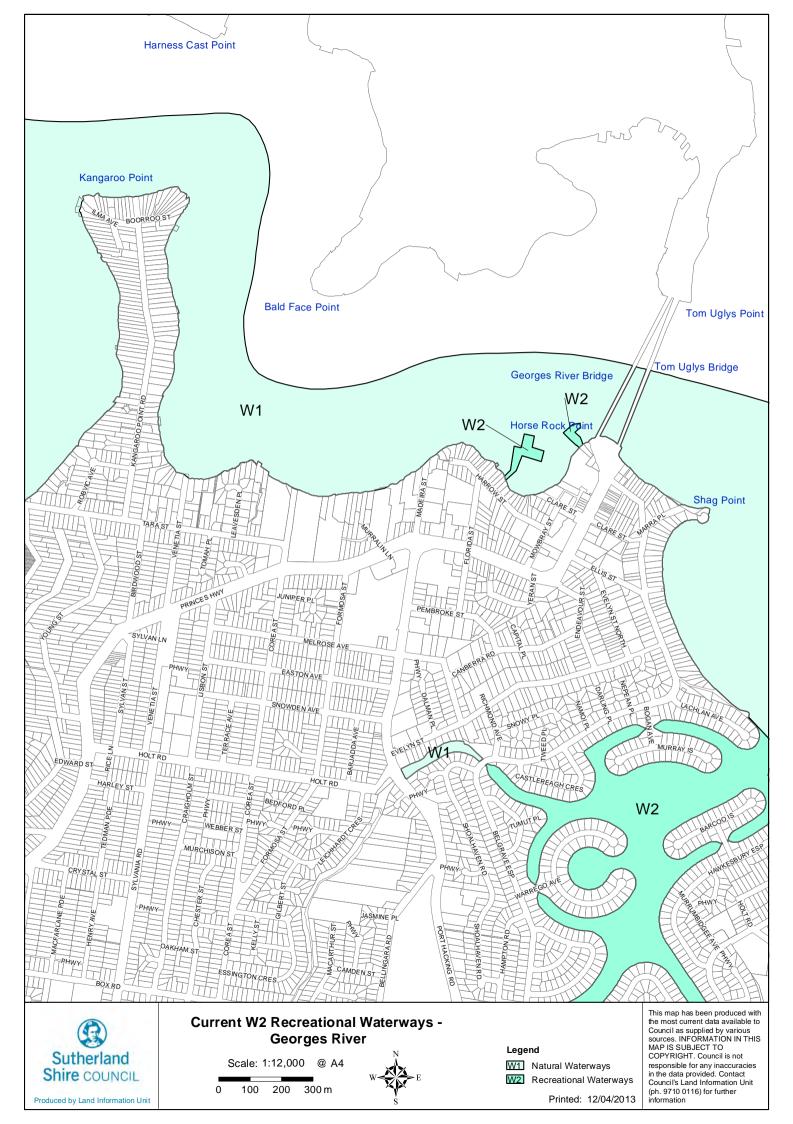


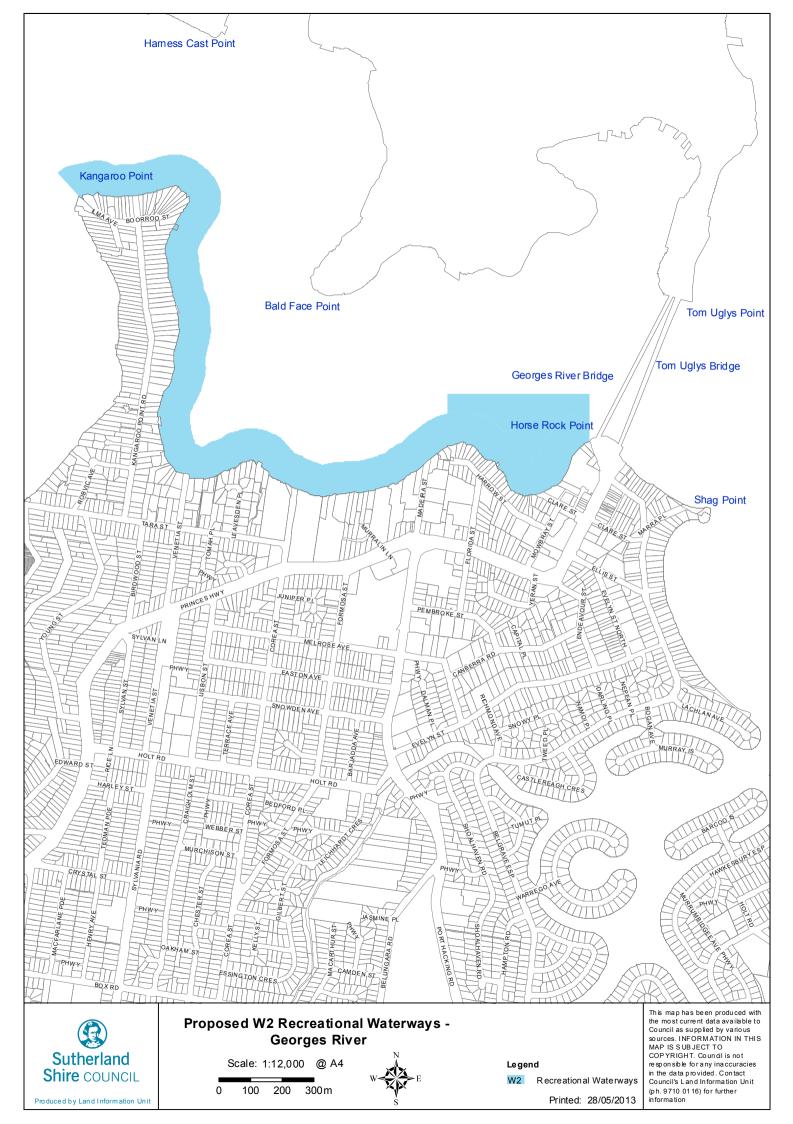


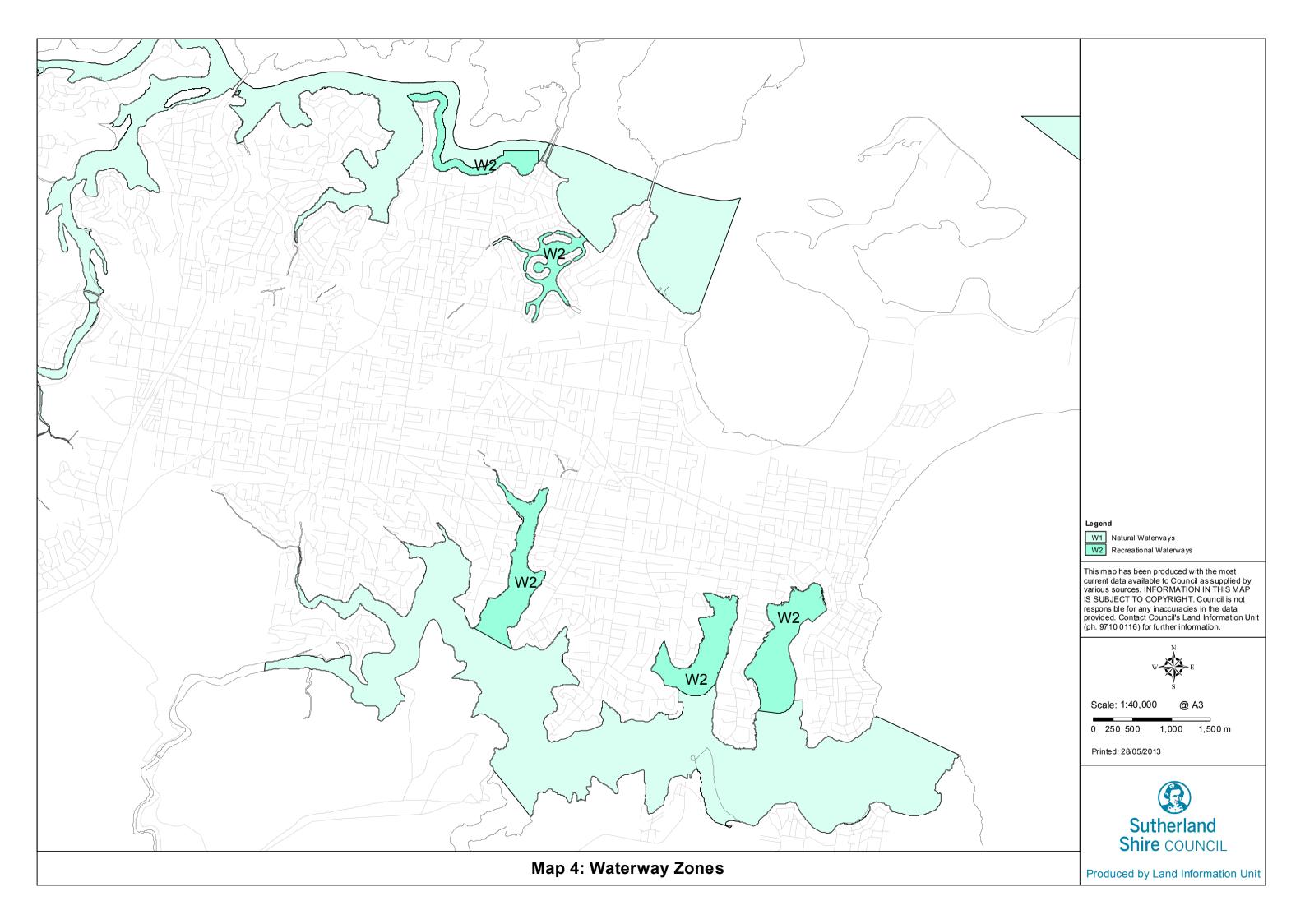












#### Part 6 - Project Timeline

Task	Estimated Completion Time	Dates	Revised Dates Post Gateway
Submission of Planning	N/A	Week ending 12	Week ending 12
Proposal to DP&I		April 2013	April 2013
Gateway Determination		3 May 2013	29 May 2013
Anticipated timeframe for the completion of required studies	N/A	N/A	N/A
Timeframe for government agency consultation (pre and post exhibition as required by Gateway determination)	During exhibition		21 days – during exhibition period
Commence exhibition and completion dates for public exhibition period	2 weeks to finalise exhibition documents, distribute to libraries & place advert in St George & Sutherland Leader and Liverpool City Leader.  Four (4) weeks public consultation period.	14 May 2013	Public notification 18 June 2013
			Exhibition period 18 June 2013 – 17 July 2013
Finish Exhibition		11 June 2013	17 July 2013
Dates for public hearing (if required)	N/A	N/A	N/A
Timeframe for consideration of submissions	Three weeks		Three weeks
Timeframe for the consideration of a proposal post exhibition			
Report completed, mapping revised, instrument amended and report considered at Development Assessment and Planning (DAP) Committee		15 July 2013	12 August 2013
Council meeting		29 July 2013	26 August 2013
Anticipated date Relevant Planning Authority will forward to the department for plan to be made		Week ending 9 August 2013	Week ending 30 August 2013
PC Opinion and plan made	Approx 3 weeks plus time for legislation website	Early September 2013	Intended to incorporate into DSSLEP2013 when made.
Anticipated commencement date		DP&I to determine	

#### **APPENDIX 1 – MAYORAL MINUTE**

#### **Council Meeting**

25/03/2013

Mayoral Minute No. 29/12-13 Planning Controls for Sutherland Shire's Waterways

File Number: GO/06A/820215, LP/03/587086

**Director:** 

**Report Item** 

#### **MAYORAL MINUTE NO. 29/12-13**

25 March 2013

The Councillors of Sutherland Shire

**Dear Councillors** 

#### Planning controls for Sutherland Shire's Waterways

The Shires' waterways form an important part of the character of Sutherland Shire, and are an integral part of the enviable lifestyle enjoyed in the Shire. Council has considered the planning controls for the Shire's waterways at several recent meetings. There is significant community interest in the planning and environmental outcomes for the Shire's waterways. For this reason, it is important to clearly articulate Council's intentions and provide clear direction for future planning controls for the waterways. Council should balance the reasonable aspirations of land owners to enjoy waterfront properties with the rights of the public to enjoy the recreational amenity the waterways provide. Ecological considerations are also important to ensure the waterways remain healthy and the scenic qualities of each river and bay should be reasonably preserved and enhanced. Finding the right balance between these factors is the role of council and it is important that we get the balance right so that it reflects the priorities of the community.

While Council has already resolved to have two waterways zones, I believe that the application of these zones as proposed in the Draft Sutherland Shire Local Environmental Plan 2013 needs to be refined to clarify the development potential in each bay.

The various bays on the waterways are different. In a physical sense, some are narrow with steep foreshores while others are wide and open. Additionally the foreshores can be rocky or sandy, natural or built upon. Some bays better facilitate boating activity than others, meaning some bays are busy while others are quiet havens. Similarly some bays can better accommodate waterfront development than others. The different character of each bay should be recognised.

One of the key issues raised in the various debates relating to the proposed zoning of the Shire's waterways is the permissibility and location of moorings. There is significant pent-up demand for swing and fixed moorings. Providing opportunities for more fixed moorings may address some of this demand, but there is likely to still be a demand for swing moorings. When considering proposals for fixed moorings the question of whether they are likely to replace or supplement existing swing moorings needs to be considered. Moorings will still be in demand from boat owners who are not waterfront owners - without moorings or expanded marinas their boats must be stored on land.

While potential impacts of new and existing moorings must be considered and monitored carefully, such as their potential impacts on seagrass communities in some locations there can be positive ecological benefits of new moorings if they are sensitively designed and positioned.

The W2 Recreational Waterways zone, which permits greater maritime development, can be more broadly applied than currently proposed. All of Gunnamatta Bay, Burraneer Bay, Yowie Bay and Dolan's Bay should be in the W2 zone. The southern boundaries of the zone will be determined by consideration of the impacts on *Posidonia australis* seagrass. The waterway along the Georges River from Tom Ugly's bridge to the north-western point of Kangaroo Point is also appropriate for more intense activity. In addition the W2 zone is appropriate for the continuation, enhancement and reasonable expansion of existing commercial marinas as already proposed, in a sustainable manner.

The application of the W1 Natural Waterways Zone is most appropriate to those waterways that are more sensitive and where it is not desirable to have unsustainable intense development, such as the Woronora River and Hacking River west of Grays Point. In such localities areas of foreshore with existing natural features or a natural native foreshore character should be considered for sustainable preservation.

The land use tables for the W1 and W2 zone in the DSSLEP2013 are very similar. The differences between the zones can be more clearly articulated in the objectives to the zone to clarify that in the W2 zone there is greater development potential, while in the W1 zone the development potential is informed by locality and site specific characteristics. Also, the W1 zone should not include new commercial marinas. Including the possibility for new commercial marinas would suggest that there are locations in the zone where a commercial marina would be acceptable, while in reality it is unlikely that a commercial marina is appropriate anywhere in the zone. There may however be opportunity for the development of smaller private marinas to allow sustainable options for watercraft berthing.

It is Council's intention to permit a wider range of development in the waterway to allow waterfront landowners and boat owners to enjoy the waterways, whilst remaining mindful of the potential impacts of such development. In the W1 zone, the cumulative impact of numerous structures or inappropriate concentration of structures in one section of the waterway may in some cases destroy the very character and scenic quality which nearby residents and the wider public value. In the W2 zone the use of the waterway and views of the waterway from public and private areas must be considered. I propose that additional objectives be added to the land use tables for the W1 and W2 zone, to ensure that Council's decisions appropriately acknowledge the differing character of different parts of the Shire's waterways.

To assist Councillors to practically interpret these changes, maps marking up the proposed W2 zone changes and the amended land use tables are attached to this minute.

Council has received a Gateway Determination on the DSSLEP2013 and the draft plan is currently on public exhibition. The intention however is that all pending and future development applications are assessed with regard to the latest proposed changes to the planning controls.

#### MOTION:

- 1. That appropriate steps be taken to amend the draft Sutherland Shire Local Environmental Plan 2013 in the following ways:
  - a) Extend the boundaries of Zone W2 Recreational Waterways to include those waterways where a broader range of uses should be permitted to include:
    - i) Gunnamatta Bay, Burraneer Bay, Dolans Bay and Yowie Bay; and
    - ii) Georges River from Tom Ugly's Bridge to the north-western point of Kangaroo Point.
  - b) For clarity add the uses permitted in with consent in the W1 zone "mooring pens", "boatsheds" and "private non commercial marinas".
  - c) Replace the final objective for the W1 Natural Waterways Zone with the following objective that addresses cumulative impact to ensure that a development control plan can adequately establish guidelines to avoid clutter and conflict. To allow permitted water based structures where appropriate having regard to:
    - a) the cumulative impact of man-made structures and their concentration within a section of the waterway
    - b) the natural character and natural scenic quality of the waterway; or
    - c) the established recreational use and functionality of the waterway; or
    - d) the views of the waterway and land/waterway interface from the public and private domain.
    - e) appropriate water based facilities to serve private properties.
  - d) Insert an additional objective within Zone W1 and W2 Recreational Waterways to ensure that a development control plan can adequately establish guidelines for mooring pens:
    - To allow a suitable mooring facilities having regard to the established character of an area, recreational uses, the functionality of the waterways and the cumulative impact of man-made structures or the concentration of development within a section of the waterway.
  - e) Insert an additional objective within zone W1 "To prevent new Commercial Marinas within Zone W1 Natural Waterways."

2. That the Department of Planning and Infrastructure be advised of Council's intention for these amendments to be incorporated into Sutherland Shire Local Environmental Plan 2013 when that plan is made by the Minister, and the Mayor be delegated authority to take steps to that end having regard to advice received from the Department.

Councillor Kent Johns Mayor

#### **Report Recommendation:**

Mayoral Minute No. 29/12-13 Planning Controls for Sutherland Shire's Waterways

# APPENDIX Mayoral Minute No. 29/12-13 Planning Controls for Sutherland Shire's Waterways



2013 03 15 Proposed W2 zone maps.pdf

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#### **Committee Recommendation:**

Mayoral Minute No. 29/12-13 Planning Controls for Sutherland Shire's Waterways

#### **Council Resolution:**

- 1. That appropriate steps be taken to prepare a Planning Proposal and obtain Gateway approval to amend the draft Sutherland Shire Local Environmental Plan 2013 in the following ways:
- a) Extend the boundaries of Zone W2 Recreational Waterways to include those waterways where a broader range of uses should be permitted to include:
  - i) Gunnamatta Bay, Burraneer Bay, Dolans Bay and Yowie Bay; and
- ii) Georges River from Tom Ugly's Bridge to the north-western point of Kangaroo Point.
- b) For clarity add the uses permitted in with consent in the W1 zone "mooring pens" and "boatsheds".
- c) Replace the final objective for the W1 Natural Waterways Zone with the following objective that addresses cumulative impact to ensure that a development control plan can adequately establish guidelines to avoid clutter and conflict. To allow permitted water based structures where appropriate having regard to:
- a) The cumulative impact of man-made structures and their concentration within a section of the waterway
  - b) The natural character and natural scenic quality of the waterway; or
  - c) The established recreational use and functionality of the waterway; or
- d) The views of the waterway and land/waterway interface from the public and private domain.

- e) Appropriate water based facilities to serve private properties.
- d) Insert an additional objective within Zone W1 and W2 Recreational Waterways to ensure that a development control plan can adequately establish guidelines for mooring pens:

To allow a suitable mooring facilities having regard to the established character of an area, recreational uses, the functionality of the waterways and the cumulative impact of man-made structures or the concentration of development within a section of the waterway.

- e) Insert an additional objective within zone W1 "To allow for multiple mooring pens to be attached to a water recreation structure in Zone W1 Natural Waterways."
- 2. That the Department of Planning and Infrastructure be advised of Council's intention for these amendments to be incorporated into Sutherland Shire Local Environmental Plan 2013 when that plan is made by the Minister, and the Mayor be delegated authority to take steps to that end having regard to advice received from the Department about exhibiting and processing the Planning Proposal.

#### **Council Meeting**

27/05/2013 CCL039-13

Waterways Rezoning Proposal File Number: LP/06/529816

**Director: Environmental Services (JB:MC:MP)** 

**Report Item** 

#### REPORT IN BRIEF

#### **Purpose**

This report seeks to obtain council's approval of an amendment to the Planning Proposal to rezone parts of the waterways under Draft Sutherland Shire Local Environmental Plan 2013 (DSSLEP2013) to increase the extent of the proposed W2 Recreational Waterways zone along the Georges River in the vicinity of Tom Ugly's Bridge.

#### **Summary**

Council has previously resolved (Mayoral Minute 29/12-13 ) to expand the extent of the proposed W2 Recreational Waterways zone under DSSLEP2013. It has come to council's attention that the extent of the proposed W2 zone in the vicinity of the Sylvania Marina does not cover the full extent of the current commercial operation which includes the nearby swing moorings at Sylvania. It is also understood that the extent of the area under the current proposed zoning would not accommodate the contemplated expansion of the marina. This report seeks council's support to extend the W2 zone in the vicinity of Sylvania Marina to include the existing mooring fields in this locality.

A Planning Proposal based on council's previous resolution has been submitted to the Department of Planning and Infrastructure and considered by the Gateway, but the Gateway determination has not yet been received. If supported by council this further amendment could be included within the Planning Proposal. Should the Gateway support the Planning Proposal, it can be anticipated that the Gateway determination will authorise council to publicly exhibit the Planning Proposal for comment. It is desirable that the exhibition include the expanded W2 proposal for the Georges River because it would allow any development application to be considered on its merits. The Department of Planning has been advised of council's consideration of an amendment to the mapping of the W2 zone. Council is liaising with the Department as to the most appropriate means to incorporate the updated mapping into the Planning Proposal to be exhibited.

#### REPORT IN FULL

#### **Purpose and Background**

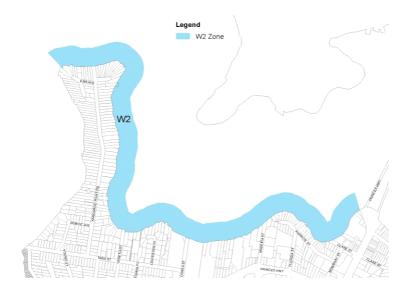
Council has previously resolved to expand the extent of the waterways proposed to be zoned W2 Recreational Waterways under DSSLEP2013 (Mayoral Minute 29/12-13). A Planning Proposal to give effect to the resolutions of the Mayoral Minute was submitted to the Department of Planning and Infrastructure in April of this year, and the Planning Proposal was considered at the Gateway Panel on 17 May. The Gateway determination has not yet been received.

This report has been prepared at the request of the Mayor and proposes an amendment to the extent of the proposed W2 zone on the Georges River. This will enlarge the area where marinas are a permissible use, allowing any future development application to extend the marina to be considered on its merits.

#### Proposed W2 Recreational Waterways zoning on the Georges River

The extent of the W2 Recreational Waterways zone proposed in the Planning Proposal is indicated in Figure 1 below.

Figure 1: Proposed W2 Recreational Waterway for the Georges River in the Planning Proposal



It is understood that the extent of this proposed W2 area in the vicinity of Sylvania Marina does not cover the full extent of the current existing marina and commercial lease area which includes the swing moorings Sylvania near Tom Ugly's Bridge. It is also understood that the extent of the area under the current proposed zoning would not accommodate the contemplated expansion of the marina to remove swing moorings adjacent to the marina and replace these with fixed moorings.

This report seeks to obtain council's approval of an amendment to the proposed W2 zone in this locality to increase the extent of the proposed W2 zone. The proposed expansion of the zone is to include the existing mooring fields, with the boundaries being geometrically determined and described as:

- East Boundary 150m due North (from cadastral boundary between 9 Princes Highway (Council Reserve) & Princes Highway road reserve)
- North Boundary 450m due West (ie., 90 deg angle to eastern boundary)
- Western Boundary 165m due North from cadastral boundary between 51 & 53 Harrow Street

The proposed amendment to the currently proposed W2 zone is illustrated in Figure 2 below. This would provide opportunity for the expansion of either of the existing marinas in this locality.

Legend

W2 Zone

W2 Zone

Figure 2: Proposed Revised extent of W2 Recreational Waterways for the Georges River

#### **Amending the Planning Proposal**

As previously noted, the Planning Proposal has been considered by the Gateway Panel, but the Gateway determination has not yet been received by council. Should the Gateway support the Planning Proposal, it can be anticipated that the Gateway Determination will authorise council to publicly exhibit the Planning Proposal for comment. It is desirable that the exhibition include the amended W2 proposal for the Georges River. The proposed amendment to the W2 zone in the vicinity of Sylvania Marina does not include a policy change relating to the Planning Proposal considered by the Gateway.

The Department of Planning and Infrastructure has been advised that council is to consider a proposed amendment to the extent of the W2 zone along the Georges River and that if the amendment is supported, intends to submit a replacement map (see Appendix 1) for inclusion in the Planning Proposal that has been considered by the Gateway Panel. Council has not yet received confirmation from the Department that this approach is acceptable to the Department.

If this is not acceptable, it is likely that the Planning Proposal incorporating the revised map will be required to be reconsidered by the Gateway Panel before the Gateway determination is provided to council. Council cannot exhibit the Planning Proposal without receiving a Gateway determination. A report will be provided to council when the Gateway determination is received.

#### **Conclusion**

Amending the extent of the W2 Recreational Waterways zone along the Georges River will pre-empt future potential uncertainty relating to expansion of the marinas near Tom Ugly's Bridge. Whilst there is no broad policy change in relation to the Planning Proposal already submitted and considered for Gateway determination, ongoing-negotiations will be required with the Department of Planning to determine the best way to progress the incorporation of the revised map into the current Waterways Planning Proposal.

#### **Report Recommendation:**

- 1. That the proposed amendment to the extent of the W2 Recreational Waterways zone along the Georges River be adopted.
- 2. That the revised map for the Georges River (Appendix 1) be forwarded to the Department of Planning and Infrastructure as a replacement map in the Waterways Planning Proposal previously submitted for consideration by the Gateway.
- 3. That Council officers continue to liaise with the Department of Planning and Infrastructure regarding the progress of the Waterways Planning Proposal.

## APPENDIX Waterways Rezoning Proposal

#### Appendix 1



W2zone Amended GeorgesRiver.pdf

(To view the document, double click on icon and select 'Open'. Select 'File' 'Close' to return to report.)

#### **Committee Recommendation:**

- 1. That the proposed amendment to the extent of the W2 Recreational Waterways zone along the Georges River be adopted.
- 2. That the revised map for the Georges River (Appendix 1) be forwarded to the Department of Planning and Infrastructure as a replacement map in the Waterways Planning Proposal previously submitted for consideration by the Gateway.
- 3. That Council officers continue to liaise with the Department of Planning and Infrastructure regarding the progress of the Waterways Planning Proposal.

#### **Council Resolution:**

- 1. That the proposed amendment to the extent of the W2 Recreational Waterways zone along the Georges River be adopted.
- 2. That the revised map for the Georges River (Appendix 1) be forwarded to the Department of Planning and Infrastructure as a replacement map in the Waterways Planning Proposal previously submitted for consideration by the Gateway.
- 3. That Council officers continue to liaise with the Department of Planning and Infrastructure regarding the progress of the Waterways Planning Proposal.

## APPENDIX 2 – STATE ENVIRONMENTAL PLANNING POLICIES

The following tables list the State Environmental Planning Policies (SEPPs) and Deemed SEPP's which are applicable to the Sutherland Shire Local Government Area, and their applicability to the planning proposal.

## 1. STATE ENVIRONMENTAL PLANNING POLICIES APPLICABLE TO SUTHERLAND SHIRE LOCAL GOVERNMENT AREA

State environmental planning policies (SEPPs) deal with issues significant to the state and people of New South Wales. They are made by the Minister for Planning and may be exhibited in draft form for public comment before being gazetted as a legal document.

STATE ENVIRONMENTAL PLANNING POLICY	RELEVANT TO PLANNING PROPOSAL?
SEPP No. 1- Development Standards Gazetted 17.10.80	No
SEPP No. 4 – Development Without Consent and Miscellaneous Complying Development (Previously known as SEPP No. 4 – Development without Consent) Gazetted 4.12 1981	No
SEPP No. 6 - Number of Storeys in a Building Gazetted 10.12.82	No
SEPP No. 19 - Bushland in Urban Areas Gazetted 24.10.86	No
SEPP No. 21 - Caravan Parks Gazetted 24.4.92	No
SEPP No. 22 - Shops and Commercial Premises Gazetted 9.1.87	No
SEPP No. 30 - Intensive Agriculture Gazetted 8.12.89	No
SEPP No. 32 - Urban Consolidation (Redevelopment of Urban Land) Gazetted 15.11.91	No
SEPP No. 33 - Hazardous and Offensive  Development  Gazetted 13.3.92	No
SEPP No. 39 - Spit Island Bird Habitat Gazetted 9.9.94	No
SEPP No. 50 – Canal Estates Gazetted 10.11.97	No

STATE ENVIRONMENTAL PLANNING POLICY	RELEVANT TO PLANNING PROPOSAL?
SEPP No. 55 – Remediation of Land Gazetted 28.8.98	No
SEPP No. 64 - Advertising and Signage Gazetted 16.3.01	No
SEPP No. 65 - Design Quality of Residential Flat Development Gazetted 26.7.02	No
SEPP No. 71 - Coastal Protection Gazetted 01.11.02	Yes
The Policy aims to ensure that development in the NSW coastal zone is appropriate and suitably located, to ensure that there is a consistent and strategic approach to coastal planning and management and to ensure there is a clear development assessment framework for the coastal zone.	The planning proposal is consistent.
SEPP (Housing for Seniors or People with a Disability) 2004 Gazetted 31.03.04	No
SEPP (Building Sustainability Index: BASIX) Gazetted 01.07.04	No
SEPP (Development on Kurnell Peninsula) 2005 Gazetted: 01.07.05	No
SEPP (Major Development) 2005 Gazetted: 01.08.05	No
SEPP (Mining, Petroleum Production and Extractive Industries) 2007 Gazetted: 16.02.07	No
SEPP (Temporary Structures) 2007 Gazetted: 28.09.07	No
SEPP (Infrastructure) 2007 Gazetted: 21.12.07	Yes
Provides a consistent planning regime for infrastructure and the provision of services across NSW, along with providing for consultation with relevant public authorities during the assessment process. The SEPP supports greater flexibility in the location of infrastructure and service facilities along with improved regulatory certainty and efficiency.	The planning proposal is consistent.
SEPP (Exempt and Complying Development Codes) 2008 Gazetted 12.12.08	No

STATE ENVIRONMENTAL PLANNING POLICY	RELEVANT TO PLANNING PROPOSAL?
SEPP (Affordable Rental Housing) 2009 Published: 31.07.09	No

# 2. DEEMED STATE ENVIRONMENTAL PLANNING POLICIES APPLICABLE TO SUTHERLAND SHIRE LOCAL GOVERNMENT AREA (REGIONAL ENVIRONMENTAL PLANNING POLICIES)

All existing REPs are now deemed State environmental planning policies (SEPPs). These cover issues such as urban growth, commercial centres, extractive industries, recreational needs, rural lands, and heritage and conservation. The Department of Planning and Infrastructure is reviewing all these remaining REPs as part of the NSW planning system reforms.

DEEMED STATE ENVIRONMENTAL PLANNING POLICY	RELEVANT TO PLANNING PROPOSAL
REP No. 2 - Georges River Catchment Gazetted 5.2.99	No
REP No. 9- Extractive Industry (No. 2) Gazetted: 15.9.95	No

#### **APPENDIX 3 – LOCAL PLANNING DIRECTIONS**

The following Directions have been issued by the Minister for Planning and Infrastructure to relevant planning authorities under section 117(2) of the *Environmental Planning and Assessment Act 1979*. These directions apply to planning proposals lodged with the Department of Planning and Infrastructure.

Note: Directions 5.5 Development in the vicinity of Ellalong, Paxton and Millfield (Cessnock LGA), 5.6 Sydney to Canberra Corridor and 5.7 Central Coast have been revoked.

PLANNING DIRECTION	RELEVANT TO PLANNING PROPOSAL?  COMMENT
Employment and Resources	
1.1 Business and Industrial Zones	No. The Planning Proposal does not relate to business or industrial zones.
1.2 Rural Zones	No. The Planning Proposal does not relate to rural zones.
1.3 Mining, Petroleum Production and Extractive Industries	No. The Planning Proposal does not affect mining, petroleum production or extractive industries.
1.4 Oyster Aquaculture	No. The Planning Proposal does not apply to land where oyster aquaculture is undertaken.
1.5 Rural Lands	No. The Planning Proposal does apply to rural lands.
2. Environment and Heritage	
<ul> <li>2.1 Environment Protection Zones</li> <li>The objective of this direction is to protect and conserve environmentally sensitive areas.</li> <li>This direction requires that: <ul> <li>(a) A planning proposal must include provisions that facilitate the protection and conservation of environmentally sensitive areas.</li> <li>(b) A planning proposal that applies to land within an environment protection zone or land otherwise identified for environment protection purposes in a LEP must not reduce the environmental protection standards that apply to the land (including by modifying development standards that apply to the land). This requirement does not apply to a change to a development standard for minimum lot size for a dwelling in accordance with clause (5) of Direction 1.5 "Rural Lands".</li> </ul> </li> </ul>	Yes. The planning proposal responds to the environmental characteristics of different parts of the waterways by applying different zones and permitting different land uses.

	PLANNING DIRECTION	RELEVANT TO PLANNING PROPOSAL?  COMMENT
in the N	Coastal Protection  bjective of this direction is to implement the principles NSW Coastal Policy.  rection requires that a planning proposal must include provisions that give effect to and are consistent with:  the NSW Coastal Policy: A Sustainable Future for the New South Wales Coast 1997, and the Coastal Design Guidelines 2003, and the manual relating to the management of the coastline for the purposes of section 733 of the Local Government Act 1993 (the NSW Coastline Management Manual 1990).	Yes. The planning proposal does not propose any amendment to Clause 5.5 Development in the Coastal Zone in DSSLEP2013.
objects and inc	Heritage Conservation sjective of this direction is to conserve items, areas, and places of environmental heritage significance digenous heritage significance.  rection requires that a planning proposal must contain provisions that facilitate the conservation of:  items, places, buildings, works, relics, moveable objects or precincts of environmental heritage significance to an area, in relation to the historical, scientific, cultural, social, archaeological, architectural, natural or aesthetic value of the item, area, object or place, identified in a study of the environmental heritage of the area, Aboriginal objects or Aboriginal places that are protected under the National Parks and Wildlife Act 1974, and Aboriginal areas, Aboriginal objects, Aboriginal places or landscapes identified by an Aboriginal	Yes. The planning proposal does not propose any amendment to Clause 5.10 Heritage Conservation, Schedule 5 and the Heritage Map in DSSLEP2013.
2.4	heritage survey prepared by or on behalf of an Aboriginal Land Council, Aboriginal body or public authority and provided to the relevant planning authority, which identifies the area, object, place or landscape as being of heritage significance to Aboriginal culture and people.  Recreation Vehicle Areas	No. The Planning Proposal does not propose
2.4	Recreation vehicle Areas	to enable land to be developed for a recreation vehicle area.
3. Ho	ousing, Infrastructure and Urban Development	
3.1	Residential Zones	No. The Planning Proposal does not apply to residential zones.
3.2	Caravan Parks and Manufactured Home Estates	No. The Planning Proposal does not relate to caravan parks or manufactured home estates.
3.3	Home Occupations	No. The Planning Proposal does not relate to home occupations.
3.4	Integrating Land Use and Transport	No. The Planning Proposal only relates to private waterfront development.

PLANNING DIRECTION	RELEVANT TO PLANNING PROPOSAL?  COMMENT
3.5 Development Near Licensed Aerodromes	No. The Planning Proposal does not apply to land near licensed aerodomes.
3.6 Shooting Ranges	No. The Planning Proposal does not apply to shooting ranges.
4. Hazard and Risk	
4.1 Acid Sulfate Soils	Yes. The Planning Proposal does not propose any amendment to Clause 6.5 Acid Sulfate soils in DSSLEP2013.
4.2 Mine Subsidence and Unstable Land	No . The Planning Proposal does not apply to land that is within a Mine Subsidence District proclaimed pursuant to section 15 of the Mine Subsidence Compensation Act 1961, or has been identified as unstable land
4.3 Flood Prone Land	Yes. The Planning Proposal does not propose any amendment to Clause 6.6 Flood Planning in DSSLEP2013.
4.4 Planning for Bushfire Protection	No. The Planning Proposal does not apply to land identified as bush fire prone land.
5. Regional Planning	
5.1 Implementation of Regional Strategies	No.The Planning Direction is not applicable to Sutherland Shire
5.2 Sydney Drinking Water Catchments	No .The Planning Direction only applies to land within the Sydney drinking water catchment.
5.3 Farmland of State and Regional Significance on the NSW Far North Coast	No. The Planning Direction is not applicable to Sutherland Shire Local Government Area.
5.4 Commercial and Retail Development along the Pacific Highway, North Coast	No. The Planning Direction is not applicable to Sutherland Shire Local Government Area.
5.8 Second Sydney Airport: Badgerys Creek	No. The Planning Direction is not applicable to Sutherland Shire Local Government Area.
6. Local Plan Making	

	PLANNING DIRECTION	RELEVANT TO PLANNING PROPOSAL?  COMMENT
6.1 Approval and Referral Requirements		Yes. The planning proposal is consistent
The objective of this direction is to ensure that LEP provisions encourage the efficient and appropriate assessment of development.		with the Planning Direction.
This d	lirection requires that a planning proposal must:	
(a)	minimise the inclusion of provisions that require the concurrence, consultation or referral of development applications to a Minister or public authority, and	
(b)	not contain provisions requiring concurrence, consultation or referral of a Minister or public authority unless the relevant planning authority has obtained the approval of:	
	<ul><li>(i) the appropriate Minister or public authority, and</li></ul>	
	(ii) the Director-General of the Department of Planning (or an officer of the Department nominated by the Director-General),	
	prior to undertaking community consultation in satisfaction of section 57 of the Act, and	
(c)	not identify development as designated development unless the relevant planning authority:	
(d)	can satisfy the Director-General of the Department of Planning (or an officer of the Department nominated by the Director-General) that the class of development is likely to have a significant impact on the environment, and	
(e)	has obtained the approval of the Director-General of the Department of Planning (or an officer of the Department nominated by the Director-General) prior to undertaking community consultation in satisfaction of section 57 of the Act.	
6.2	Reserving Land for Public Purposes	No. The Planning Direction only applies to land reserved for public purposes.
6.3	Site Specific Provisions	No. The Planning Direction only applies to a site specific planning proposal.
7.	Metropolitan Planning	
7.1 Sydne	Implementation of the Metropolitan Plan for ey 2036	Yes. The Planning Proposal is consistent with the Planning Direction
vision and a 2036.		
This direction requires that a planning proposal shall be consistent with the NSW Government's Metropolitan Plan for Sydney 2036 published in December 2010 ("the Metropolitan Plan").		

#### **APPENDIX 4 – FACTSHEET**



# Endangered populations in NSW: Posidonia australis in Port Hacking, Botany Bay, Sydney Harbour, Pittwater, Brisbane Waters and Lake Macquarie

Fisheries Ecosystems Unit, Port Stephens Fisheries Institute

#### Introduction

Posidonia australis, also commonly referred to as strapweed, is a type of seagrass that is endemic (native) to the temperate marine and estuarine waters of the southern half of Australia. In NSW, Posidonia australis is found within the protected waters of coastal bays and estuaries and coastal lakes that are subject to frequent tidal flushing.

This seagrass species has been impacted by a range of human activities, particularly in six estuaries within the Sydney and Central Coast region. Populations of *Posidonia australis* in Port Hacking, Botany Bay, Sydney Harbour, Pittwater, Brisbane Waters and Lake Macquarie have suffered such a large reduction in abundance and geographic distribution that they have been listed as **endangered populations** under the threatened species schedules of the NSW *Fisheries Management Act 1994*.

This loss is likely to have had significant historical and ongoing impacts on marine and estuarine biodiversity and productivity as *Posidonia australis* plays an important role in providing nursery areas, feeding grounds and shelter for many aquatic animals.



Figure 1: Posidonia australis generally has green or brown leaves, often with algae growing on them. Photo: Justin Gilligan.

#### **Description**

Seagrasses are flowering plants that live and reproduce entirely within seawater. Seagrasses are not related to seaweeds.

Posidonia australis is the largest of the eight species of seagrass that occur in NSW waters and has strap-like leaves that can reach up to 60 cm in length. New leaves are bright green, and mature leaves are often more brown in colour and commonly covered in epiphytes (which are smaller algae species that attach themselves to the leaf surface, see figure 1). Leaves are typically between 10–20 mm wide, but can be as little as 6 mm in very young plants.

Each shoot along the rhizome (the horizontal stem that runs between plants and helps to anchor the plant) carries 2–4 leaves. The rhizomes are usually buried and are 1–2 cm thick.

The leaves of this species are produced constantly throughout the year, but growth is slower during the winter months. Old leaves are shed regularly and accumulate in the shallows and on shore (known as "wrack").

#### **Habitat and ecology**

The Posidoniaceae family contains nine species, but *Posidonia australis* is the only member of the family that occurs in NSW. Seven other species occur elsewhere in Australia, and the remaining member of the family is found in the Mediterranean Sea.

Within NSW, *Posidonia australis* occurs from Wallis Lake in the north to Twofold Bay in the south, with a few isolated populations found along the coastline and at offshore islands. Maps showing the current known distribution of the endangered populations of *Posidonia australis* can be seen in the maps below.

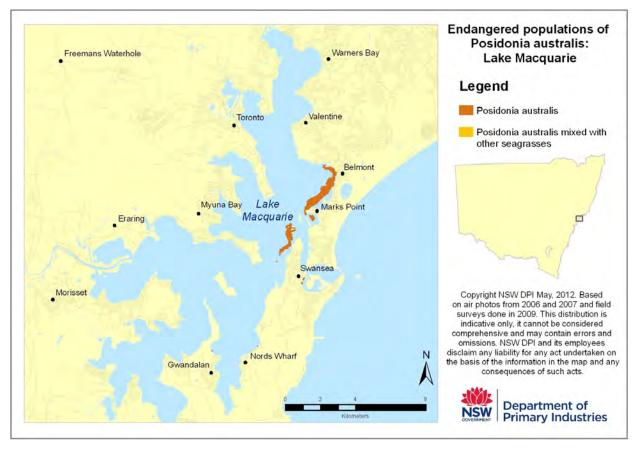


Figure 2: Map showing the known extent of the endangered population of Posidonia australis in Lake Macquarie.

The species can grow in coarse sandy to fine silty sediments between the low tide line and approximately 10 m depth. It may also occur in deeper water if water clarity is good.

It can form large, dense stands (called meadows), and is also often found mixed with other species of seagrass such as *Zostera* (eelgrass) and *Halophila* (paddleweed).

The expansion of meadows of *Posidonia australis* occurs primarily by the lateral (sideways) growth of the rhizomes.

Sexual reproduction is via the production of monoecious flowers (male and female reproductive organs on the same plant) that are pollinated underwater. *Posidonia australis* fruits in November and the floating fruits are distributed by currents before splitting open to expose the seed.

Successful recruitment of *Posidonia australis* from seed has rarely been observed by researchers. Many fruits tend to be blown onto shore where most of the seeds are thought to perish due to desiccation.

Seedlings take 2–3 years before producing rhizomes (which help anchor plants) and are thought to be vulnerable to physical disturbance from wave action, storms, currents and smothering during this time.

Intact stands of *Posidonia australis* have the ability to grow quite rapidly, however if the growing tips of

the rhizomes are damaged, the plants cease to establish lateral rhizome runners and are very slow to recover. For example, it can take up to 50 years to close a gap of 1 m following damage to these tips.

As a result of the factors listed above, the endangered populations of *Posidonia australis* are unlikely to re-establish naturally to predevelopment levels in the short to medium term.

## Why is *Posidonia australis* important?

Posidonia australis, along with other seagrasses, is an important driver of fisheries productivity in coastal waters and is crucial to the maintenance of estuarine biodiversity. It provides important feeding and refuge areas for many species of fish, molluscs and crustaceans, many of which are targeted commercially and recreationally (see Figure 3).

All seagrasses contribute organic matter to estuarine food chains. They also stabilise the sea floor and baffle water currents, causing a reduction in sedimentation and assisting to maintain water quality.

Additionally, they help to prevent erosion by stabilising sediments and assist in removing nutrients from the water.

Posidonia australis wrack (shedded leaves) that is washed ashore also provides an important habitat and food source for small invertebrates and can provide nutrients to other marine vegetation.

# Why are populations of *Posidonia australis* endangered?

The endangered populations of *Posidonia australis* within the estuaries of Port Hacking, Botany Bay, Sydney Harbour, Pittwater, Brisbane Waters and Lake Macquarie are under particular threat due to historical and current intensity of urbanisation and associated disturbance, including:

- direct physical disturbance from dredging and reclamation activities, as well as damage from anchors, boat propellers and boat moorings (which can harm seagrass by scouring as the mooring chain is dragged across the sea bed by the moored vessel, see Figure 5);
- increased sediment entering waterways which can smother seagrass and block the light available for photosynthesis;
- eutrophication (nutrient increase, especially of nitrogen and phosphorus) resulting in an increase in epiphytes which grow on the leaves, reducing the photosynthetic capacity of Posidonia australis;



Figure 3: Posidonia australis plays a critical role in providing habitat and feeding grounds for a range of fish and other marine animals. Photo: Justin Gilligan

- indirect disturbance from altered tidal and wave regimes (associated with major dredging and foreshore reclamation) and stormwater discharges changing water quality and salinity levels:
- the construction of foreshore structures such as pontoons, jetties and berthing areas which cause direct loss and shading that inhibits the growth of seagrass; and
- potential impacts from invasive species which may have consequences for *Posidonia* australis that is already stressed due to other disturbances.

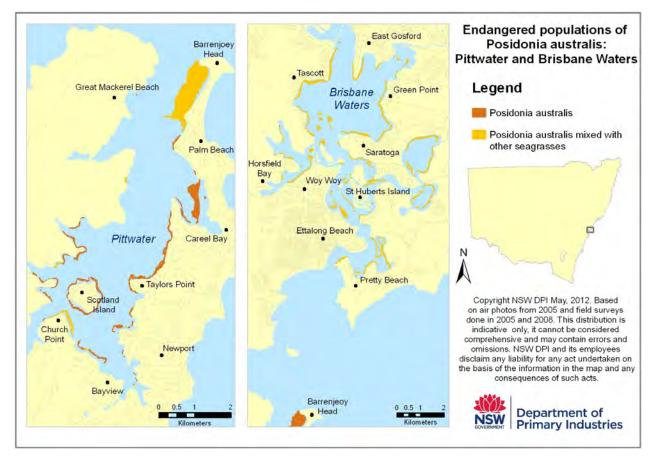


Figure 4: Map showing the known extent of the endangered population of Posidonia australis in Pittwater and Brisbane Waters.



Figure 5: Holes have been formed in a large Posidonia australis meadow at Marks Point, Lake Macquarie by boat mooring chains scouring across the sea bed. Photo: Tim Glasby.

## Conservation and recovery actions

NSW DPI works with a range of stakeholders, including other State authorities, local councils and community groups, to conserve *Posidonia* australis. Recovery actions for this species include:

- conducting research into the biology and ecology of *Posidonia australis* including cultivation and rehabilitation techniques;
- promoting the replacement of existing moorings within seagrass beds to environmentally friendly moorings;

- avoiding the establishment of new mooring blocks in proximity to *Posidonia australis* plants;
- educating boat owners to avoid anchoring in or mooring boats over fragile Posidonia beds;
- improving protection for Posidonia australis through land use and coastal zone management planning processes;
- ensuring that structures such as jetties, pontoons, berthing areas, boat ramps and slip rails and their associated use avoid shading or physical damage to *Posidonia australis* beds;
- ensuring that dredging and reclamation activities do not directly or indirectly damage Posidonia australis beds;
- preventing sedimentation and poor water quality by improving land management practices, conserving and restoring riparian (river bank) vegetation and using effective erosion control measures;
- educating coastal communities about the ecological importance of *Posidonia australis* and ways to assist with its protection and recovery;
- monitoring and assessing the impact of threatening processes affecting the survival of endangered populations of *Posidonia australis*;
- undertaking compliance action where activities cause unauthorised harm to *Posidonia* australis seagrass.

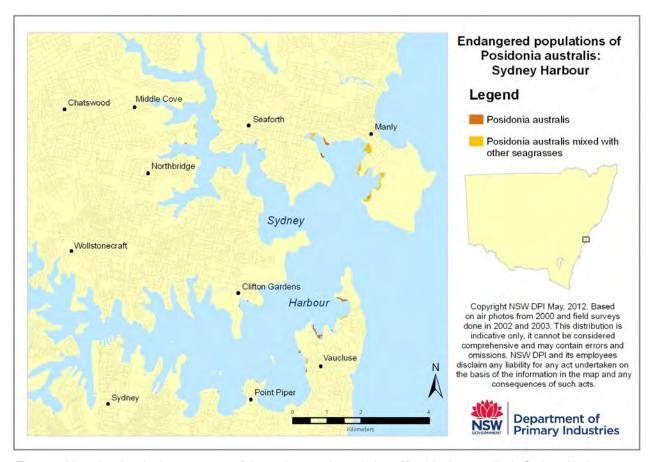


Figure 6: Map showing the known extent of the endangered population of Posidonia australis in Sydney Harbour.

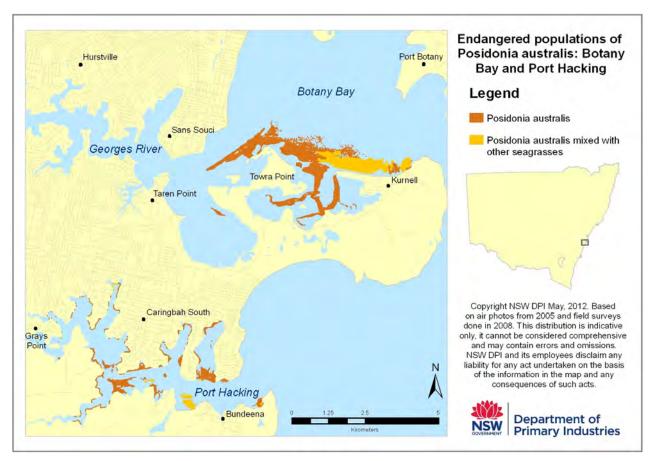


Figure 7: Map showing the known extent of the endangered population of Posidonia australis in Botany Bay and Port Hacking.

You can help too by reporting any illegal activities affecting *Posidonia australis* to your nearest Fisheries Office or to the Fishers Watch Phoneline on 1800 043 536.

#### Legal implications

It is illegal to harm, buy, sell or possess any *Posidonia australis* from Port Hacking, Botany Bay, Sydney Harbour, Pittwater, Brisbane Waters and Lake Macquarie without a specific permit, licence or other appropriate approval. This means you cannot gather, cut, pull up, destroy, poison, dig up, remove, injure, shade or cause any kind of damage to *Posidonia australis* within these waters without an appropriate approval.

Significant penalties apply for harming endangered populations including fines of up to \$220,000 and up to 2 years in prison.

There can also be significant penalties for causing damage to the habitat of an endangered population through actions such as dredging and reclamation or construction, without relevant approvals.

Different types of approvals may be granted, including for:

#### i) Research and rehabilitation

NSW DPI may issue permits for collecting live or dead *Posidonia australis* for the purpose of scientific research or for other activities that are for the benefit of the species such as habitat rehabilitation. Permit application forms and more information on research and rehabilitation permits can be found on the NSW DPI website (www.dpi.nsw.gov.au).

# ii) Development, dredging and reclamation and other activity approvals

Developments or activities that require consent or approval (in accordance with the *Environmental Planning and Assessment Act 1979*) that may impact on an endangered population of *Posidonia australis* or their habitat must be assessed to determine the significance of any impacts. Where significant impacts are identified, a detailed Species Impact Statement must be prepared, and special consultation and concurrence requirements are established.

These types of activities may be authorised, but this is dependant on the particular development or activity and the level of impact. In certain situations a threatened species licence to harm may be required.

Contact your regional Fisheries Conservation Manager to discuss requirements for undertaking activities that may cause harm to an endangered population of *Posidonia australis*.

Other legal implications include:

#### i) Land Use Planning

State and local government must consult with NSW DPI prior to making environmental planning instruments such as Local Environmental Plans and State Environmental Planning Policies that may adversely affect endangered populations of *Posidonia australis*.

#### ii) Recovery Planning

NSW DPI may prepare a recovery plan in accordance with the provisions of the *Fisheries Management Act 1994* to promote the recovery of the endangered populations of *Posidonia australis* to a position of viability in nature.

Strategies to be adopted for promoting the recovery of the endangered populations of *Posidonia australis* must be set out by NSW DPI in the Priorities Action Statement which can be viewed on the NSW DPI website at www.dpi.nsw.gov.au.

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Figure 8: Dense and healthy meadow of Posidonia australis. Photo: Justin Giligan.

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Disclaimer: The information contained in this publication is based on knowledge and understanding at the time of writing (July 2012). However, because of advances in knowledge, users are reminded of the need to ensure that information upon which they rely is up to date and to check currency of the information with the appropriate officer of the Department of Primary Industries or the user's independent adviser.

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