

An aerial photograph of a harbor filled with numerous sailboats. The water is a deep greenish-blue. In the upper right, a sandy beach is visible, bordered by a line of houses and trees. A long pier extends into the water from the top left. The overall scene is a peaceful coastal setting.

# PITTWATER WATERWAY REVIEW

## Stage 1 - Discussion Paper

NORTHERN  
BEACHES  
COUNCIL

[northernbeaches.nsw.gov.au](http://northernbeaches.nsw.gov.au)





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## What is the Pittwater Waterway Review?

The Pittwater waterway is iconic and one of the Northern Beaches most significant natural assets. It fundamentally embodies the spirit and character of the Northern Beaches and makes the area such a beautiful place to live, work and visit.

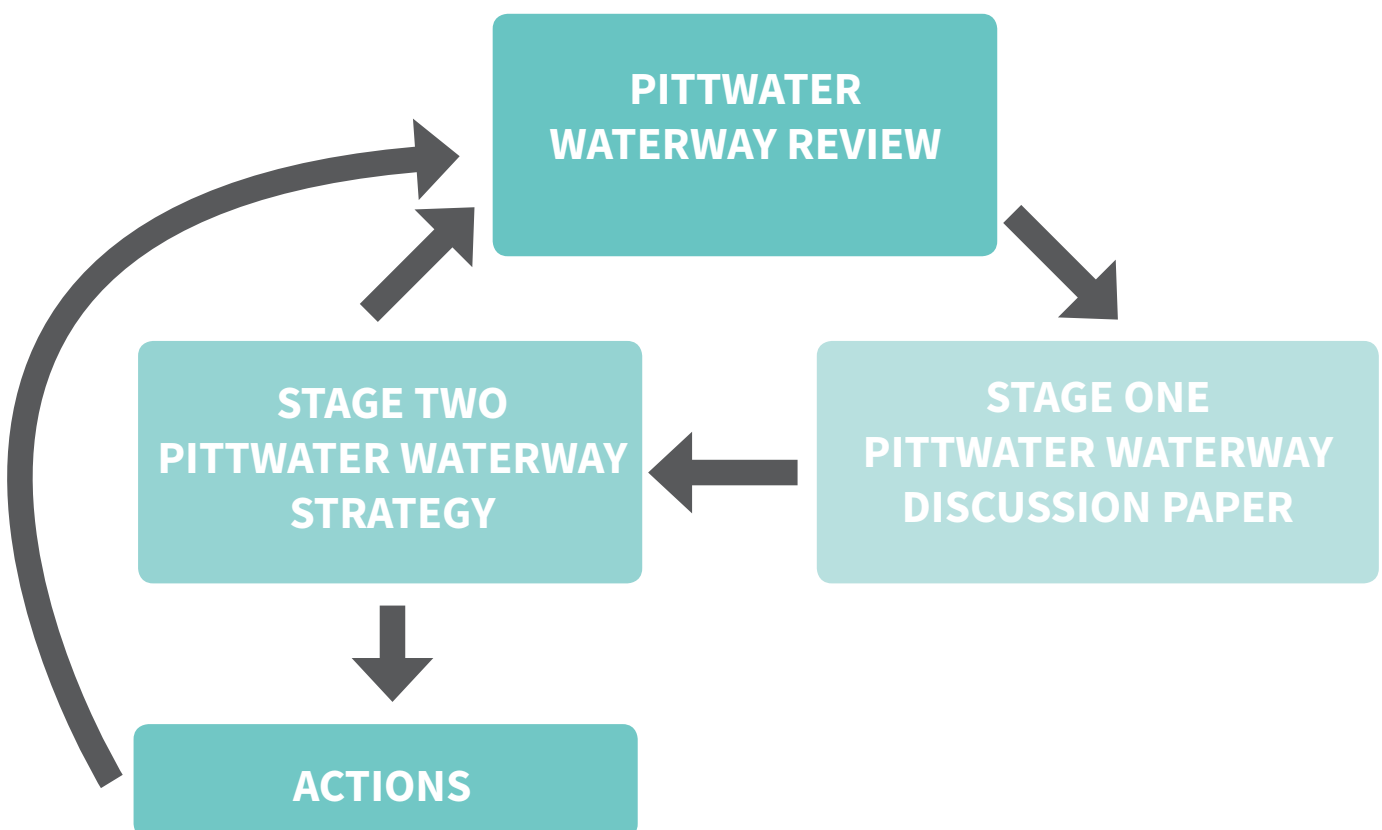
The Pittwater waterway (referred to as Pittwater or the Waterway in this paper) is highly valued, locally and regionally, for its varied marine biodiversity, delicate estuarine habitats, unique environmental setting, recreation value, natural picturesque setting, contribution to the local economy and community and means of access for offshore communities.

These diverse and competing pressures highlight the need to manage Pittwater sustainably now and into the future.

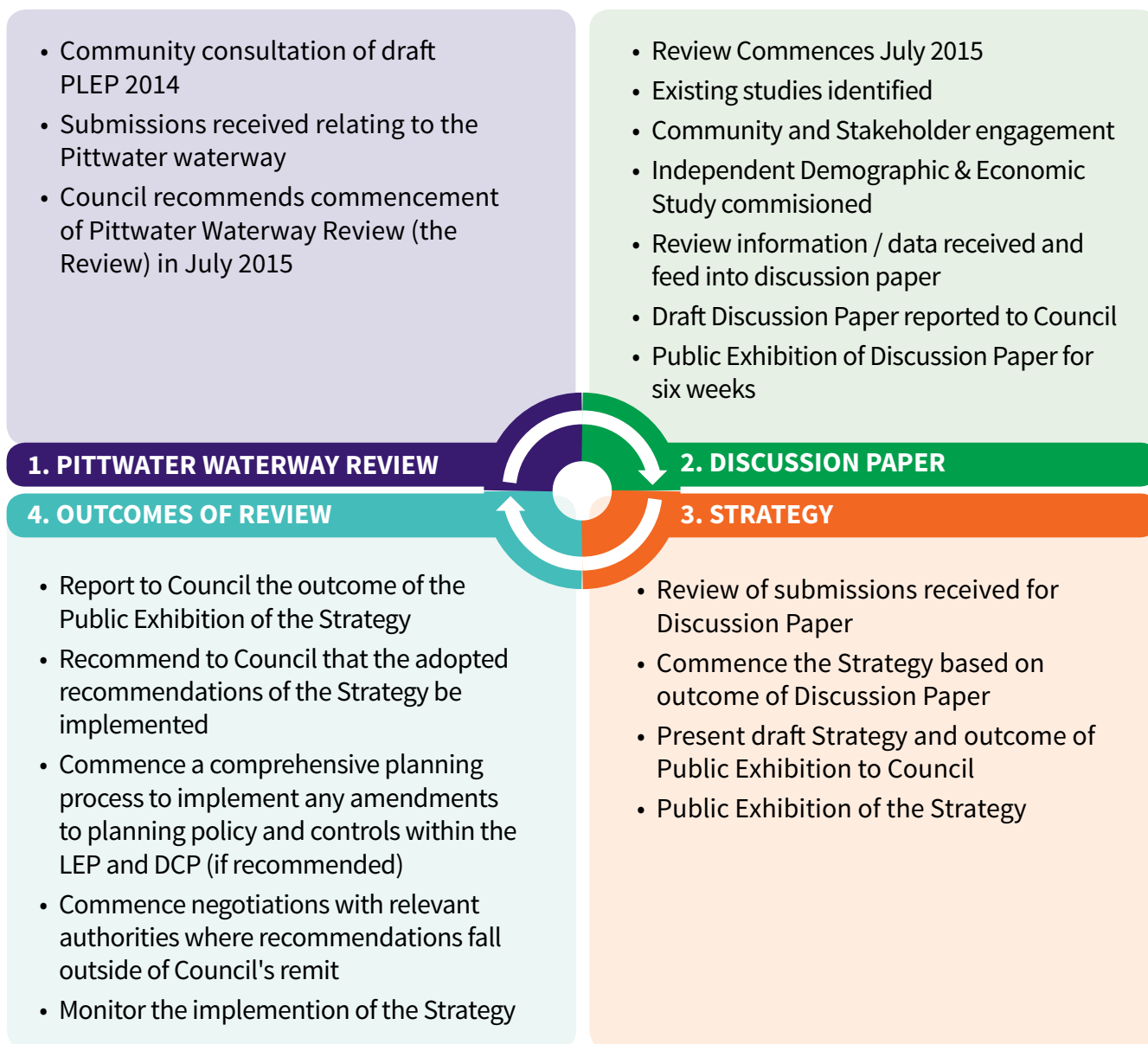
To achieve this, Council has embarked on a holistic review of the waterway to ensure it is sustainably managed.

The Pittwater Waterway Review (the Review) will seek to identify and assess all issues impacting the waterway and potential opportunities to address and balance the array of competing interests. The Review will then form the basis for the development and implementation of strategies and specific actions to guide the management of the waterway over the next 10-15 years.

### The Pittwater Waterway Review



## The Pittwater Waterway Review Process



As set out, stage 1 of the Review (the Discussion Paper), provides information and an overview of key issues impacting Pittwater, with possible strategies suggested. Council will work with the community and relevant stakeholders to develop appropriate responses to the diverse range of competing demands impacting Pittwater and deliver a Pittwater Waterway Strategy (the Strategy) which will set the framework for future planning and decision making. The Strategy (stage 2 of the Review) will provide the strategic framework to guide and inform future direction, decisions and actions associated with the Pittwater waterway, including allocation of specific actions to relevant stakeholders, such as state agencies and Council.

At its meeting on 5 August 2013 Council resolved to undertake a strategic review of the land use planning provisions relating to the Pittwater waterway. The primary driver for the review was the large number of submissions received during the preparation of the Pittwater Local Environmental Plan 2014.

These submissions were the catalyst for the development of the Pittwater Waterway Review and cover many of the key issues that this discussion paper explores.

The Review has also been recognised in the Draft North District Plan, November 2016 as, '...a useful template for the planning and management of major waterways'.



## What is the purpose of this Discussion Paper?

The discussion paper (the paper), which represents stage 1 of the Review, provides information and an overview of key issues impacting the Pittwater waterway, with possible strategies suggested. The information outlined in the paper has been gathered from existing studies, online community surveys and targeted community and stakeholder consultation undertaken in 2015 and 2016.

Council invites your comments on the identified issues and possible strategies set out in the discussion paper to guide the sustainable management of Pittwater waterway.

### This review is:

- A review promoted by the community, written with the community, and developed for the community.
- A strategic review of planning controls associated with Pittwater waterway, including land and water based.
- A strategic document encompassing the sustainability pillars of environment, economic, social and governance.
- A strategic document guiding the management of Pittwater waterway over the next 10-15 years.
- A document that will make recommendations for zoning, zone objectives and development control.
- A non-legislative document which establishes a framework for future planning and decision making associated with Pittwater waterway.
- An evidence based strategic planning document that will utilise data and community input in the development of strategies for the future of Pittwater waterway.
- A strategic tool to assist the decision making process and recommendations to state government for action.

### This review is:

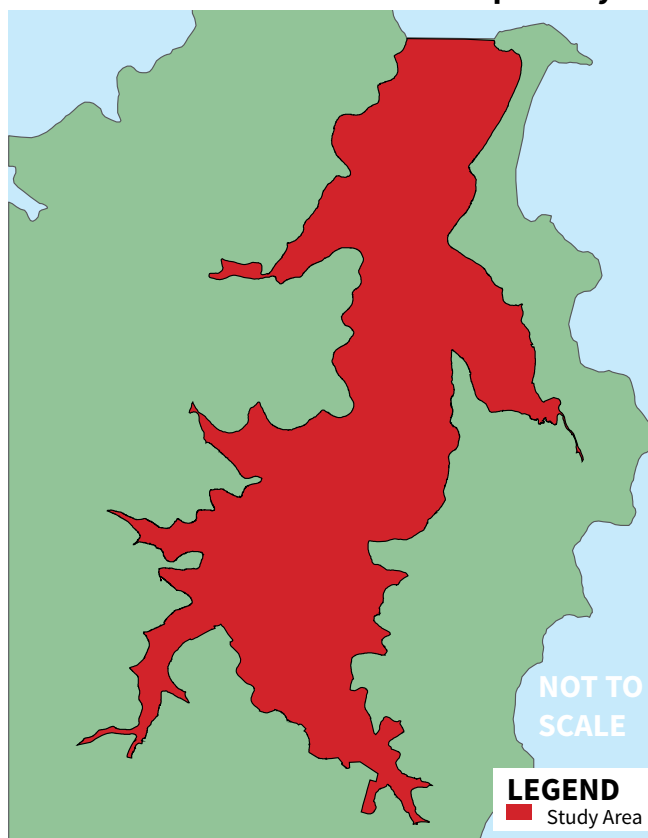
- **NOT** a coastal zone management plan or Coastal Management Plan.
- **NOT** a document that can require specified state government actions.
- **NOT** an amendment to Pittwater Local Environmental Plan 2014 that makes zoning or planning control changes.
- **NOT** a document that incorporates the coastal fringe, Middle Harbour, Narrabeen or Dee Why Lagoon.
- **NOT** an environmental assessment or audit of the health and condition of Pittwater waterway.
- **NOT** a Plan of Management as mandated under the Crown Lands Act 1989 or the Local Government Act 1997.

## Study area

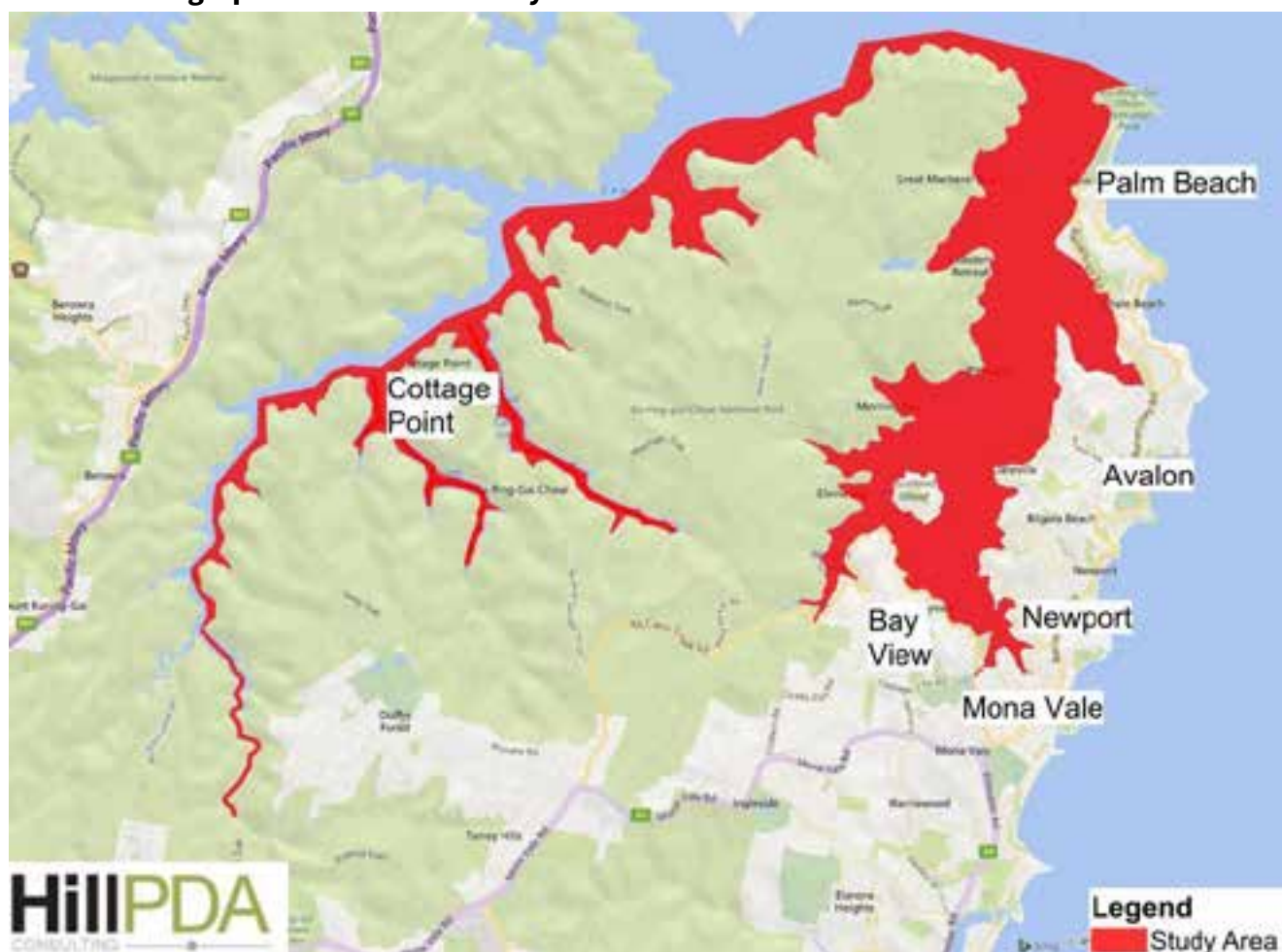
Initial community consultation and stakeholder engagement has been undertaken within the former Pittwater Local Government Area (LGA). However, the Review and associated supporting report (Hill PDA Consulting, 2016), have been revised post amalgamation to incorporate the Northern Beaches Council LGA, excluding the Manly locality due to recognition that Sydney and Middle Harbour play a pivotal role in meeting the boating and recreational pursuits of this area. This discussion paper seeks the views and opinions of the Northern Beaches community and will form an essential consultation tool for the Review.

The study area for the purpose of this discussion paper is the Pittwater waterway, as shown in Map 1, and is referred to as Pittwater or the Waterway in this paper.

**MAP 1. Pittwater Review Discussion Paper study area**



**MAP 2. Demographic & Economic Study area**



Hill PDA Consulting, 2016 (MapInfo)

## How to use the Discussion Paper?

Pittwater waterway is enjoyed by a diverse range of users, so we are interested in hearing about your vision, ideas, concerns and priorities for the waterway.

As you read through the discussion paper, think about what Pittwater waterway means to you, how you use and access the waterway and whether it affects your life, work, business or principals. Think about what is important to you now and into the future.

Your involvement will help set the groundwork for the development of the Pittwater Waterway Strategy and the sustainable future of the waterway.

### How to get involved?

- You can respond to all questions raised in the discussion paper or only to those that interest you.
- You can respond to the issues and proposed strategies, or if your issue or proposed strategy is not addressed you can submit your own.
- You can submit as an individual, on behalf of a business or community group.
- Send written submissions to Northern Beaches Council, 1 Park Street, Mona Vale NSW 2103.
- Make your submissions via [yoursay.northernbeaches.nsw.gov.au/WaterwayReview](https://yoursay.northernbeaches.nsw.gov.au/WaterwayReview)

If you would like more information on the Discussion Paper to inform your submission you can email Council's Strategic Planning team via [pittwater@northernbeaches.nsw.gov.au](mailto:pittwater@northernbeaches.nsw.gov.au) or call on (02) 9970 1111.





### Setting the scene

The Pittwater waterway is an open body of water at the mouth of the Hawkesbury – Nepean River system that flows north towards its mouth into Broken Bay, marking the divide between Pittwater and the Hawkesbury. We respectfully acknowledge and pay respect to the Aboriginal people and recognise that Pittwater has great significance to the traditional owners and custodians of this land.

The waterway is an important resource locally and regionally and highly valued from a diverse range of perspectives for its unique environmental setting, delicate estuarine habitats, contribution to the local economy and community, means of access for offshore communities and aesthetic beauty. Consequently, there are diverse range of perspectives and an ever increasing need to manage competing pressures.

Pittwater named *Pitt Water* in 1788 by Governor Phillip in honour of William Pitt the younger, then Prime Minister of Great Britain.

## Ownership, management and controls: who owns and manages what?

The Pittwater waterway and its foreshore fringe is governed and controlled by a number of groups and state agencies, resulting in a complex overlay of ownership, management and controls. These groups and agencies are highlighted below:

- **Department of Primary Industry (Lands)** – Responsible for the control and management of the bed of Pittwater waterway (defined as the mean high water mark and below); Crown land and Crown reserves.
- **Transport for NSW** – Responsible for transport on and around the waterway.
- **Roads and Maritime Services (RMS)** – Regulates a range of waterway activities, including moorings and mooring numbers and enforce rules and regulations on the waterway.
- **NSW Police Marine Area Command /Water Police (Broken Bay)** - Enforcement of rules and regulations relating to the waterway.
- **NSW National Parks and Wildlife Service** - Owns and manages Ku-ring-gai Chase National Park.
- **Northern Beaches Council** - Regulates and controls land uses on and adjacent to the waterway through Pittwater Local Environmental Plan 2014 (Pittwater LEP 2014) and Pittwater 21 Development Control Plan (Pittwater 21 DCP).
  - Controls and owns reserves (road, natural and open space)
  - Prepares and implements Plans of Management (POMs).
  - Maintain seawalls on public land where Council has care or control of the land.
  - Maintain public wharfs, jetties and boat ramps.
- **Private property landowners** - own land to the mean high water mark of their property, jetties, ramps and pontoons.

## Existing Strategic Planning Framework

### Environmental Planning and Assessment Act 1979

The Environmental Planning and Assessment Act 1979 (EP&A Act) is NSW State legislation that deals with environmental assessment of both development within the built environment and development in endangered ecosystems. An Environmental Planning Instrument (EPI) is made under the EP&A Act. An example of an EPI is the Local Environmental Plan (LEP).

### Environmental Planning and Assessment Regulation 2000

The Environmental Planning and Assessment Regulation 2000 is the NSW legislation that sets out the regulations under the EP&A Act 1979.

### State Environmental Planning Policies

**(SEPP):** SEPP's are planning controls (EPI's) put in place by the State Government to deal with issues considered to have state significance. The SEPPs currently considered relevant to this review (subject to Coastal Reform detailed below) include - 14 (Coastal Wetlands); 71 (Coastal Protection) (Major Projects) 2005 and (Infrastructure) 2007.

**Coastal Reform - Coastal Management Act, Draft Coastal Management Manual and the draft Coastal Management SEPP:** Coastal Reform aims to utilise the Coastal Reform Act, Manual and SEPP to manage coastal risks associated with climate change, coastal protection, foreshore development, coastal wetlands, lakes and littoral rainforests, catchment runoff and impact on estuaries and access to beaches and headlands. Public consultation on draft Coastal management SEPP which aims to supersede SEPP 14 (Coastal Wetlands), 26 (Littoral Rainforests) and 71 (Coastal Protection) closed on the 20th January 2017. The Coastal Management Act, although made, is not yet in force. Further information can be found via the following link: [environment.nsw.gov.au/coasts/coastreforms.htm](http://environment.nsw.gov.au/coasts/coastreforms.htm)

**A Plan for growing Sydney, 2014:** A strategic plan for Metropolitan Sydney through visions, goals and actions across the six Sydney districts which includes the Northern Beaches Local Government Areas (LGA) in the north.

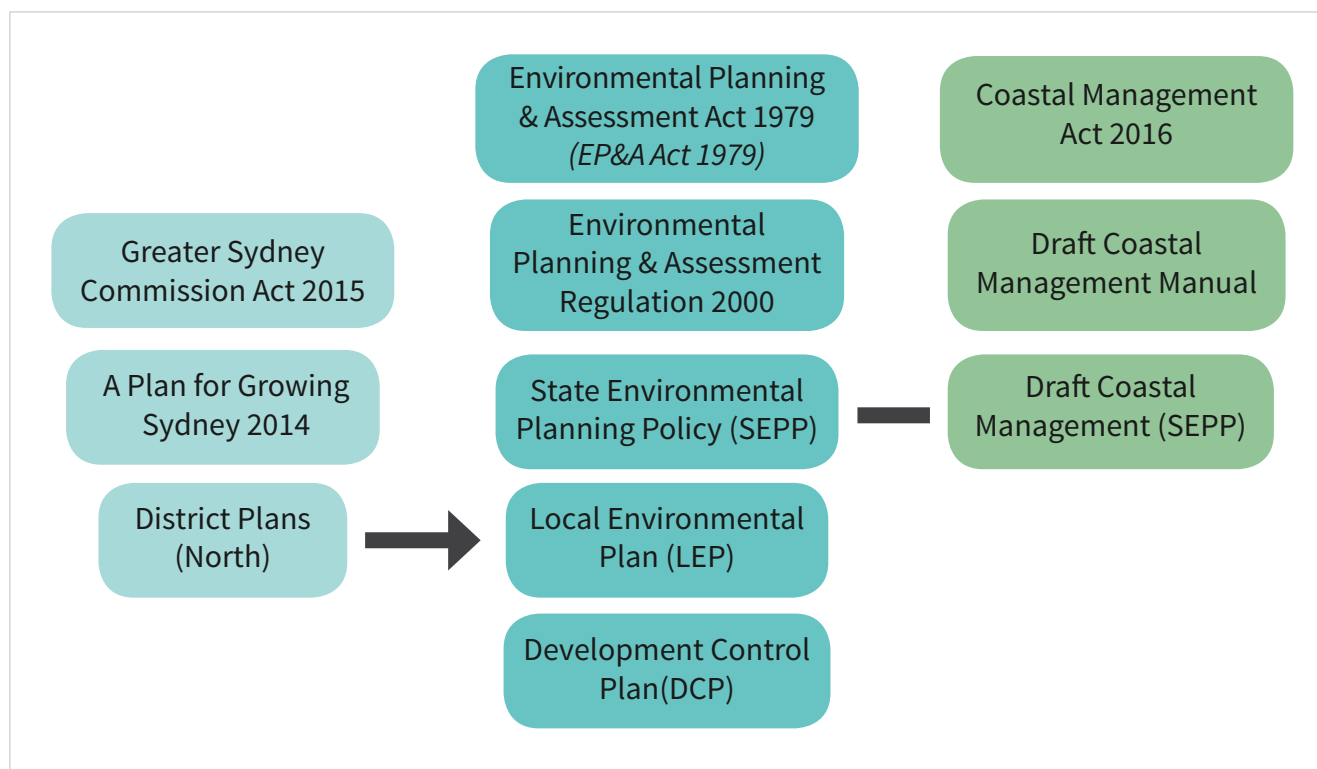
**Draft North District Plan, November 2016:** This strategic plan is currently out on formal public exhibition until March 2017 and is due to be finalised towards the end of 2017. This strategic document supersedes the former North East Subregion – Draft Subregional Strategy 2007 and identifies priorities and actions for the District which includes the Northern Beaches LGA.

**Pittwater Local Environmental Plan 2014:** This document guides development through land use zonings and a range of planning provisions. The primary land use zonings affecting waterway development in Pittwater are: IN4 Working Waterfront; E2 Environmental Conservation; W1 Natural Waterways; W2 Recreational Waterways and Schedule 1, Clause 23 – Additional Permitted Uses of certain land in Zone W1 Natural Waterways.

A list of the zones and their objectives is provided in Appendix 1. Extract from Pittwater LEP 2014 Zoning Tables and Schedule 1, Clause 23 – Additional Permitted Uses of certain land in Zone W1 Natural Waterways.

**Pittwater 21 Development Control Plan (Pittwater 21 DCP):** Pittwater 21 DCP sets the controls, standards, and regulations that apply when carrying out development or building work. It supports Pittwater LEP 2014, by providing additional detailed information. Section D15 of Pittwater DCP, at Appendix 2, regulates the waterway locality and covers topics ranging from scenic protection (D15.2) to Waterfront development (D15.15) and moorings (D15.17).

## NSW Legislative Strategic Planning Framework



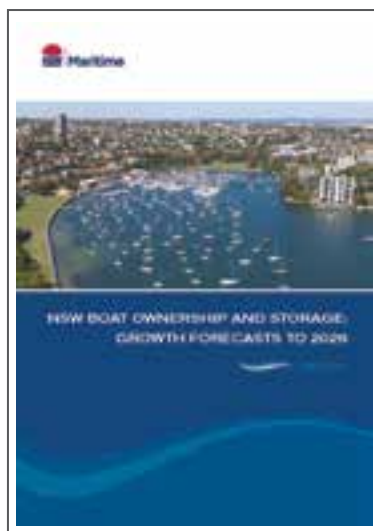
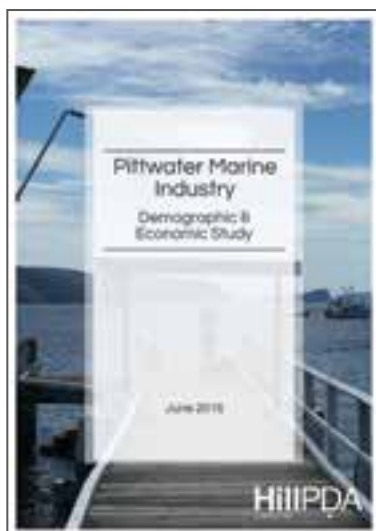
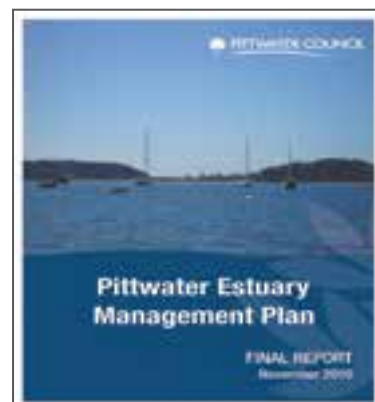
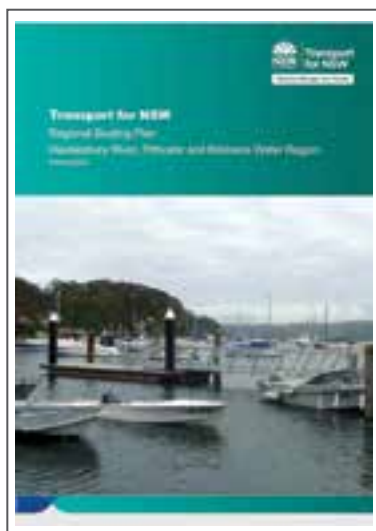


## Supporting background reports

An extensive list of background reports and studies have been examined and considered as part of the Review. You can view the complete list at Appendix 4. The Review should also be read in conjunction with the *Pittwater Marine Industry - Demographic and Economic Study (2016)* (the Study) at appendix 3. Section 2 of the Study outlines key findings.

Whilst the list of reports is extensive, we recognise that new reports and studies are frequently being released, so please feel free to make suggestions beyond those studies currently listed.

### Images of some key documents



“The Pittwater waterway will continue to be a place of natural wonder and beauty. It will be a place that balances the majesty of nature with vibrant and diverse activity. A place for all to enjoy.”



## Consultation - Our conversation so far

Community involvement in all aspects of the Review is essential and we have sought your ideas, information and feedback via:

- Two online community surveys (363 total respondents)
- A mobile phone/ Facebook campaign
- An informational stall at Avalon Market Day
- Interviews with targeted users
- Nine targeted workshops with key stakeholders (Appendix 5)

One of the most significant inputs from the community to date has been through the online surveys. The majority of the 363 respondents were former Pittwater Council residents over the age of 25 (38% onshore and 46% off-shore) and were made up of people who use the Pittwater waterway for a wide range of activities including but not limited to recreation swimming, boating, unpowered watercraft, businesses, foreshore recreational users, etc. A youth targeted Facebook campaign was also released with a short survey to target residents under 24 and this was relatively well received.

Further to this, the nine targeted workshops focused on key stakeholders including marina operations, off-shore residents, state agencies, recreational user groups, internal council departments and the Currawong Art and Science project.

This feedback will help shape a community vision for the waterway which will inform and guide the development of strategies and actions.

Conversations so far have provided additional insight into the complexity of issues and threats impacting the waterway. Suggested approaches and actions have been offered in response to the challenges and issues, including their perceived priority. These are highlighted throughout the Discussion Paper.

The community was asked to list their aspirations for the waterway during the online survey. The following quotes provide an insight into the key issues.

“A clean, healthy waterway that maintains its natural beauty, wildlife and habitats and to ensure these unique features are protected and enhanced now and into the future.”

“A safe waterway that is accessible for all and caters for a wide variety of activities.”

“Assurance that facilities are maintained and improved upon so this wide number of activities can continue and expand in variety. This includes boating, kayaking, paddle-boarding and swimming as well as a number of other activities.”

“Ensuring growth in use of the waterway and associated conflicts that will arise in relation to demand, are acknowledged and managed.”

“Ensure the responsible and reasonable use of the waterway now and into the future.”

“Allow and promote future development on and adjacent to the waterway to more adequately reflect and be appreciative of the waterways natural splendour.”

## A commitment to sustainability

Council is committed to sustainability. This commitment was reflected by all former Council's through a variety of adopted strategies and policies, including 2006 Manly *Sustainability Strategy - for today and future generations*, Warringah *Environmental Sustainability Strategy 2012* and Pittwater *Sustainability Policy (2006)* and *Strategy (Pittwater 2025 – Our Community Strategic Plan)*. Each approach has endorsed the goal of Australia's National Strategy for Ecologically Sustainable Development (the National Strategy).

The National Strategy defines Ecological Sustainable Development (ESD) as, “*development that improves the quality of life, both now and into the future, in a way that maintains the ecological processes on which life depends*”.

Sustainability matters and the Review will attempt to balance the four key elements of sustainability, economic, environmental, social and governance, in accordance with Council's strategic objectives.

## How can we achieve a Sustainable Pittwater Waterway future?

This section of the discussion paper will set out emerging trends; issues, challenges and possible strategies, as identified through existing studies and recent consultation.

The issues and challenges identified follow six key themes of the waterway: Economy; Environment; Reserves and Recreation; Development; Activation (access) and Regulation. Each theme is structured with regard to one or more of the four elements of ecological sustainable development (ESD). The issues and challenges, overlap as do the themes. How we manage the issues will be crucial to the success of the Review, and its fundamental goal of ensuring a sustainable future for Pittwater waterway.



*economical*



*environment*



*social*



*governance*

## EMERGING TRENDS: Population, boating use and seasonal demand

### Population increase in proximity to the waterway

Total population in the Northern Beaches LGA is projected to increase from 265,250 people in 2016 to 310,800 in 2031, or an increase of 45,500 people (NSW Planning & Environment, 2014) placing additional pressure on the waterway. The population increase will be greatest in the 35 - 49 and 60-69 age group (NSW Planning & Environment, 2014), with residents over 50 years projected to increase by 40% (Hill PDA Consulting, 2016). These age groups are reported to have an impact on increasing boating demand due to entering the boating market and an increase in disposable income / leisure activities. This increase in ageing population trend, is set to continue (Hill PDA Consulting, 2016). Demographic findings are set out in full in Section 3 of the *Pittwater Marine Industry – Demographic & Economic Study* (2016) at Appendix 3.

### Boating Use - Increasing boat numbers, size, type and associated impacts

The Hawkesbury/Broken Bay region (which includes Pittwater waterway), has the second highest number of registered recreational and commercial vessels in New South Wales with a predicted growth of an additional 67% or 5,854 boats over six metres between 2009 – 2026 (NSW Maritime, 2010).

Boat sharing was also identified as having a significant impact on the waterway. This approach gives people greater opportunity than ever before to access boating, including potentially larger and faster boats.

Predicted growth in boating and boat size from 2008 - 2031 is estimated to increase boat storage space requirements in the region by 2068 spaces or a 13% increase (HillPDA, 2009). This

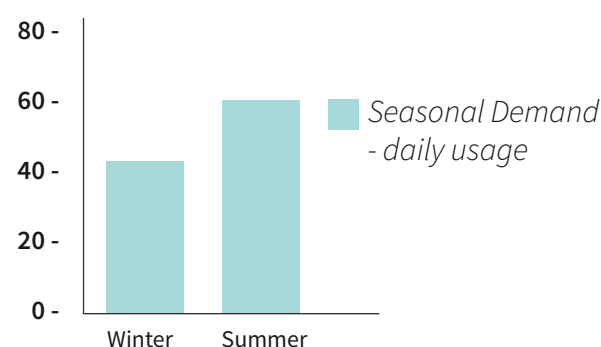
will have direct impact on boat and associated infrastructure, wait lists for marina berths, moorings, demand for larger berthing spaces, on land implication arising from trailer boat parking and increased use of boat ramps, etc.

### Seasonal demand variance

The survey results have highlighted greater use of the Pittwater waterway in the summer months with 62% of responses indicating they use the waterway on a daily basis in comparison to 45% during the winter months. Seasonal variation places alternating pressures on the waterway, making planning for the growth in demand and usage a challenge.

#### Seasonal Demand - daily usage

% of survey respondents



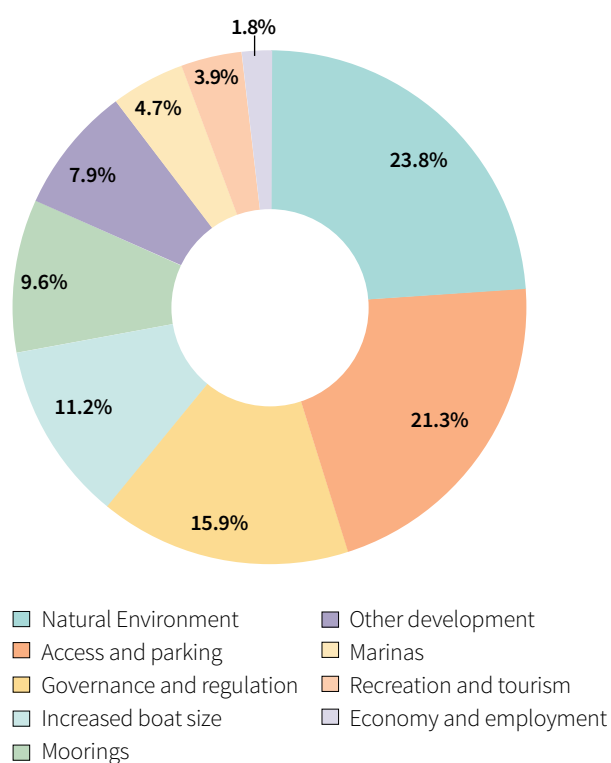
#### Survey Results

*Waterways demand changes depending on the seasons. Summer months see a much greater usage of the waterway.*

## ISSUES AND CHALLENGES: What you have told us

During the preliminary consultation period, we asked the community to identify the single biggest challenge facing Pittwater waterway. Responses identified natural environment, access and regulation as the highest priorities; this corresponded and mirrored the key areas identified in the community's vision. Some of the challenges identified covered more than one main area or more than one major issue was listed, hence they are recorded twice. All challenges listed are categorised into the following nine key areas.

### What is the single biggest challenge facing the waterway now and into the future?



#### Survey Results







## Theme 1: The Economics of the Waterway

The Pittwater waterway is a working waterway and an economic hub, home to a diverse range of businesses and industries including marinas, commercial fishing, sailing clubs, restaurants, cafes and tourism facilities. Increasing usage in boating, recreation, tourism and marina activities provide significant opportunities to increase the economic potential of the waterway. There are many pressing issues that need to be addressed and how we manage these will be crucial to the economic sustainability of the waterway and its surroundings.

### Economic aspects of marinas and their growth

Marinas in Pittwater provide significant economic benefits for the LGA, including employment; boat sales; maintenance and general boating facilities; infrastructure, such as pump out stations and refuelling stations; restaurants and other club facilities (Hill PDA Consulting, 2016). They also offer a regional and even international draw to the waterway through events, world class boating services and educational and employment opportunities.

***“Out of the nine marinas providing feedback, approximately 80% of the workforce lived in the study area”***

- (Hill PDA Consulting, 2016).

### The evolution of waterway related industry and commerce

Pittwater is a working waterway with marine related industry playing a pivotal role both locally and regionally. The increase in boat numbers and size of vessels is impacting on the waterway's economy and will need to be considered strategically in the future.

Marine related industries contribute over \$47.2 billion to the Australian economy, in comparison to agricultural production which contributes \$46.7 billion (Hill PDA Consulting, 2016). Local marine industries contribute significantly to the local economy as recognised in the Economic Study (Hill PDA Consulting, 2016) and via feedback.

### Estimated retail spend of employees

|                | Total Workforce | Weekly retail spend | Total retail spend (p/a) |
|----------------|-----------------|---------------------|--------------------------|
| Marine workers | 751             | 75                  | \$2.4m                   |

Source: HillPDA

### Economic contribution of Marine Industries

- 1,002 residents employed within marine related industries
- Combined marine industries provided an estimated \$57 million in industry value add
- 4000 worked within the tourism industry
- Tourism provided an estimated \$171 million in wages and a further \$330 million in industry value add

HillPDA, 2015 (former Warringah & Pittwater LGA study area)

### Marine related industries include:

- marinas
- kayak and paddle boarding,
- shipbuilding and repair services,
- boatbuilding and repair services
- water freight transport,
- marine equipment retailing,
- scenic and sightseeing transport;
- tourism
- commercial fishing

## Events

Events on the Pittwater waterway significantly contribute to the social and economic makeup of the region. Race days, boating and sailing events draw visitors from across Sydney, regionally and even internationally. They provide valuable input to the local economy throughout the year. While promoting and creating additional events could increase economic opportunities for the local area, associated noise, traffic and light spill impacts, must be considered and managed appropriately.

The Pittwater SAIL expo hosted by the Royal Prince Alfred Yacht Club attracts 2000 visitors annually. This is one of many events that takes place on the waterway ([www.rpayc.com.au/news-events/pittwater-sail-expo](http://www.rpayc.com.au/news-events/pittwater-sail-expo)).

## Tourism

The Pittwater waterway is a primary tourism attraction and potentially more so in the future. Tourism employs 10% of the former Pittwater LGA workforce and approximately 670,000 visitors a year visit the area (Pittwater Council, 2015). In 2011, approximately 4000 people in the study area were employed in tourism with an estimated \$171 million in annual wages and contributed around \$330 million every year to the local economy (GDP). Approximately \$127 million of expenditure captured within the study area was related to marine tourism (Hill PDA Consulting, 2016).

Tourism related businesses and activities are vital to the local economy. Feedback during consultation highlighted that that more promotional information on the range of natural attractions and recreational activities available on the waterway should be provided.

Sustainably managing the growth in tourism and its impact on the waterway is imperative. The focus is to establish an effective balance between the economic benefits of tourism growth and the potential environmental pressure due to increased usage.

## Management of the Currawong Estate and the Basin Campground

The Currawong Estate, located on the North West foreshore of Pittwater, is nestled into the Ku-ring-gai Chase National Park. It is listed as a State Park and is a unique tourism location, focusing on ecotourism. The park and recreational lands are Crown land under the care and control of the Northern Beaches Council. Ecotourism is defined as, “ecologically sustainable tourism with a primary focus on experiencing natural areas that fosters environmental and cultural understanding, appreciation and conservation” (*Ecotourism Australia in Pittwater Council, 2015*).

The Basin camping ground has also been identified as a significant natural attraction for the area, playing host to numerous recreational activities. However a range of issues have been identified, including conflicting uses; limited boat access; overcrowding; littering and noise.

Further information on Tourism in Pittwater can be found via the following link: [www.businessinpittwater.com.au/about-the-region/key-documents/](http://www.businessinpittwater.com.au/about-the-region/key-documents/)

## POSSIBLE STRATEGIES:

- Promote tourism through co-ordinated waterways branding, with associated signage, web information and booklets highlighting café hotspots, natural attractions and activities on the waterway.
- Promote access to the waterway through improved sustainable regional transport networks and consultation with council to appropriately manage potential parking implications
- Promote and establish initiatives focused on tourism accommodation on the waterway, including exploring additional eco-tourism facilities.
- Continue to develop comprehensive management plans for Currawong and for the Basin in consultation with relevant state government agencies, being mindful of community expectations and needs.
- Develop planning strategies that are mindful of growth and demand on the waterway, including consideration of zoning expansion for marinas and additional storage facilities.
- Discuss with RMS the potential need to extend Pittwater's wash free zone north of Longnose Point, Stokes Point and Dark Gully, to minimise the impact of larger boats on other recreational activities and the environment.

## YOUR SAY:

*A stakeholder concern referenced in the Study Hill PDA, 2016 was that:*

***'Current W1 zoning within the study area restricts the economic potential of marinas, preventing growth opportunities and ability for operators to adapt and remain valid.'***

*Do you think that the current W1 land use zoning for the wider waterway in the Pittwater LEP 2014 should be amended to address economic growth within the study area and adapt to increasing demand?*

*Would you like to see economic growth on the waterway?*

*Do you think expanding marinas is a practicable option for Pittwater?*

*Would you like to see more cafes, restaurants and businesses utilising the water's edge?*

*What economic activities would you like to see in the future on the waterway and its foreshore edge?*

*What should we be planning for long term to ensure economic sustainability on the waterway?*

*What events would you like to see more of on the Pittwater Waterway?*

*Do you support the Church Point waterfront precinct being considered as a future area of low scale activation, including a hub for café, restaurant and tourism - focused activity.*

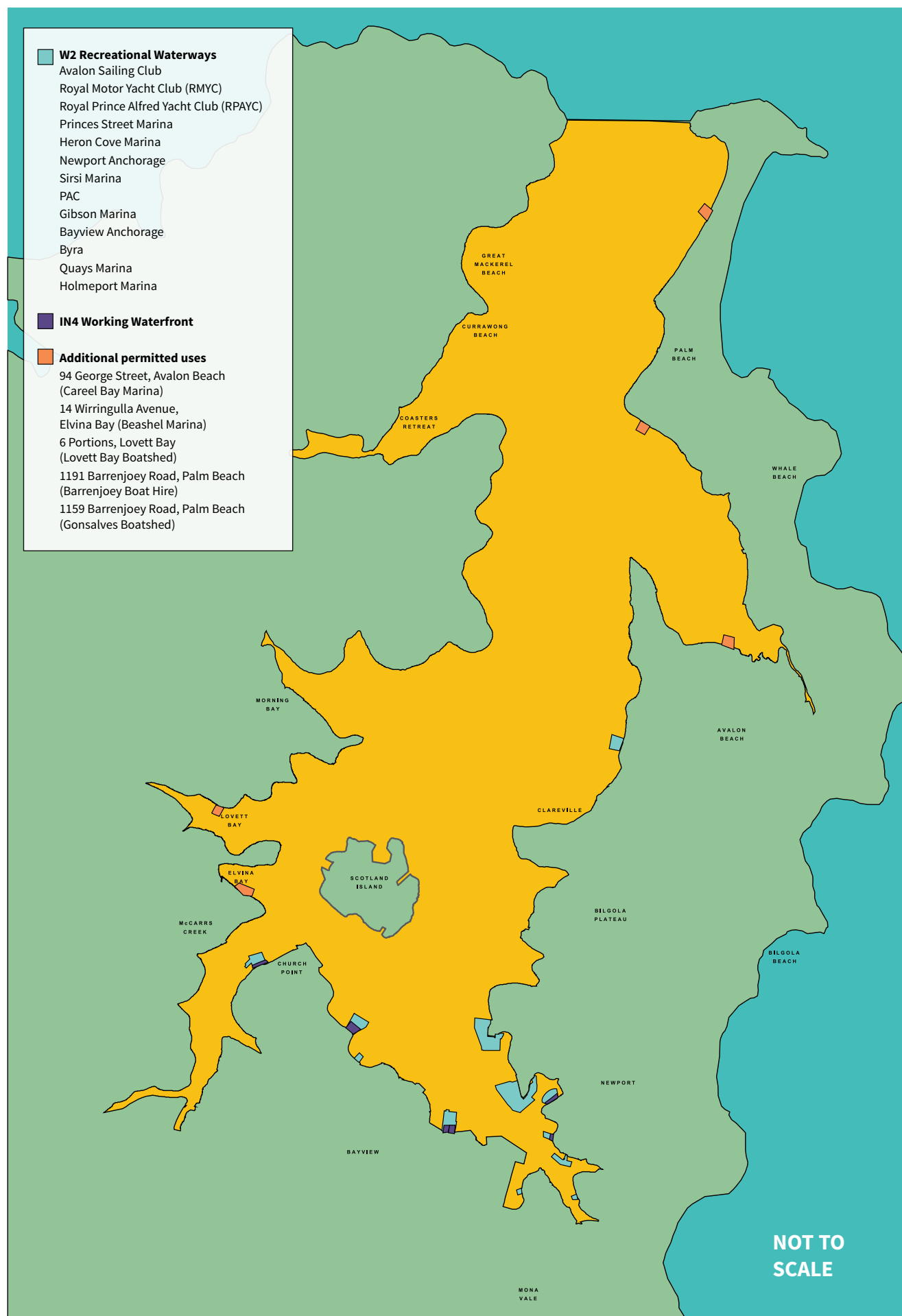
*How do you think Northern Beaches Council should react to the pressure of increased usage and demand?*

*Should we be lobbying for greater safety measures on the waterway given the increase in demand and use and what are your suggestions?*

*Have we missed any economic considerations?*



## Map of Marina Locations and Working waterfront





## Theme 2: Natural environment

Consideration and protection of the natural environment is crucial to ensuring a healthy and sustainable waterway and this requires delicate balancing of a range of diverse and often competing pressures.

Feedback via the online survey stated that the natural flora and fauna of the waterway is the most important asset, with the community most satisfied by the natural assets compared with any other aspect. The natural environment was also a priority during the consultation phase of the *Pittwater Estuary Management Plan* (2010).

Achieving sustainability and protecting the waterway's unique natural beauty is becoming more complex due to an unprecedented increase in boat usage, tourism and population.

This section will outline some of the current pressures the natural environment is facing, as well as recreational facilities.

### Scenic Amenity

The waterway is iconic and highly valued for its natural picturesque setting and environmental assets. This is further reinforced by the magnificent backdrop of Ku-ring-gai Chase National Park and prominent natural features of West Head and Barrenjoey Head. Survey results highlighted that the natural splendour and beauty of the waterway is extremely important to the community and must be considered and protected.

### Ecological diversity

The waterway offers a rich ecological diversity including mangroves; seagrasses; wading birds; intertidal mud flat; rocky shores and sandy beaches. In essence it is a priceless

natural resources and valuable from an ecological, social and economic perspective. One of the most important ecological communities found in the waterway is Coastal Saltmarsh which can be found at Winnererremy Bay, Careel Bay, Refuge Cove, Saltpan Cove and Winji Jimmi.

### Increasing sea levels

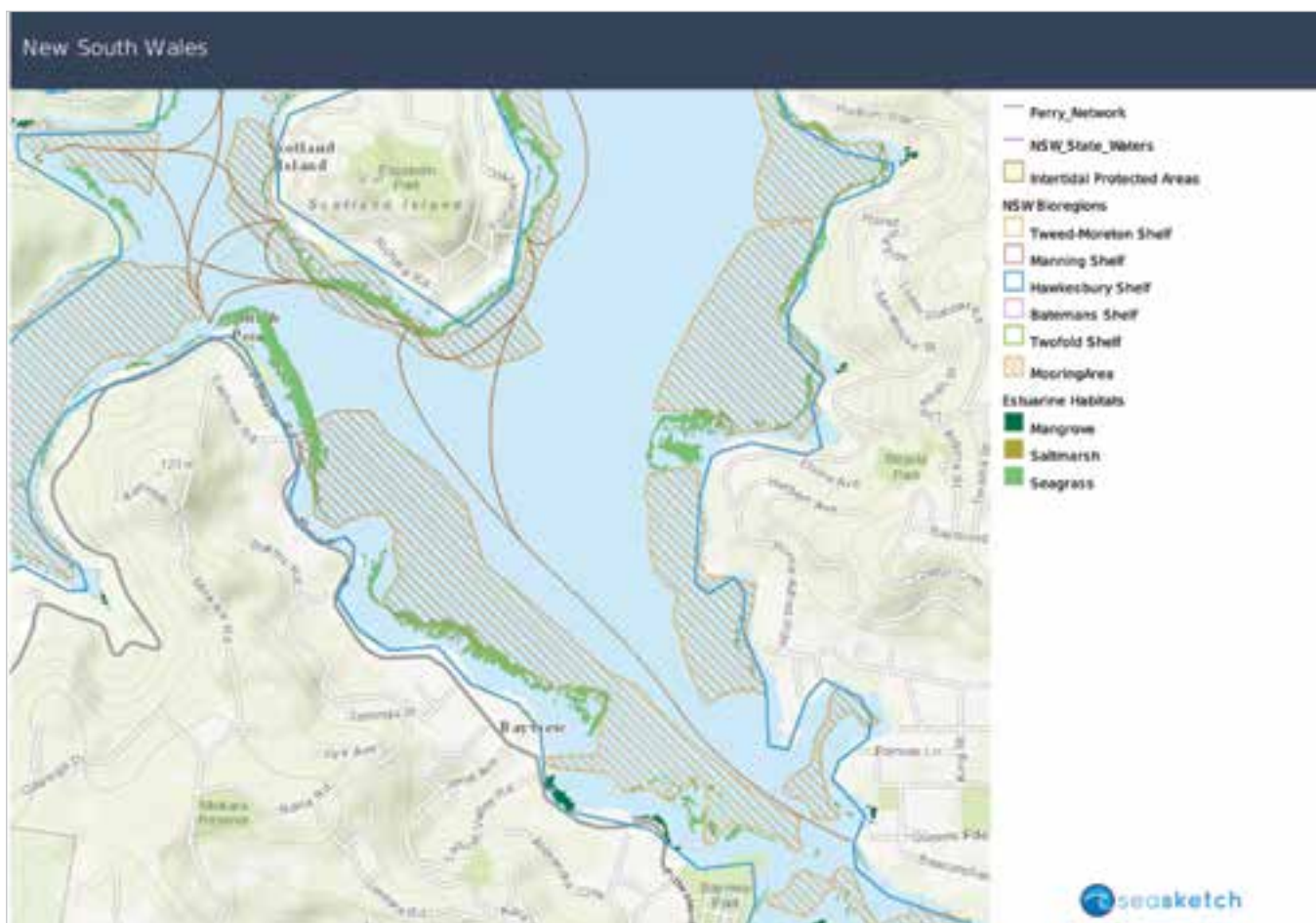
Sea level rise was found to be an important environmental issue to the community as demonstrated in the survey, due to the potential to affect foreshore habitats, ecological diversity and properties on the waterway.

A report prepared by Cardno in 2015 identified estuarine risk areas in the Pittwater locality and is accessible via the following link: [portal.pittwater.nsw.gov.au/common/Output/DataworksAccess.aspx?id=SKaPXKEE8qY%253d&ext=pdf](http://portal.pittwater.nsw.gov.au/common/Output/DataworksAccess.aspx?id=SKaPXKEE8qY%253d&ext=pdf)

Cardno reported the foreshore areas of the waterway, including properties, are subject to periodic inundation by coastal and estuarine processes. Pittwater 21 DCP (Appendices 7 & 8) establishes the acceptable risk management criteria for a design project life as 100 years, which is consistent with the estuarine management principles contained in the NSW Estuary Management Manual (1992). The development, refinement and enforcement of planning controls to manage development and sea level rise, as it relates to the waterway and foreshore edge, is a continuous and evolving process.

Potential sea warming could also have a significant impact on waterways ecologies, and on the surrounding land based ecologies that the waterway supports. Climate change places comprehensive long term pressure on the waterway requiring appropriate management in the future.

## Estuarine Habitat mapping in the southern section of Pittwater Waterway.



Source: Seasketch

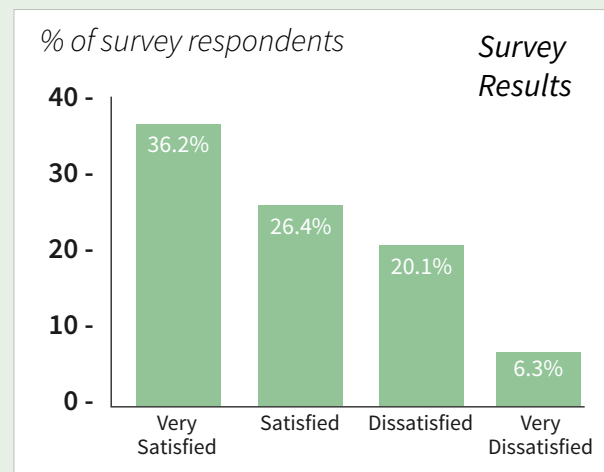
### Impact of urbanisation

As urbanisation and development increases, the importance of continual management, maintenance and improvement of water quality becomes increasingly important. Survey respondents highlighted that pollutants, from household sewerage systems and stormwater runoff exceed acceptable levels in specific locations of the waterway, such as Scotland Island and Barrenjoey Beach. Beachwatch Northern Sydney (Pittwater to Manly) State of the Beaches 2015-2016 report, which samples 10 estuarine sites in the Pittwater waterway every sixth day between October and April, graded two sites as poor/very poor. The sites were Barrenjoey Beach and Bayview Baths.

During the consultation process, Lovett Bay was also cited as suffering serious impact from runoff.

Overall 63% of the community indicated, during the online survey, that they were satisfied or very satisfied with the water quality of Pittwater and the natural environment, in comparison to 27% who were dissatisfied or very dissatisfied.

### Community satisfaction with water quality in Pittwater



## Fishing

Although not within Council's jurisdiction, commercial fishing is an important economic aspect of the regional Hawkesbury inlet as well as Pittwater. As of 2012 there are 83 identified commercial fishing enterprises in the Hawkesbury region.

However, commercial fishing (excluding sustainable recreational fishing charters) has been identified via consultation as having a potential threat to the delicate natural biosphere of Pittwater, creating noise, water pollution and conflicting impacts on other activities. There are regulatory issues surrounding enforcement and provision of licences by the state government, such as restrictions on commercial fishing on weekends around the Coasters Retreat area and Great Mackerel area. While sections of the community are seeking a ban on commercial fishing on the waterway entirely.

The Marine Estate Management Authority (MEMA) released a discussion paper Hawkesbury Shelf Marine Bioregion Assessment, suggested management initiatives which, via Initiative 6 – Reducing user conflicts in Pittwater, seeks to reduce resource-use conflict between commercial fishing and other community user groups by negotiating loss of access rights to commercial fishers in Pittwater. Further information can be found via [www.marine.nsw.gov.au/key-initiatives/hawkesbury-shelf-marine-assessment](http://www.marine.nsw.gov.au/key-initiatives/hawkesbury-shelf-marine-assessment).

Survey respondents and workshop participants stated that commercial fishing was impacting local fish resources and is in direct conflict with recreational fishing pursuits. It was also mentioned that commercial fishing practices, such as offloading of animal matter directly into the waterway and oil slick run-off, are directly impacting water quality.

In comparison, recreational fishing was considered to have less of an impact and is regulated through the NSW Department of Primary Industry (Fisheries) via the imposition of catch limits, although the enforcement of limits was seen as challenging.

The following comments were received via the online survey:

*“Ban all commercial fishing”;*

*“No to commercial fishing”;*

*“Stop commercial fishing in Pittwater”*

*Sample survey respondents.*

## Environmental impacts and protection of the foreshore

The foreshore edges of the waterway are environmentally sensitive areas which are impacted by a range of diverse processes, including sedimentation, pollution, stormwater runoff and erosion. Developments within the foreshore area, such as seawalls, jetties and wharfs can also have a direct impact on the natural environment, especially if they are constructed inappropriately. Impacts can include disturbance of natural sedimentation processes, causing build up or erosion of the seabed and beaches (BMT WBM Pty Ltd, 2010).

Consultation discussions have suggested that dragging craft along beaches; damaging the existing natural edges of the waterway; increased wakes and wash from boats can speed up erosion on the foreshore edge.

Council has addressed a range of impacts identified above in its Estuary Management Plan.

## Environmental protection

Protection of the delicate waterway habitats has been identified, in the survey, as a community priority. Currently, protection of the waterway is achieved through a range of controls, including planning controls like zoning and development control provisions and boating laws and regulations covered by the following legislation:

- *Marine Safety Act 1998*
- *Marine Safety (General) Regulation 2009*
- *Marine Pollution Act 2012*



However certain activities, such as powered vessels entering and moving through areas of seagrass beds; illegal boat tie up and foreshore launching continue to harm the waterway and its foreshore edges.

The waterway has a number of seagrass habitats covering approximately 1.934 km<sup>2</sup>, including species *Posidonia australis*, *Halophila sp* and *Zostera sp* (BMT WBM Pty Ltd, 2010). The largest seagrass beds are located at Palm Beach and Careel Bay.

| Threat to seagrass beds                 | Reason for threat   |
|---|---|
| <b>Mooring fields</b>                   | The main mooring type used in Pittwater is swing moorings. This mooring type consists of a chain and block configuration, in which the chain remains free to move around the block and drag along the waterbed. This action results in seagrass scour where circular patches of seagrass are denuded around the block (Demers, et al., 2013; Maritime Management Centre, 2014).   |
| <b>Human activity</b>                   | Boating activities, such as power boat propellers, boat wash and fishing practices disturb seagrass beds. While the shade produced by pontoons and jetties cause indirect damage (BMT WBM Pty Ltd, 2010; West et al, 2011).   |
| <b>Caulerpa taxifolia – marine alga</b> | Fast growing marine alga, which is native to tropical Australia and the South Pacific, has spread and colonised extensively outside this natural range and has been recorded in the Pittwater waterway. This species easily spreads between estuaries by boating and fishing activities and within affected estuaries through natural processes such as wind, waves, tides and currents. Caulerpa grows rapidly, allowing the potential to out-compete native seagrass and can spread easily via small fragments (BMT WBM Pty Ltd, 2010; NSW Department of Primary Industries, 2016). |

(Demers, et al., 2013; Maritime Management Centre, 2014; BMT WBM Pty Ltd, 2010; NSW Department of Primary Industries, 2016; West et al, 2011)

### Domestic animals and impacts on wildlife habitat

The community, via the online survey has raised concerns with the impact of domestic animals on wildlife and wildlife habitat on and adjacent to the waterway. Domestic pets are generally not permitted on land adjacent to the waterway or reserves. However, certain areas, such as, Hitchcock Park at Careel Bay and Rowland Reserve at Bayview permit off leash exercise areas directly adjacent to and within the waterway.

At its meeting on 9th August 2016, Council resolved to undertake a review of the availability of off-leash dog areas on the entire Northern Beaches. This issue is therefore outside the scope of the Pittwater Waterway Review.

### Illegal Dumping

Illegal dumping was a common theme raised during the stakeholder workshops, with specific focus around creek line catchments and offshore locations. Boats were also identified as a source of potential litter and illegal dumping via waste pump out systems and general waste.

84% of survey respondents considered littering and illegal dumping to be a very important environmental issue for the Pittwater waterway.

## POSSIBLE STRATEGIES:

- Establish 'no go zones' protecting endangered seagrass habitats, such as those off Palm Beach and Careel Bay. This solution would require consultation and approval from Roads and Maritime Services (RMS).
- Provision of reticulated water and connection to sewerage to Scotland Island as outlined in the Council Report Agenda, item 7.3 on the 16th June 2016.
- Promote increased Bushcare management, and increased funding for foreshore reserves and habitats.
- Strengthen environmental protection provisions in Pittwater 21 DCP, specifically Part D15 Waterways Locality, to ensure protection of environmentally sensitive areas such as significant seagrass beds, saltmarsh and mangroves.
- Increased enforcement, in association with an educational program, of the management of pets in offshore communities.
- Regular 'green' bin and waste disposal service for offshore communities.
- Explore opportunities for additional public waste pump-out facilities in Pittwater.
- Continue to pursue opportunities to develop strategies and actions, in association with relevant state authorities, focused on the appropriate environmental management and protection of the waterway.
- Expansion of education campaigns, including stormwater catchment signage 'drains to Pittwater' in association with a public awareness and educational program focused on encouraging best practice behaviour for stormwater run-off.
- Provide more dog waste bins (not just in dog parks).
- Install recycling bins at Council reserve barbeque areas such as Clareville.
- Support initiative 6 which seeks to remove commercial fishing access rights to Pittwater, as proposed in Discussion Paper Hawkesbury Shelf Marine Bioregion Assessment, suggested management initiatives.

## YOUR SAY:

*Do you agree with the possible strategies?*

*What are your areas of concern for the natural environment?*

*Do you agree that ecological sustainability should be given priority over people related demands?*

*Do you have suggestions on what additional environmental protection controls are required under the LEP and DCP?*

*Do you think that more bins, especially recycle bins and dog waste bins, should be provided and managed on Council land?*

*Do you support the establishment of environmental seawalls?*

*Do you think that environmentally friendly mooring should be used instead of swing moorings?*

*What do you think can be done to address illegal dumping?*









## Theme 3: Natural reserves and recreation

The community have identified a number of issues and considerations relating to Council and Crown owned nature reserves and parks adjacent to the waterway. The Ku-ring-gai Chase National Park forms part of these considerations.

The survey results indicate that the community is generally satisfied with the recreational facilities in Pittwater, however have identified some suggested improvements.

### **Reserves – public access and recreation**

55% of the survey respondents were satisfied or very satisfied with the recreational facilities at parks and reserves and 91% of the respondents felt that public access to the foreshore and waterway was an important or very important social issue. Comments relating to this issue include the need for more accessibility to foreshore walkways, cafes and retail, recreational foreshore fishing. Some respondents and workshop participants recognised the difficulty providing and linking foreshore access given private ownership implications but options to provide and improve foreshore access was desirable and reflected in response to the survey question, “What are your top three aspirations for the waterway in the future?”.

Additionally, 65% of the respondents said that access to the waterway for recreational fishing was an important or very important issue and as discussed in Themes 4 and 5 of this paper, appropriate access, storage and infrastructure for all waterway (and foreshore) recreational users is essential to enable people to utilise and enjoy Pittwater.

### **Dog Parks**

Survey respondents requested greater access and improved dog areas and facilities on the foreshore edges whereas others were concerned with water quality impacts. However, at its meeting on 9th August 2016, Council resolved to undertake a review of the availability of off-leash dog areas on the entire Northern Beaches. This issue is therefore outside the scope of the Pittwater Waterway Review.

### **Public art**

Public art has been identified as a key strategy to activate the waterway and adjacent reserves, bringing a level of vibrancy to the waterway. It could be used to enhance the natural beauty and wonder of the waterway and its surrounds.



### POSSIBLE STRATEGIES:

- Explore funding and grant opportunities for public art and appropriate locations and reserves for these activities. Consider linking public art with signage and education.
- Ensure compliance of recreational fishing along the foreshore by improving signage on fishing catches, at strategic locations coinciding with foreshore reserves and popular fishing sites, and promoting best practice through Council's webpage.
- Ensure Plans of Management (POMs) for foreshore reserves are updated to respond to the changing dynamic of the waterway and the communities aspirations.
- Explore funding and grant opportunities to establish a continuous foreshore walk, including boardwalks, around Pittwater waterway (excluding Western Foreshore and Scotland Island).

### YOUR SAY:

*Do you agree with the above strategies?*

*What ideas do you have for public art on the waterway foreshores?*

*Do you think that an audit of existing reserves adjacent to the waterway should be carried out to look at increased public access to the foreshore?*

*Do you think that there is a need to provide additional public facilities in foreshore reserves, and if so what type of facilities?*

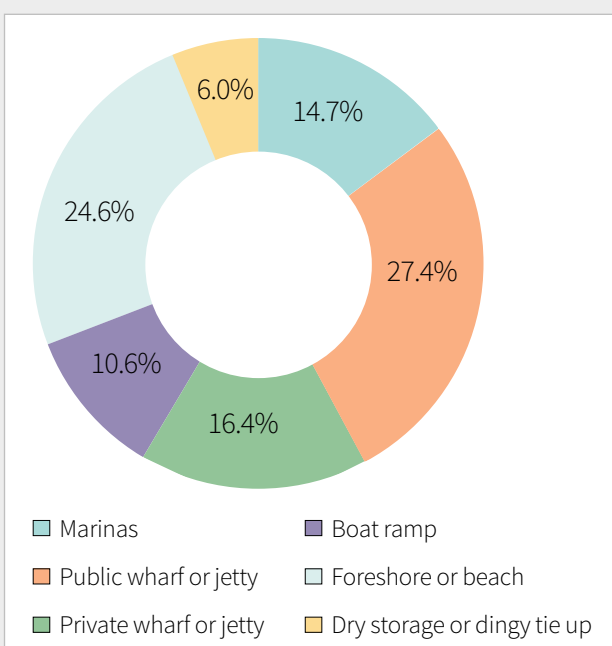


## Theme 4: Development of the waterway?

The Pittwater waterway is home to a large variety of development types, including marinas, moorings, boat ramps and foreshore development such as jetties, wharves and seawalls. These developments can impact on a number of factors such as employment, public access, environment and amenity. Managing the impacts moving forward is crucial to the continued success of the Pittwater waterway as a hub for land and water based activity whilst respecting and protecting the unique and natural environmental setting.

As set out in the Hawkesbury discussion paper, 'the social and economic benefits from recreational boating are reliant on adequate land-water interface based infrastructure such as boat launching facilities, navigation aids, access points, boat storage facilities, wharfs, [etc. and a lack of such facilities] can reduce the incentive for recreational boating, lessen the enjoyment... and raise the cost of boat ownership.'

### Percentage of people that use different infrastructure on the waterway



Survey results

This section will specifically address the two dominant boat storage types which are of greatest concern to the community: marinas and moorings. Other waterway development, such as boat ramps, tie ups, seawalls, wharves and jetties will also be addressed.

During the targeted workshops and online survey, marinas and moorings were consistently raised as a major issue impacting the waterway. Growth in boat ownership was considered to be an important issue to 47% of survey respondents, with 39% highlighting the growth in marina size and 35% the increasing demand for moorings as a very important issue.

### Marinas

Marinas are permanent boat storage facilities which provide a variety of amenities, facilities, and services such as:

- *Berthing and mooring structures;*
- *Fuelling and sewage pump-out;*
- *Launching or landing boats, such as slipways or hoists;*
- *Construction, repair, maintenance and hire of boats.*
- *Tourist, recreational and club facilities*

Marinas in Pittwater play a pivotal role in meeting demand for boat storage spaces. Marinas in Pittwater vary in size from 15 to 352 berths. In total the marinas provide 1,224 berths, or 24% of the total boat storage spaces (Hill PDA Consulting, 2016).

## Increasing demand for marina berths

The Pittwater waterway is predominately used for recreational boating purposes and is one of the busiest in New South Wales. Its popularity stems from the demographic of the locality and its location on the northern edge of Sydney.

Boat ownership in the former Pittwater and Warringah Local Government Areas (LGAs) increased from 8,182 in 2003 to 10,940 in 2015. This represents an increase of 34%, or an annual compound growth of 2.5%. These statistics demonstrate a strong growth in boat ownership and projections estimate that the growth trend will continue with ownership levels projected to increase by 8,950 boats (+82%) over a 26 year period to 2041 (Hill PDA Consulting, 2016).

With strong boat ownership growth and the popularity for on water boating activities, marinas are experiencing high demand and increasing waiting lists for berth and mooring spaces. In addition to growth in boat numbers, the average size of boats is increasing with vessels greater than 6 metres projected to contribute 63% of total growth to 2041 (Hill PDA Consulting, 2016).

During workshop consultation, marina operators told us that they all had waiting lists for berth and mooring spaces.

Half of the marina operators consulted indicated that increased demand for more berths and larger boat storage options was driving upgrades, extensions or new development projects.

However, operators also told us that there is tension between the demands for increased provision of appropriate zoning around marinas to support future expansion and the community's attitude towards marina development, specifically environmental protection and amenity concerns.

This is discussed in more detail in Theme 6 of this paper and consideration of the space efficient provision of marina berths (64 berths per hectare) over swing moorings (7 moorings per hectare) should be taken into consideration.

## Community concerns outlined in submissions received for Development Application (DA) No.240/15, 2A McCarrs Creek Road, Church Point.

- *Increased parking pressure on site, adjacent to and around the proposals*
- *Visual impact increases including glare issues*
- *Obstruction of waterways activity, access and navigation*
- *Noise pollution and wash associated with increased size in boats on new berths*
- *Loss of public ownership of the waterway*
- *Lack of development controls for marina parking and inconsistent parking control requirements across different parking policy documents*
- *Safety issues regarding the navigation of larger vessels in a congested waterway and associated navigational impact from increasing arms of marinas out into navigational channels. Associated safety hazards extend to activities with children.*
- *Serious pollution issues at Horseshoe Cove in light of marina development (sediment testing was seen to show elevated levels of heavy metals and acid sulphate soils in this bay)*
- *Conflicting use with larger vessels and smaller boats and limiting recreational activity*
- *Seagrass damage from swing moorings*
- *Berthing size (16m+) not in line with boating demand projections (6m+)*
- *Increasing social divide for access to the waterway by accommodating very large and expensive yachts*



## Management of pump-out and other boating services at marinas

Pump-out facilities allow boats, with on board toilet facilities, to pump out waste to a land based storage facility and subsequently to the sewer. The management and maintenance of pump-out is crucial and as boat numbers and size increase, demand for these facilities will increase. Currently there are only two public pump-out facilities in Pittwater. Some private marinas also have pump out facilities open for public use. This critical lack of facilities can lead to illegal pump out into the waterway, causing preventable pollution.

Strategy 2h) of the Pittwater Estuary Management Plan (2010) stated that all new marina developments over nine berths should have pump outs services.

Marinas on the waterway also provide refuelling services for club patrons and other boat users. However, a range of associated impacts from a health, safety and environmental perspective may be associated with fuel spills and the storage of hazardous substances.

## Berthing areas

Berthing areas, specifically marina berths, have potentially significant environmental and navigational impacts upon the surrounding waterway. If the expansion of these areas is not undertaken in a considered manner there is potential to encroach into navigational channels, sea grass beds and aquatic habitats.

Hill PDA Consulting (2016) reports that berth spaces are far more water space efficient than other forms of on-water storage, such as moorings. Swing moorings far exceed marina berths water space usage with one swing mooring accounting for approximately eight marina berths, a ratio of 1:8. Each hectare of water space can accommodate 64 marina berths or alternatively 7 swing moorings.

Having regard for the above, it is evident that marina berths are far more space efficient at

meeting expected future boat storage demand than swing moorings.

## Dry stack storage

Dry stack storage is a land-based facility that can house many boats in a multi levelled structure. The storage operator utilises mechanical means to access stored boats and lower them directly into water prior to use by the owner. Once the boat owner returns to the facility the operator will retrieve the boat from the water and return it to the storage facility.

Dry stack storage is a viable and economical storage solution for medium sized boats, ranging from approximately 5 to 11 metres (18 – 36 ft). Other advantages of dry storage are its ease of use, reduction in maintenance works, safety and security.

A local example of a dry stack facility is d'Albora Marina, Akuna Bay sited on Coal and Candle Creek West of Pittwater.

While dry stack storage is a viable option, there are associated impacts which relate to the height of the building, visual and operational impacts, including noise, traffic and parking.





## Public access

Marinas are generally privately owned facilities with exclusive access to storage facilities and berths; however Pittwater Aquatic Club (PAC) provides a co-operative model approach. While marinas provide a storage service exclusive to members, the community is not excluded from these areas. Marinas provide public access to a range of associated businesses and facilities such as refuelling, pump out points, cafes, marine industries and boat sales.

**'Crowding of the waterway caused by marina expansion and private mooring expansion... take the public space which is Pittwater.'**

*(Survey respondent)*

## Parking

Parking has been identified and raised as a major issue for the community, as evident from the range of submissions received relating to recent marina Development Applications (DAs). Furthermore the survey highlighted that parking issues are not isolated to marinas, with 35% of survey respondents dissatisfied and very dissatisfied with parking facilities at foreshore localities.

**'The study area would likely need between 200-240ha of additional water-space to accommodate the additional swing moorings to 2041, while only 8-13ha ...for the additional marina berths. '**

*(Hill PDA Consulting, 2016)*





## POSSIBLE STRATEGIES:

- Review existing and consider additional development controls such as dry, stack storage design and locational controls, increased protection of Posidonia sea-grass beds and marina development. Controls should address the increased demand projections for boat usage and storage and potential environmental and amenity impacts, with references drawn from the Review.
- Consider Council led amendment to Pittwater LEP 2014 which reflects relevant outcomes identified in the Review including expansion of marinas where appropriate, considering environmental, navigational, traffic and parking impacts. Expansion subject to trade off which would result in a reduction in commercial moorings held by marinas (increase in boat storage associated with a reduction in water uptake).
- Explore mechanisms and opportunities to inform boat users of boat related services and facilities in Pittwater, including servicing facilities, public amenities, leisure facilities and passenger access points. Investigate incentives for commercial marinas to be involved in the program.
- Ensure all marinas are compliant with relevant standards including Australian Standard (AS) 3962-2001 Guidelines for design of marinas and International Standards Organisation (ISO) 14001 – Environmental Management Systems, or have an appropriate environmental management policy in place.
- Review and re-evaluate parking rates of provision in relation to marina and dry storage development.
- Consider ‘sea bin’ development close to marinas; to improve waterway cleanliness.

## YOUR SAY:

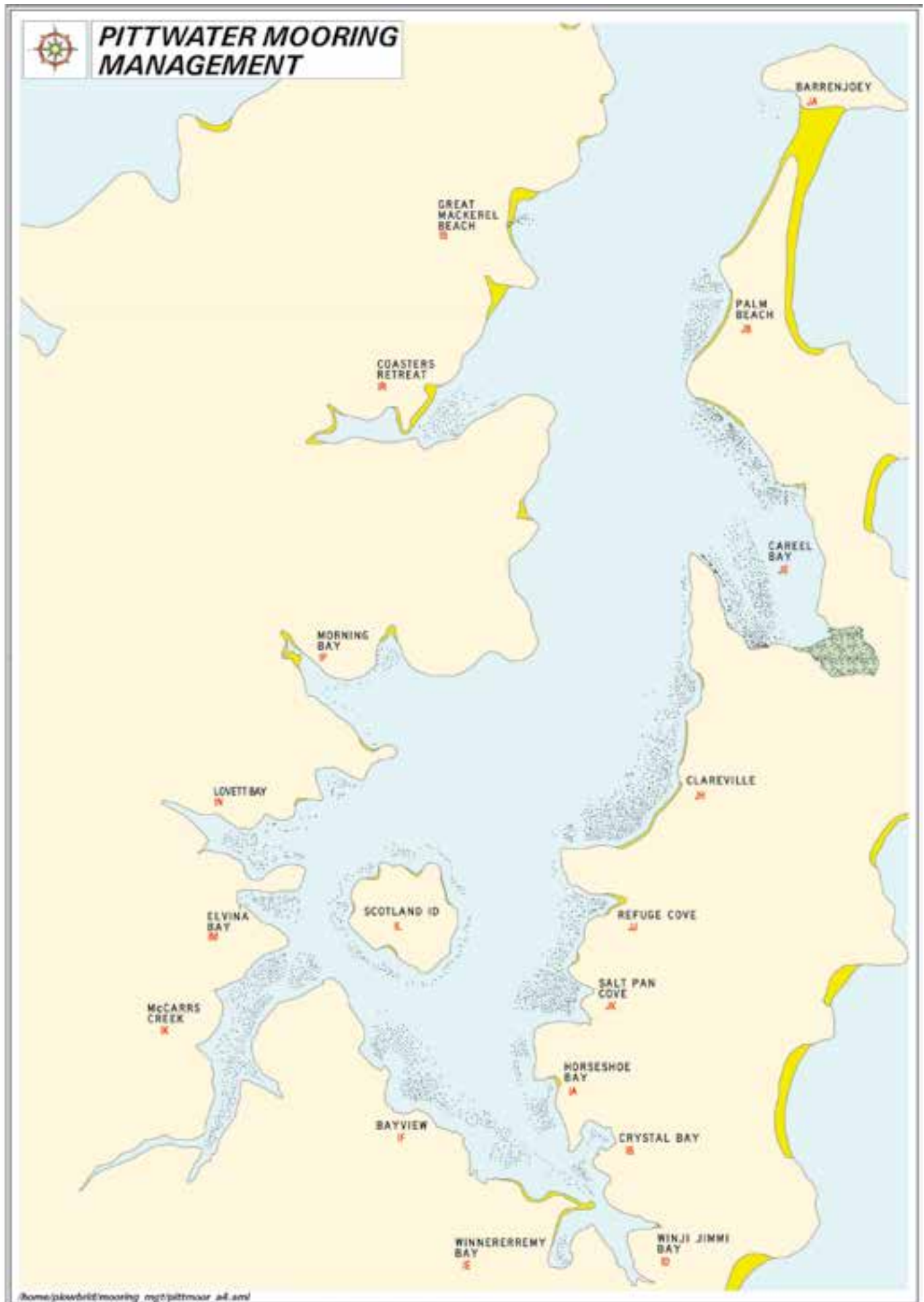
*What do you think of the possible strategies outlined above?*

*Should Council consider establishing a marina reference group with representation from Council, the marina sector, key stakeholders and community representation?*

*Should Council allow marinas to expand in a considered manner; taking into consideration environmental, navigational, traffic and parking impacts; in the face of increasing boat ownership and usage and economic growth?*

*Should Council look to new types of technology to clean the waterways in priority areas, such as Seabins etc?*

## Mooring fields in Pittwater





## Moorings

Moorings are defined as: ‘a detached or free-standing apparatus located on or in a water-way and that is capable of securing a vessel, but does not include a mooring pen’.

There are four types of moorings; commercial; private; courtesy and emergency.

Moorings provide an easy and affordable method for the public to store medium and larger boats. Pittwater has a high demand for moorings as seen in the private mooring waiting lists with Winji Jimmi and Crystal Bay both having waiting periods of 27 years. These represent the highest waiting lists for moorings in NSW. Moorings are regulated through the Roads and Maritime Services (RMS) and Pittwater 21 DCP (D15.17 Moorings) provides a range of development controls relating to maximum number of moorings and the management of mooring areas.

Pittwater 21 DCP sets an overall maximum cap of 3641 moorings in Pittwater, while individual mooring areas have a maximum number of moorings permitted.

The community has identified a number of issues with moorings, with 82% of survey respondents saying that the enforcement and management of moorings in Pittwater was an important or very important issue.

## Water space comparison of marina berths to swing moorings.



## ‘Over’ mooring in certain localities

Moorings can have a negative impact on aquatic habitats, seagrasses, visual pollution, navigational and safety issues brought about by inefficient mooring field layouts, systems and equipment.

*“Increase in number and size of vessels and ...overcrowding of Pittwater is an on-going concern as the route the ferry takes is being constantly pushed out as more moorings are put in.”*

*(Gray & anor v Pittwater Council [2016] NSWLEC 1176)*

Over mooring is also causing conflict with recreational activities such as sailing and small recreational crafts, such as kayaks. These issues are particularly relevant on the southern section of the waterway, from Winnererremy Bay to McCarrs Creek.

“As of 2015, the bays and coves of Bayview, Crystal Bay, Winji Jimmi and Winnererremy Bay contained a total of 51 swing mooring over an area roughly calculated at approximately 70ha of water-space. By comparison the Royal Prince Alfred Yacht Club and Royal Motor Yacht Club provide 572 berths over an estimated 9ha of water-space”  
*(Hill PDA Consulting, 2016).*

## Mooring minders

Mooring minders have been identified through several workshops as a key issue impacting Pittwater. Mooring minders is an informal term given to inexpensive and unmaintained boats purchased by a licence holder for the specific purpose of reserving the mooring space. The concern with ‘mooring minders’ is that they pose a range of impacts, these include:

- Visual amenity of neglected and unseaworthy boats,
- Navigational and safety concerns.
- Potential damage to other vessels and property due to risk of sinking or breaking free from unmaintained moorings.
- Stifle access to potential moorings subsequently increasing mooring wait lists and placing additional demand pressure for boat storage.

*“There are ...way too many boats that sit on moorings and never get used.”*

*“Get... rid of mooring minders.”*

*“Too many un-sea worthy and ‘mooring minders’ taking up valuable space at moorings.”*

*“Need to get rid of unused boats to free moorings instead of getting more new moorings.”*

*(Survey respondents)*

## Mooring limits

RMS has established and allocated a maximum mooring cap for Pittwater of 3641 (maximum limit on mooring numbers) and this is further reflected in restrictions relative to the maximum number of moorings for specific mooring areas throughout Pittwater as indicated in Pittwater 21 DCP (D15.17 Moorings).

The dilemma of establishing specific mooring caps for individual mooring areas is the potential for popular areas having high demand and associated long waiting lists, while other less popular areas remain under-utilised.

As indicated, Pittwater has the highest waiting lists for moorings in NSW and during workshops there were a range of options discussed in relation to addressing boat storage demand now and into the future. Options included increasing mooring numbers in areas of high demand while other options sought reduction in mooring numbers in favour of other boat storage options. RMS has investigated and trialled alternative mooring systems and types in an attempt to potentially increase mooring capacity in some localities, such as multipoint systems, which include star and pontoon moorings.

*“Currently [there are] no available mooring for new [residents] who move to Scotland island. This makes daily life incredibly difficult.”*

*(Survey respondent)*

## Types of moorings in Pittwater

Swing moorings are the most common type of mooring system in NSW consisting of 86% of all private mooring licences. This trend is similar for Pittwater and can be contributed to the ease and low cost of construction of the mooring. Swing moorings are also a much more affordable option than marina berths and therefore provide a crucial cost efficient solution for many boat users (Hill PDA Consulting, 2016).

Unfortunately, as already highlighted in this paper, swing moorings have a number of environmental and navigational issues. The chain in swing moorings scours the seabed around the block, causing significant damage to and potential loss of seagrass beds (Demers, et al., 2013; Maritime Management Centre, 2014). Seagrass form a vital part of waterways ecology; and their protection is vital.

Swing moorings are also space inefficient. Each boat on a swing mooring takes a large amount of space because the chain that ties the boat down moves with tide, current and wind direction.

*“Berths [Marina] could provide 64 on-water spaces for every 1ha compared to seven swing moorings per 1ha.”*

*(Hill PDA Consulting, 2016).*

*“Between 91 to 202ha of additional water space could be required to accommodate the additional swing mooring to 2041, while only nine to 21ha of water space would likely be needed for the additional marina berth”*

*(Hill PDA Consulting, 2016).*

## POSSIBLE STRATEGIES:

In conversation with the Roads and Maritime Services and Department of Primary Industry (Lands):

- Encourage consolidating mooring fields by considering denser mooring formations where possible. This could include reorienting mooring fields into more organised formations including considering multipoint systems such as ‘pontoon’ or ‘star’ mooring systems in which one mooring can support multi boats in an orderly fashion.
- Review DCP controls and provision, being 15.17 Moorings, and RMS mooring limits to ensure they are appropriate and capable of delivering required environmental, navigational and water safety outcomes in conjunction with meeting increased demand.
- Identify opportunities and investigate feasibility to establish additional mooring and tie-up infrastructure for residents of offshore communities.
- RMS to investigate initiatives and opportunities for the conversion of swing mooring systems to more environmentally friendly systems, with emphasis on mooring fields located in seagrass areas, and/or where denuding of seagrass beds has occurred.
- Discuss options with RMS to increase enforcement of mooring minders and a comprehensive review of how mooring licences are granted, to reduce the number of mooring minders on the waterway.
- Seek support and funding commitment from RMS to implement Environmentally Friendly Moorings (EFMs), specifically in sensitive locations, and multipoint systems in a timely manner to address increasing demand and seek part funding from the mooring fees to cover enforcement and the provision of related storage facilities.

## YOUR SAY:

*What do you think of the potential strategies outlined above?*

*Do you think that marinas should be permitted to accommodate part of the additional demand predicted given the advice that they can accommodate the additional demand in a more water space efficient manner?*

*Survey respondents and workshop participants suggested that a yearly inspection of all boats on moorings be mandatory to ensure that they are sea-worthy and remove mooring minders. What do you think of this suggestion?*





## Other development

Other types of waterway development include seawalls, jetties, wharves, boat ramps, boat sheds, storage facilities including dinghy / kayak storage areas and dry stack (warehousing) facilities. At a local level these development types are generally regulated through LEP and DCP controls.

## Ageing infrastructure

Survey respondents and workshop discussions have highlighted concerns regarding ageing infrastructure, such as public wharves. Council has undertaken wharf upgrades at Bonnie Doon and Bennetts Wharves, Palm Beach, Salt Pan Cove, Yachtsman's Paradise, Tennis Court Wharf. Work is currently being planned at Great Mackerel Beach Wharf. To ensure compliance with the Disability Standards for Accessible Public Transport 2002 additional work will be required, dependent on securing funding support.

## Lack of facilities for 'off the beach' small boat sailing

Sailing is a popular activity on the waterway and it has been highlighted that particularly small craft don't have adequate storage facilities. This has been said to lead to erosion on beachfront and foreshore edges due to unauthorised storage. There are also limited designated small craft sailing areas, which can lead to potential navigational/safety issues with larger, more powerful motor craft.

## Pasadena and Church Point redevelopment

Workshop discussion and survey respondents highlight that many offshore residents use Church Point as their main hub. There are a number of infrastructure projects underway in this area and development for a variety of uses is important.

## Jetties and wharves

There are several issues identified with jetties and wharves in Pittwater and particularly with regard to Scotland Island and the western foreshore due to accessibility requirements.

Jetty issues highlighted include: jetty use (who can use them) and the regulation surrounding enforcement: the visual impact of rows of private jetties and associated boat sheds; jetties in disrepair and responsibility / requirement for maintenance; congestion and encroachment of jetties and restricting public access to the foreshore by private jetties.

Wharf issues identified during consultation include: congestion in front of the ferry wharf at Scotland Island and potentially other locations; illegal boat tie up and enforcement; competing demands affecting public wharf infrastructure on the waterway; including recreational fishing use and general access, maintenance and safety issues and disabled access.

## Seawall development

Seawall development, if constructed incorrectly and without consideration of context, may cause significant environmental harm and destruction to local aquatic ecologies. State Government and Council projects are required to go through a 'review of environmental factors' which addresses the environmental impact assessment requirements for activities subject to Part 5 of the Environmental Planning and Assessment Act 1979. Private seawalls, are governed by State Environmental Planning Policy (Infrastructure) 2007 and development controls contained in Pittwater 21 DCP (D15.18 Seawalls). These generally do not permit private seawalls, with variations only considered if there is a potential for erosion from coastal processes.

## Dinghy storage and tie-up facilities

Currently the Pittwater waterway has 981 dinghy and watercraft spaces that are available to rent yearly from Council. According to Council figures, this is insufficient, with most storage areas experiencing waiting lists of approximately 50 spaces. It has been identified that more spaces are required north of Avalon and Church Point.

*“Dry storage for dinghies is very important as it promotes access to the waterway for those who cannot afford mega yachts and the waterfront marina lifestyle.”*

*(Survey Respondent)*

## Kayak and paddleboard storage facilities

Kayaking and stand up paddle boarding continues to grow in popularity as a water base activity that can be enjoyed by a variety of ages and experience levels. Due to the growth in popularity, it has been identified that there is a lack of kayaking and paddle boarding storage by the foreshore. This can lead to inefficient, damaged or illegal storage methods and conflicting use at recreational facilities. Kayak and paddleboard storage, according to consultation, is of particular concern as there are limited dedicated facilities in Pittwater. Although additional storage has been provided at Church Point and investigated at Paradise Beach, as the activity becomes more popular, demand for storage may rise and impact on dinghy storage facilities.

This opens a relevant debate about what is the most appropriate use of Council’s designated dinghy storage facilities and where does the personal responsibility for storage of smaller water craft, such as kayaks and stands up paddle boats, lie.

68% of survey respondents felt that storage for kayaks, paddleboards and dinghies was important or a very important issue requiring further consideration.

## Boat ramps

Boat ramps are the primary access point for boat launching. Pittwater has 12 boat ramps, however not all boat ramps are vehicular accessible. The majority of boat ramps are classed as hand launching areas, such as Snaperman Beach and Church Point boat ramps. Currently there are only two facilities in Pittwater that are large enough to launch medium size boats onto the waterway and both of these are at Rowland Reserve. The lack of facilities for larger boats has led to incidents, with some boat owners attempting to launch larger boats via smaller facilities, causing damage to the boat, boating infrastructure and surrounding aquatic environment. [www.pittwater.nsw.gov.au/lifestyle/boating\\_facilities/boat\\_ramp\\_locations](http://www.pittwater.nsw.gov.au/lifestyle/boating_facilities/boat_ramp_locations)

## Design considerations for waterway infrastructure projects

The Careel Bay precinct upgrade was identified, via workshops, as a successful example of appropriate and considered waterway design.

**POSSIBLE STRATEGIES:**

- Investigate updating signage for tie-up facilities to clearly set out use limits and permitted uses, enforcement provisions relating to illegal tie-up at wharves and non-designated areas.
- Review licencing system for Pittwater boat tie-up facilities, with a focus on innovative approaches and opportunities to cater for more flexible usage.
- Investigate opportunities for additional dinghy storage to cope with demand, both for moorings access and recreational users.
- Review Pittwater 21 DCP planning controls relating to seawall development, with specific reference to exploring opportunities to promoting best practice, innovative and ecologically friendly seawall design.
- Explore opportunities to encourage shared jetty/ pontoon arrangements to reduce proliferation of waterway structures and increase access to vital boating infrastructure to offshore residents.
- Explore and investigate options for new boat ramp development on Pittwater for medium and larger boats.

**YOUR SAY:**

*What do you think of the possible strategies outlined above?*

*Do you think Council should provide storage facilities for kayaks and paddleboards on foreshore areas?*







## Theme 5: Activating the Waterway

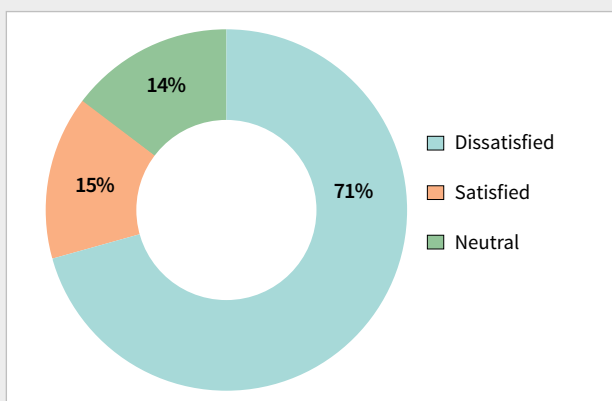
### Accessing the waterway: access, parking and navigation

Access and parking is crucial as it ensures the waterway remains a shared, public place that can be enjoyed by everyone.

Many issues discussed so far, particularly in relation to development, storage and increasing demand, will have a significant impact on access to and on the waterway. Access is essential as it activates the area and allows people to utilise and enjoy Pittwater.

Parking has been highlighted during the consultation period as one of the biggest issues. The community has identified that there is a substantial lack of parking for all major stakeholders, including offshore and onshore residents and visitors to the waterway.

### How satisfied were you with parking facilities for the Pittwater Waterway.



*Survey results*

The community is less than satisfied with the current parking arrangement for the Pittwater waterway.

### Car Parking

Consultation has highlighted a huge demand for parking across the waterways locality. Governor Philip Park, Palm Beach Ferry Wharf car park and Rowland Reserve face increased demand, at peak times, far in excess of current parking provisions.

The offshore communities rely on public foreshore parking to access their homes and Council operates a permit system to give priority to these residents. Council has initiated the Church Point upgrade which incorporates a new car park with 120 new parking spaces. The northern section of Pittwater, including Great Mackerel and Coasters Retreat residents, do not have access to a parking permit system and have said that they experience great difficulty in accessing and locating parking to access their homes.

### Council parking stickers for non-residents

Some Central Coast residents have access to Council parking permits. The Central Coast is a burgeoning area for commuters that work in Sydney. Although not directly within the scope of the Review, consultation responses have shown that this has caused an unsustainable demand for parking at Palm Beach Ferry Wharf car park. Council has committed to undertake a Parking Demand Study (PDS) for the West Palm Beach locality to consider and address a range of parking and transport related issues.

### Trailer and boat parking

Trailer and boat parking issues are apparent in most localities and contributes to a number of problems including amenity impact, safety issues, reduced visibility, damage to property and traffic congestion.

Trailer boat parking has special requirements, as significant room is required to safely park

and manoeuvre. Trailer boat parking is prevalent on local roads, and has safety and visibility impacts.

The former Pittwater Local Government Area (LGA) conducting a three month trial which commenced on 15 July 2016. The trial permitted Council to impound boat trailers parked on public roads and lands if they have not been moved for a period of 28 days. Further information can be found via:

[www.pittwater.nsw.gov.au/places/parking](http://www.pittwater.nsw.gov.au/places/parking)

Temporary, fee paying facilities for on-land storage is available at Rowland Reserve and Sandy Point, however workshop feedback has confirmed that there is a lack of permanent, cost effective on-land storage options available for boats and trailers.



### Ferry and transport integration

Currently there are two independent ferry systems operating on the waterway with individual ferry service timetables. Ensuring the different modes of transport systems, particularly buses, work in an integrated way is crucial.

### Active Travel paths

The online survey and workshops have identified bike access to the waterway and foreshore as limited, with few dedicated safe cycle paths provided. However it is recognised that the waterway and its edges present a unique opportunity for increased cycle and pedestrian access, especially to foreshore areas and foreshore bike trails.

Strengthening connections and pathways from village centres and neighbourhoods to the waterway is also extremely important, taking pressure off the road network and parking.

### Privatisation of the foreshore

All workshops identified public accessibility to the waterway and foreshore edges as a key issue. Survey respondents highlighted that there is limited public access to the waterway and some workshop discussions questioned whether better access could be made available, via DCP controls requiring unrestricted public access to and around the foreshore is maintained.

### Conflicting use on the waterway

Survey results and workshop discussions have indicated conflicting use between non boating recreational users and boat users on the waterway.

91% of survey respondents considered safety on the waterway and foreshore to be an important or very important issue.

Comments received highlighted concerns with powered boat users and recreational users. The community survey identified swimming as a primary use of the waterway and one which must be considered in future planning.

*“Safety on the waterway is often lacking. Too many people don’t seem to know the rules or don’t care for them, putting other lives in danger and disturbing the tranquility of the area.”*

*(Survey respondent)*

### Personal water craft

The use of personal water craft or Jet Ski’s (PWCs) was shown in the survey to be very contentious with 89% of respondents considering this an important or very important issue. Commentary contained in the survey sought a ban on the use of PWCs on the Pittwater waterway. In 2001, the NSW Parliament completely banned the use of PWCs in Sydney Harbour due to noise impacts and their impact on the environment. Their use is considered by some to have serious impacts associated with excessive noise, environmental, navigational and safety of the waterway.



*“Jet skis should be banned from Pittwater. Their noise totally prevents other visitors and residents from enjoying the peace of this beautiful waterway. It is also plain dangerous given how many commuter boats, kayaks, yachts and kids wakeboarding, etc.”*

*(Survey respondent)*

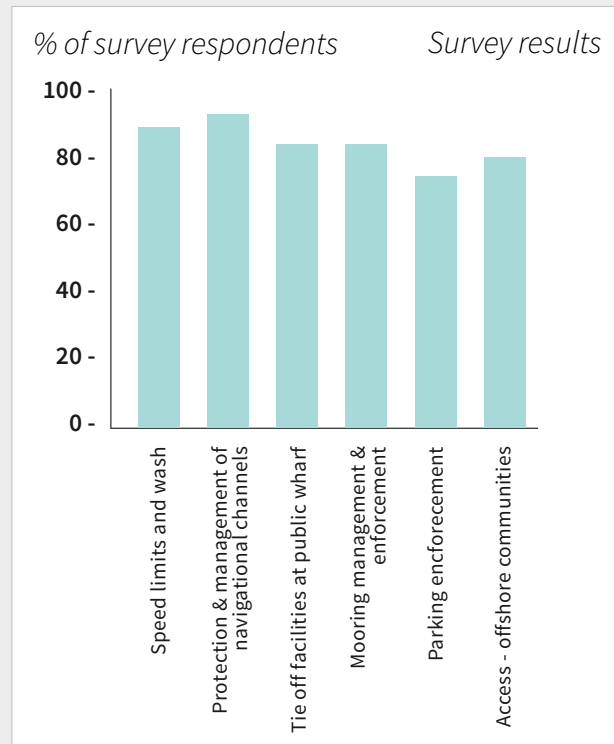
### Illegal dinghy, kayak and paddleboard storage

There are approximately 60 illegal dinghy tie ups at Old Wharf Avalon and illegal storage of kayaks and paddleboards in other foreshore locations. In addition to other issues already addressed, this is having an impact on public access to the foreshore and appropriate access for recreational users.

### Sea planes

Seaplanes currently use the waterway for storage and take-off / landing. As a popular tourist attraction, sea planes require a dedicated area for take-off / landing and navigable channels have to be open for these commercial operators.

### Prior to activation issues associated with Pittwater Waterway.



## POSSIBLE STRATEGIES:

- Investigate opportunities to coordinate and integrate public transport timetables, such as ferry and buses, with relevant providers to ensure point-to-point transport availability.
- Investigate options for the zoning of land and creation of appropriate controls for the development of dry stack storage facilities, in appropriate locations subject to consideration of the following criteria:
  - Visual impact
  - Transport and parking
  - Environmental attributes
- Investigate opportunities for additional dinghy storage in priority areas.
- Undertake a comprehensive review of existing procedures in relation to tie up facilities. Review to consider potential strategies focused on increasing enforcement of existing tie up facilities and investigation of new tie up facilities in high demand areas.
- Undertake audit of existing public access thoroughfares to Pittwater foreshore, with focus on improving universal public access. Audit is to incorporate a site inventory which captures site condition, characteristics, infrastructure provisions and opportunities and constraints.
- Investigate impact of PWCs (jet skis) on Pittwater and consider appropriate action to mitigate identified impacts through restrictions, if necessary.
- Explore opportunity to incorporate the investigation of new bike routes that connect key localities to and along the foreshore in Council's Active Travel Strategy.

## YOUR SAY:

*Do you agree with these strategies outlined above?*

*What solutions would you like to see Council explore?*

*Could dry stack storage away from the waterway's edge provide a solution in existing established industrial areas of say Mona Vale and Warriewood?*



## Theme 6: Waterway Regulation

How we regulate our waterway is crucial to how the waterway successfully operates on a day to day basis. A number of issues have been raised during the consultation process relating to the current enforcement and governmental structure surrounding the waterways.

There is a broad range of legislation, regulation and controls relating to the waterway and foreshore edges, including:

- Marine Safety Act 1998
- Marine Safety (General) Regulation 2009
- Marine Pollution Act 2012
- Marine Estate Management Act 2014
- Protection of the Environment Operations Act 1997
- Protection of the Environment Operations Regulation (General) 2009
- Fisheries Management Act 1994
- Environmental Planning and Assessment Act 1979
- Environmental Planning and Assessment Regulation 2000

Zoning map showing w1 and w2 zones





## Land Use Planning

Pittwater LEP 2014 defines the area in which marinas can operate, via zoning controls. Zone W2 Recreational Waterways permits, with consent, development for the purpose of marinas.

The preparation of Pittwater LEP 2014 was a 'like for like' translation of Pittwater LEP 1993 into the required Standard Instrument Local Environmental Plan format and therefore the zone boundary surrounding existing marinas was replicated in the new plan. This approach didn't consider or provide for extensions of the zone boundary around marinas; subsequently this resulted in restricting any potential for expansion and growth. Under the current planning controls, the only way for marinas to expand is through a rezoning process, as marina development is prohibited in Zone W1 Natural Waterways, which represents the greater area of the waterway outside Zone W2 in Pittwater LEP 2014.

Stakeholder workshops and the *Pittwater Marine Industry – Demographic & Economic Study* (2016) have stressed that the current restrictive zoning boundaries surrounding marinas on Pittwater is impacting on marina growth and redevelopment required to meet current and predicted boat storage demand.

Two suggestions were identified from the marinas workshop and reported in the Hill PDA Consulting (2016) study:

- 1) Zoning boundaries should remain flexible (around current W2 zone areas) or land use zoning for the wider waterway should be revised to W2 (Recreational Waterways) in the Pittwater LEP 2014.
- 2) A buffer system be considered around current W2 zoned land in the Pittwater LEP 2014 which allows development proposals to be lodged as 'assessable development' without being classified as prohibited development. This buffer could extend up to 50 metres around a marina. The purpose would not be for immediate development but to safeguard water

space around a marina. This would allow future expansion to accommodate both additional storage and reconfigurations as a result of increasing boat ownership and size of boats.

While the suggestions above were raised and identified as possible solutions, neither are supported by Council as they do not provide an adequate level of certainty or assurance on what type of development can occur and where. The preference is to undertake a detailed investigation of each marina and its surrounding locality, to establish the opportunities and constraints for future expansion.

*“The majority of stakeholders highlighted that regulatory, planning and approval processes needed to be streamlined and simplified to support the growth and prosperity of the marina industry.”*

*(Hill PDA Consulting, 2016)*

In terms of management demand, dry storage is a favourable option and already in use at Akuna Bay. However, workshop discussions suggested that the visual impact of such a facility may not be supported by the local community (Hill PDA Consulting, 2016).

## Land ownership and responsibility

As detailed earlier in the Paper, Pittwater waterway and its foreshore fringe is governed and controlled by a number of groups and State Agencies, resulting in a complex overlay of ownership, management and controls.

Private landowners, Council and State Government agencies are key stakeholders in shaping the waterway, in terms of use, development proposals, integration, control, management and governance. As such, many of the potential solutions highlighted in this Paper fall outside the scope of Council and lie within the realm of State government. Therefore implementing the range of solutions and strategies identified requires collaboration and co-ordination of all tiers of government.

Transport for NSW has actively supported Council in the Review, through provision of key data and by funding the commission of the Pittwater Marine Industry – Demographic & Economic Study (2016) undertaken by Hill PDA Consulting. While other relevant State Agencies have participated in targeted stakeholder workshops and provided essential data.

## Native title claim

The former Pittwater Council were provided notice by the National Native Title Tribunal on 16th September 2013 of the native title claim file by the Awabakal and Guringai People (Federal Court Ref. NSD 780/2013). The claim relates to the central coast region of NSW and includes part of the former Pittwater LGA. All freehold land is excluded from the Claim which relates to non-freehold Government land (Crown land) and waters.

## Legislative reform

There are a host of legislative reforms surrounding the waterways currently underway. These reforms will have long term impacts on the governance of the waterway, both from a local and state perspective:

- Coastal Reform aims to utilise the Coastal Reform Act, Manual and SEPP to manage coastal risks associated with climate change, coastal protection, foreshore development, coastal wetlands, lakes and littoral rainforests, catchment runoff and impact on estuaries and access to beaches and headlands.
- The Coastal management SEPP will supersede SEPP 14 (Coastal Wetland), 26 (Littoral Rainforests) and 71 (Coastal Protection). Further information can be found via the following link: [www.environment.nsw.gov.au/coasts/coast-reforms.htm](http://www.environment.nsw.gov.au/coasts/coast-reforms.htm)
- The NSW Marine Estate Management Authority (MEMA) was established in 2013 to advise on policies, priorities and directions for the NSW marine estate which includes marine water, estuaries and the coast. The Marine Estate Management Act 2014, provides for strategic and integrated management of the estate. MEMA is currently focusing on the Marine Estate Management Strategy and the Hawkesbury Shelf marine bioregion assessment. Further information on both the Strategy and Assessment can be found via the following links: [www.marine.nsw.gov.au/key-initiatives/marine-estate-management-strategy](http://www.marine.nsw.gov.au/key-initiatives/marine-estate-management-strategy) [www.marine.nsw.gov.au/key-initiatives/hawkesbury-shelf-marine-assessment](http://www.marine.nsw.gov.au/key-initiatives/hawkesbury-shelf-marine-assessment)
- Department of Primary Industry: Crown Lands Legislation Review: A comprehensive review into streamlining the management of Crown Land. Further information can be found via: [www.crownland.nsw.gov.au/crown\\_land/comprehensive\\_review\\_of\\_nsw\\_crown\\_land\\_management](http://www.crownland.nsw.gov.au/crown_land/comprehensive_review_of_nsw_crown_land_management)

## Funding for major projects

Approximately \$5.3 million has been designated for the Hawkesbury/ Brisbane River Region for infrastructure upgrades as part of Transport for NSW's boating now program. The former Pittwater Council submitted funding applications for a number of projects and was successful in obtaining funding for the following items:

- *Expand commuter vessels facility at Church Point*
- *Increase parking and install pontoons at Rowland Reserve, Bayview.*
- *Install dinghy storage at Paradise Beach, Clareville*
- *Upgrade Bayview Wharf*
- *Install pontoon for boat tie up at Bayview*

## Compliance of industries on the waterway

Industry compliance is an important issue, as waterway related industries (Zone IN4 Working Waterfront) poses potential impacts in terms of pollution and foreshore amenity.

96% of survey respondents felt that pollution from marinas, commercial and industrial activities was an important or very important issue. The marina stakeholders engaged in the workshop discussions similarly voiced appreciation of the environmental importance the waterway and identified that the public use of pump out facilities assisted in environmental protection and increased 'good will' and social cohesion. (Hill PDA Consulting, 2016; Marinas workshop)

Marinas must abide by stringent regulations as set under the Marine Pollution Act 2012 and work within recognised and established environmental management programs. The community and workshop participants have highlighted the importance of ensuring compliance so as to avoid potential negative environmental and amenity impacts on the waterway.

*"Pollution from commercial and marinas is important, but it is well managed."*

*"Pollution from use of detergents used to wash boats."*

*"Not sure we agree that marinas... generate pollution – probably the people..., not the marina itself."*

*(Survey respondents)*

## Pittwater's unique offshore locations

46% of the survey respondents were offshore residents. Pittwater is unique and challenging in terms of its special character and the functional role it plays in servicing the needs of the offshore communities. Survey responses have highlighted water pollution from on-site septic systems on Scotland Island; lack of commuter car parking and lack of commuter boat parking / moorings as the key areas of concern for offshore residents.

Council is currently addressing the issue of a reticulated waste water system (sewerage) on Scotland Island and is in the process of improving commuter parking at Church Point. A recent Council report regarding reticulated water and waste water on Scotland Island can be accessed via: [portal.pittwater.nsw.gov.au/common/Output/DataworksAccess.aspx?id=fd2d6YjOGhY%253d&ext=pdf](http://portal.pittwater.nsw.gov.au/common/Output/DataworksAccess.aspx?id=fd2d6YjOGhY%253d&ext=pdf)

Other issues raised, relating to off shore communities, include safety of commuting, especially at night when moored boats close to the navigational channels aren't appropriately marked (by lights); lack of 24/7 offshore ferry services; lack of recognition that the waterway is the offshore communities only means of access to their homes; wharf tie up facilities limited and increasing in cost; and need for upgrades to commuter wharves.



### Speed restrictions on the waterway

There are a number of speed limited zones in the waterway, specifically around mooring fields and high congestion areas. As boat usage increases, there will be a need to review the zones. Many survey respondents have suggested that the entire waterway should be made a no wash zone, to facilitate greater recreational use and reduce environment impacts.

### Foreshore signage

Signage on the foreshore was considered by workshop participants and survey respondents to be both restrictive and not informative enough. It was suggested that signage be mindful of its natural surroundings, informative and facilitate safety and best practice on the waterway.

A workshop group suggested using public art on signage to promote and educate good practice rather than purely indicating restrictions and controls.

### Recognition of Pittwater's history

Recognition of Aboriginal and European heritage on and adjacent to the waterways was discussed in a number of workshop sessions where participants felt that greater understanding and recognition of the waterways heritage was needed. Historical recognition will contribute to greater community appreciation and understanding of the overall character and uniqueness of the waterway and can be promoted through a variety of media and measures, including websites, signage and public art. Traditional land owners have very close ties to the water and there are a number of registered and listed Aboriginal and European heritage sites within close proximity of the water.

### Waterway education

During consultation the lack of education on safe boating practice, heritage and ecological aspects relating to the Pittwater waterway was raised as a major concern. Lack of boating safety knowledge has been broadly attributed to minimal boating licencing requirements, lack of training and understanding of waterway etiquette. Workshop participants identified many water based activities are deregulated with a distinct lack of educational initiatives on offer outside of clubs.



## POSSIBLE STRATEGIES:

- Should Council identify and support the need to amend the Pittwater LEP 2014 to expand the W2 zoning around marinas, as recommended and supported by the Review, it must be subject to the requirement that any additional marina berths are offset by the surrender of at least an equal number of moorings.
- Investigate opportunities for dry storage facilities within proximity to the waterway or within the Mona Vale and Warriewood industrial areas.
- Prepare a suite of DCP controls to guide the development of dry storage facilities in order to achieve best practice and exemplary design outcomes while appropriately responding to visual, noise and traffic impacts.
- Consider incorporating an emphasis on Pittwater Waterway through education campaigns and the promotion of eco-tourism.
- Develop a Council website hub, incorporating mobile apps, to promote Pittwater waterway related issues with specific focus on conservation, education, water and boating safety, heritage awareness and identity.
- Discuss additional speed limit zones or no wash zones with the Roads and Maritime Services (RMS), extending north of Stokes Point, Dark Gully and Longnoise Point.
- Investigate development of a Council waterway portal explaining ownership of the waterway, development controls and LEP zoning.
- Look to continue conversation between local and state bodies in the management of the waterways future.
- Explore improved signage options that incorporate public art, to develop a strong brand identity for Pittwater waterway. Signage to incorporate an educational focus informing waterway users on key aspects of the waterway and correct waterway usage, including boat ramp usage, foreshore fishing, etc.
- Audit foreshore development to identify and rectify illegal foreshore works in identified problem areas.
- In consultation with RMS, discuss the requirements and training for boat licenses and / or discuss with marinas the option of whether they could provide additional training courses.
- In consultation with RMS, advocate for legislative reform requiring moored boats to be appropriate lit at night.

## YOUR SAY:

*Do you agree with these strategies outlined above?*

*Currently the wider waterway (excluding the existing W2 zoned area) is zoned W1. This means that only environmental protection works are permitted without consent and environmental facilities and mooring pens are permitted with consent. The W1 zone is for Natural Waterways to prohibit commercial development to protect the ecological and scenic values of the waterway amongst other objectives. Do you agree that the current W1 zoning should be reviewed or is it appropriate?*

## CONCLUSION:

As indicated in the Discussion Paper, there is an array of issues that are directly impacting on the Pittwater waterway today that will have significant consequences for its future. To achieve and ensure a sustainable future, these issues will need to be appropriately managed in a holistic way and will require collaboration and cooperation from all levels of government.

You can have your say on these issues and the potential solutions identified in the paper by lodging a submission to Council. Your submission will help us develop and form meaningful strategies that will guide the waterway to a sustainable future over the next 20 years.

### How to get involved?

- You can respond to all questions raised in the discussion paper or only to those that interest you.
- You can respond to the issues and proposed strategies, or if your issue or proposed strategy is not addressed you can submit your own.
- You can submit as an individual, on behalf of a business or community group.
- Send written submissions to  
Northern Beaches Council  
1 Park Street  
Mona Vale NSW 2103
- Make your submissions via [yoursay.northernbeaches.nsw.gov.au/WaterwayReview](https://yoursay.northernbeaches.nsw.gov.au/WaterwayReview)



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- Beachwatch Northern Sydney (Pittwater to Manly) *State of the Beaches 2015-2016 report*
- *Australian Standard (AS) 3962-2001 Guidelines for design of marinas*, International Standards Organisation (ISO) 14001:2015 – Environmental Management Systems

**APPENDIX 1:** Extract from Pittwater LEP 2014

**APPENDIX 2:** Extract from Section D15 of Pittwater 21 DCP

**APPENDIX 3:** HillPDA Consulting, Pittwater Marine Industry – Demographic & Economic Study (2016)

**APPENDIX 4:** List of existing studies and papers

**APPENDIX 5:** Community engagement reference documents

**APPENDIX 6:** Reference maps









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# **APPENDIX 1:**

**Extract from Pittwater LEP 2014**



An aerial photograph of a white sailboat with its sails up, sailing on a deep blue sea. The boat is moving towards the bottom left, leaving a white wake behind it. The water's surface is covered in small, shimmering ripples.

## **APPENDIX 2:**

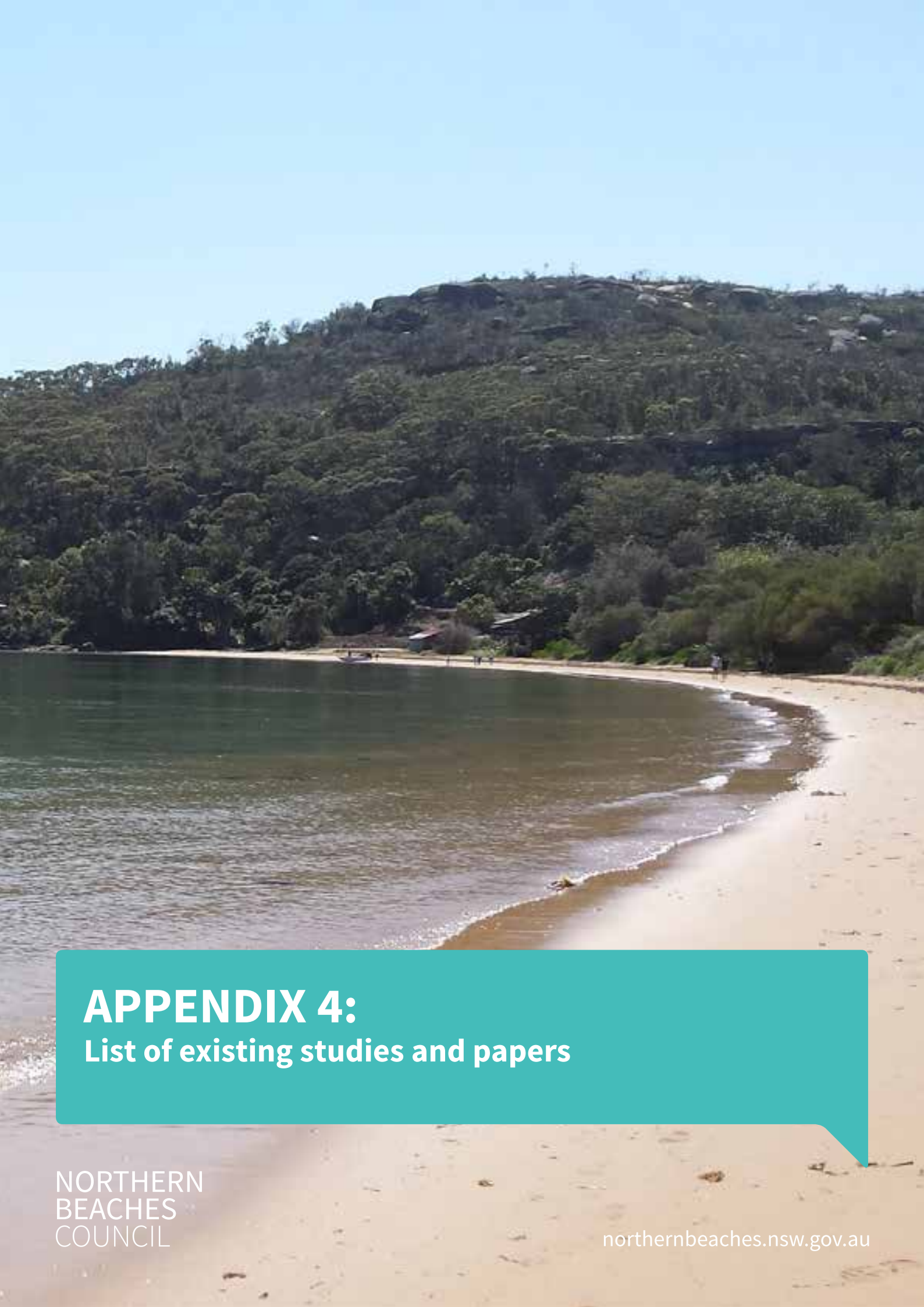
**Extract from Section D15 of Pittwater 21 DCP**



A close-up photograph of a boat's pulley system. A thick, white rope with red diamond-shaped patterns is coiled around a metal pulley. The pulley has a blue cap. In the background, other ropes and the mast of the boat are visible against a clear blue sky.

## **APPENDIX 3:**

**HillPDA Consulting, Pittwater Marine Industry  
– Demographic & Economic Study (2016)**



## **APPENDIX 4:**

### **List of existing studies and papers**





## **APPENDIX 5:**

### **Community engagement reference documents**





## APPENDIX 6:

### Reference maps

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