



Planning &
Infrastructure

**MAJOR PROJECT ASSESSMENT:
Kendall Bay Marina
MP 07_0006**



Director-General's
Environmental Assessment Report
Section 75I of the
Environmental Planning and Assessment Act 1979

May 2011

Cover photo: Artists Impression of the Proposed Kendall Bay Marina

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EXECUTIVE SUMMARY

Breakfast Point Pty Ltd (the Proponent) proposes to establish a new commercial marina complex at Kendall Bay in the City of Canada Bay local government area.

The marina complex would be comprised of:

- a 172 berth floating marina that would cater for vessels from 8 to 25 metres in length;
- a range of associated water and land-based infrastructure, including a kiosk, manager's office, and car park.

As the marina complex would be established on parts of Kendall Bay that are significantly contaminated, the Proponent also proposes to place a geo-textile blanket and other material over the contaminated sediments in the bay.

The project has a capital investment value of \$10.56 million, and would employ 3 people during operations.

The proposal constitutes a 'major project' under Part 3A of the *Environmental Planning and Assessment Act 1979* (EP&A Act), and consequently requires the Minister's approval.

The Department exhibited the Environmental Assessment of the project from 30 September 2010 to 30 November 2010, and received 343 submissions on the proposal: 11 from government authorities, 23 from special interest groups and 309 from the general public.

Both Canada Bay Council and Sydney Ferries objected to the proposal, while most of the other agencies raised significant concerns about the potential impacts of the project. In addition, all but 3 of the submissions from special interest groups and nearly 80% of the submissions from the general public objected to the project.

On 27 September 2010, the former Minister asked the Planning Assessment Commission (PAC) to carry out a review of the project.

The PAC held public hearings on the project in late February 2011, and carried out a comprehensive assessment of all aspects of the project.

On 21 April 2011, the PAC completed its review of the project, and concluded that:

- the proposed sediment protection system was untested and would pose unacceptable environmental risks;
- the proposed access arrangements for the marina would be inadequate;
- the Proponent has not demonstrated that it could adequately control the pollution and waste associated with the construction and operation of the project;
- the visual impacts of the project would be unacceptable;
- the project would have adverse effects on the recreational use and navigational safety of both Kendall Bay and the Parramatta River, and would cause a reduction in ferry services which is not in the public interest; and
- the evidence supporting the demand for a commercial marina in Kendall Bay is unconvincing.

For these reasons, the PAC recommended that the Project be refused.

The Department has assessed the merits of the project in detail, in accordance with the requirements in the *Environmental Planning & Assessment Act*, and agrees with the PAC's recommendation that the project is not in the public interest and should be refused.

1. PROPOSED PROJECT

1.1 Project Description

Breakfast Point Pty Ltd (the Proponent) proposes to construct a new 172 berth marina - to be known as the Inner West Marina - in Kendall Bay adjoining the Breakfast Point development.

The major components of the project are summarised in Table 1, depicted in Figure 2 below, and described in detail in the attached Environmental Assessment of the project (see Appendix B).

Table 1: Major Components of the Project

Aspect	Description								
Project Summary	The Kendall Bay Marina Project, to construct a floating marina structure to accommodate 172 vessels. The project also includes installation of a geo-textile blanket around the footprint of the marina, construction of a new low level fixed-jetty, kiosk, manager's office, security gate and dedicated car parking spaces.								
Floating Marina Structure	<p>The marina structure includes:</p> <ul style="list-style-type: none"> construction of a new 172 berth floating marina structure, including; <ul style="list-style-type: none"> a fixed-jetty to access the floating marina structure; a pontoon accessible to the public; 5 destination berths accessible to the general boating public; installation of a sewage and wastewater pumpout facility; and disabled ramp access to floating structures. <p>The proposed marina would cater for a range of vessels from 8m to 25m in length and there are no dredging or reclamation works required and there will be no provision of refuelling facilities or slipway maintenance facilities.</p>								
Sediment Protection System	<p>Installation of a Sediment Protection System (SPS), in the form of a geo-textile blanket secured by rock basalt over the contaminated bed of Kendall Bay within the lease area of the proposed marina site. More specifically the geo-textile layer would be:</p> <ul style="list-style-type: none"> placed in strips up to 140x40m, overlapped and capped with between 300mm-400mm of igneous rock (basalt); cover an approximate area of 56,000m² (5.6 hectares); and has a design life of over 100 years. 								
Office and Amenities	<ul style="list-style-type: none"> manager's office, kiosk for seating up to 50 people (indoor plus outdoor) and associated infrastructure. 								
Car Parking	<ul style="list-style-type: none"> dedicated marina car parking for 58 car parking spaces is proposed on a separate site approximately 150 metres west of the marina site on Peninsula Drive, Breakfast Point (Lot 53 DP 270347). 								
Employment	Peak construction workforce of 50, with an estimated operational workforce of 3.								
Capital Value	\$10.56 million								
Construction	92-106 weeks								
Hours of Operation	<table border="1"> <tr> <td>Marina Office</td><td>8.00am – 6.00pm, 7 days a week (Summer) 9.00am – 5.00pm, 7 days a week (Winter)</td></tr> <tr> <td>Destination Berths</td><td>during regular marina office hours (as above)</td></tr> <tr> <td>Fixed-Jetty & Pontoon</td><td>accessible to public 24 hours, 7 days a week</td></tr> <tr> <td>Kiosk</td><td>7.00am – 6.00pm, 7 days a week</td></tr> </table> <ul style="list-style-type: none"> Marina berth holders would have authorised security access to the floating marina structure 24 hours a day, 7 days a week. 	Marina Office	8.00am – 6.00pm, 7 days a week (Summer) 9.00am – 5.00pm, 7 days a week (Winter)	Destination Berths	during regular marina office hours (as above)	Fixed-Jetty & Pontoon	accessible to public 24 hours, 7 days a week	Kiosk	7.00am – 6.00pm, 7 days a week
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Destination Berths	during regular marina office hours (as above)								
Fixed-Jetty & Pontoon	accessible to public 24 hours, 7 days a week								
Kiosk	7.00am – 6.00pm, 7 days a week								

1.2 Project Need

The Proponent considers that the proposed marina is required to satisfy the high demand for marina berths in Sydney west of the Harbour Bridge, reduce the risk of disturbance of contaminated sediments within Kendall Bay and enhance public access to the waterway through the provision of a public jetty, pontoon and kiosk for informal gatherings.

1.3 Project Setting

The site of the proposed marina forms part of the western foreshore of Kendall Bay, which forms part of the Parramatta River and is in the City of Canada Bay local government area.

Kendall Bay adjoins the residential suburb of Breakfast Point to its immediate west. This suburb, some of which is still being constructed is comprised primarily of medium-high density houses and apartments.

The closest residences to the marina site are properties associated with the 'Hunter Wharf' precinct of the Breakfast Point development located approximately 40m west of the proposed marina-complex on Peninsula Drive and extending along the western foreshore of Kendall Bay.

Other key landuses in the vicinity of the project include (see Figure 2):

- Silkstone Park (~150m to the west);
- Waterfront Park (~300m to the south);
- Cabarita Public Ferry Wharf (~300m to the east) - this wharf is utilised by the Cabarita Rivercat ferry, as well as commercial cruise/tour operators, charter vessels and fishing vessels;
- Cabarita Park (~330m to the east);
- Cabarita Westport Marina (~740m to the east); and
- the River Quays Marina (~680m to the north-west).

1.4 Background

From 1886 until the 1980s, the site immediately west of the proposed marina site which now makes up the residential Breakfast Point Development was used to produce coal gas (see Figure 1). This industrial site was formerly known as the Australia Gas Light Company (AGL) Mortlake Gasworks Site. Over a number of decades, the gas works carried out on site generated a range of by-products which contaminated both the site and the sediments in Kendall Bay adjoining the site.



Figure 1: Aerial view of the former AGL Mortlake Gasworks Site

Remediation of the former AGL Gasworks Site

As a result, the former State Pollution Control Commission (now Office of Environment and Heritage or OEH) required the remediation of the former AGL gasworks site which was approved by the then Municipality of Concord Council in 1998. The remediation commenced in January 1998 and was completed in February 2002.

The Breakfast Point Development

In 2002, in accordance with *State Environmental Planning Policy No. 56* (Sydney Harbour Foreshores and Tributaries), the City of Canada Bay Council (Council) adopted the Breakfast Point Master Plan which proposed 1,865 dwellings and 12,300m² of commercial uses on the remediated gasworks site. The 2002 Master Plan indicated that a marina may be proposed in Kendall Bay in the future and provision was made for 100 car-parking spaces for a future marina. Further, the 2002 Master Plan also indicated a 'waterfront activity precinct' which has since been developed by the Proponent into the Hunter's Wharf residential development.

Until 2005, Council was the consent authority for the Breakfast Point Development site and issued a number of consents under Part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act), approving 876 dwellings.

On 31 August 2005, the then Minister for Planning assumed the role of consent authority for the remaining development to be undertaken at Breakfast Point under the provisions of the former *State Environmental Planning Policy (Major Projects)* 2005 (now Major Development SEPP).

On 7 April 2006, the Breakfast Point Concept Plan was approved by the then Minister for Planning for a mixed use residential/commercial/retail development comprising of the following:

- 176,222m² of Gross Floor Area (GFA) including 1,519 m² of non-residential GFA;
- 989 dwellings; and
- subdivision into Torrens Title and Strata lots.

The Breakfast Point Concept Plan superseded the 2002 Master Plan and similarly included an area for car parking, should a future marina proposal proceed.

Both the 2002 Master Plan approved by Council and the former Minister for Planning's 2005 Concept Plan approval included parking provision for a proposed future marina and references to some marina facilities. However, the size, scale and exact location of the proposed marina were not reflected in these documents. In addition, neither approval covered Kendall Bay or the waterside area of the proposed marina, only the land-based development.

Since 2006, several Part 3A project approvals have been granted for various precincts of the Breakfast Point Concept Plan including the Vineyards, Plantations, Silkstone, The Point, Manors North and Blacksmiths precincts. In addition, a number of modifications have been approved allowing changes to the both the number and mix of dwellings in the Plantations and Point precincts.

Remediation of the Beds of Kendall Bay

During the period when the subject site was used by AGL to produce coal gas, three wharfs located along the foreshore of the site were also used to load oil/tar and coal onto ships, one of which is located within the footprint of the proposed marina. It is understood that both the gasworks and the coal ships discharged many of their pollutants into the Parramatta River and Kendall Bay during this period causing the sediments of the bed of Kendall Bay to become contaminated with polycyclic aromatic hydrocarbons (PAHs) and total petroleum hydrocarbons (TPHs) including some classified as human carcinogens.

While all three wharfs have now been removed, on 24 May 2004, the Environmental Protection Authority (now OEH) declared the sediments of Kendall Bay and the Parramatta River, which fall within 200m of the land-based boundary of the former AGL Mortlake Gasworks Site, to be a remediation site under section 21 of the *Contaminated Land Management Act 1997* (CLM Act).

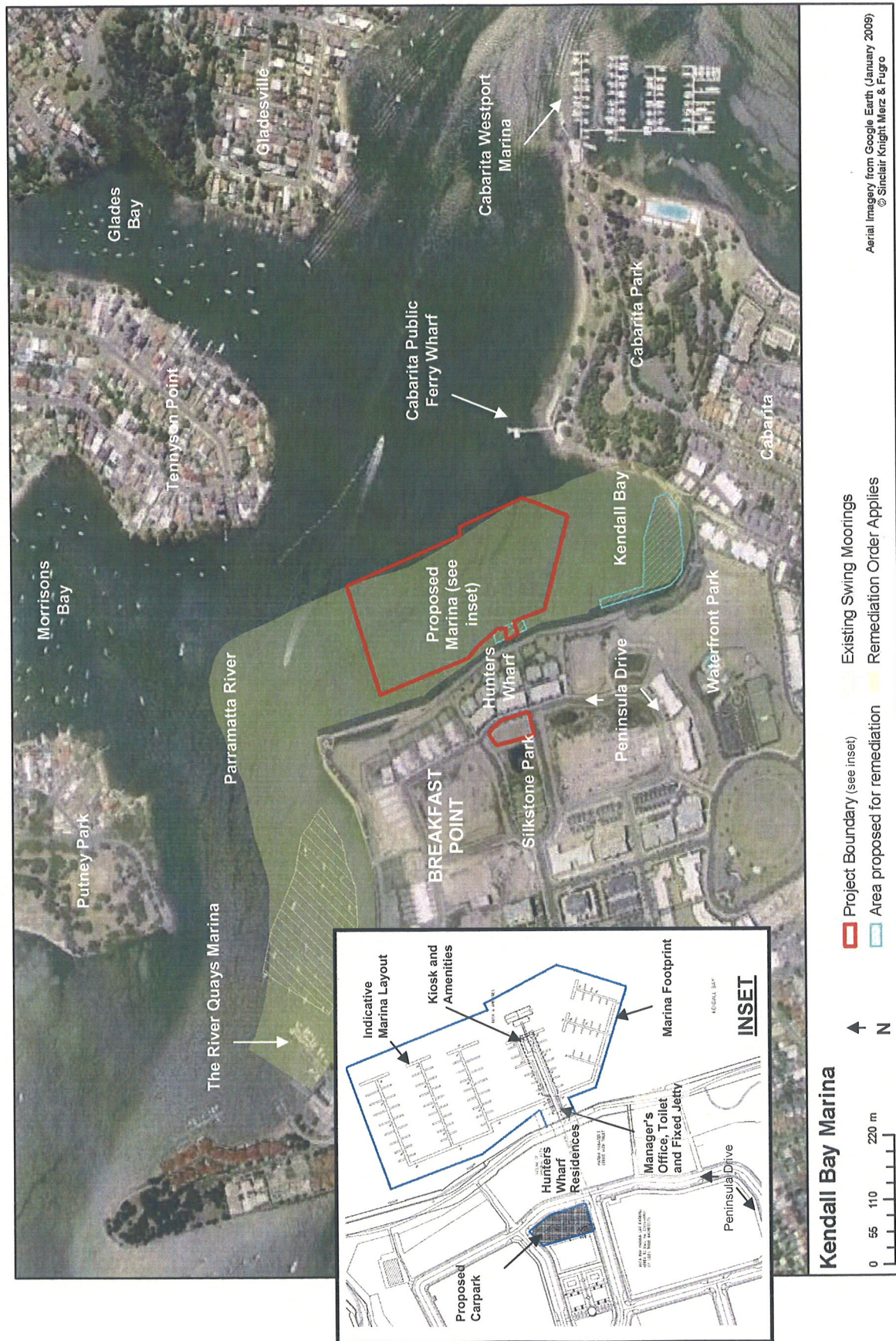
In 2005, AGL (now trading as Jemena Ltd) entered into a Voluntary Remediation Proposal (VRP) with the OEH under the CLM Act.

In June 2007, the Environmental Protection Authority (OEH) also issued a Remediation Order or 'do not disturb' notice under section 23 of the CLM Act to the NSW Maritime Authority in order to ensure that future disturbances of the contaminated sediments within Kendall Bay are minimised and that persons proposing to carry out activities within the bay must prepare and comply with EPA approved plans.

In 2008, Jemena engaged URS Australia Pty Ltd (URS) to quantify the nature and extent of the contamination, to undertake an Environmental Risk Assessment (ERA), a Human Health Risk Assessment (HHRA) and to develop a remediation strategy for the site. Following the ERA and HHRA investigations, two areas for proposed remediation have been identified.

In October 2008, Jemena submitted a Major Project Application and Preliminary Environmental Assessment (PEA) under Part 3A of the EP&A Act to the Department for the remediation of sediments in Kendall Bay. The PEA proposed remediation over a small part of the southern end of Kendall Bay (8340m²) and a 957m² block area adjacent to one of the old coal ship loading wharfs and within the proposed marina footprint (see Figure 1). These areas proposed for remediation were the areas with the highest level of contamination and/or the greatest level of risk to human exposure and interaction.

On 28 December 2008, the Department issued Director-General's Requirements for the Kendall Bay Sediment Remediation Project (MP 08_0020). These DGRs covered "*the remediation of contaminated sediments from Kendall Bay, including the excavation of sediments, importation of clean fill; the transportation and off-site treatment of sediments; and disposal of treated sediments*". This project (while highly relevant) is the subject of a separate project application and as such, is not the focus of this report. The Department is currently awaiting submission of the Environmental Assessment for that which is expected in the third quarter of 2011.



2. STATUTORY CONTEXT

2.1 Major Project

The proposal is classified as a major project under Part 3A of the *Environmental Planning and Assessment Act 1979* (the EP&A Act) because it constitutes development for a marina that would moor, berth or store more than 30 vessels in Sydney Harbour, and therefore triggers the criteria in Schedule 1, Clause 14 (1a) of *State Environmental Planning Policy (Major Development) 2005* (Major Development SEPP).

2.2 Permissibility

The proposed is located in the W1 – Maritime Waters zone of the *Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005* (Sydney Harbour Catchment SREP). Development for the purposes of a commercial marina is permissible with consent in this zone, but only if the consent authority is satisfied that the development:

- a) is not inconsistent with the aims of this plan or the objectives of the zone in which it is proposed to be carried out, and
- b) is not inconsistent with any other environmental planning instrument that applies to the land, and
- c) will not otherwise have any adverse impacts.

2.3 Environmental Planning Instruments

Under Section 75I of the EP&A Act, the Director-General's report is to include a copy of or reference to the provisions of any environmental planning instruments (EPIs) that apply to the proposed project.

The Department has considered the project against the relevant provisions of several environmental planning instruments including:

- *State Environmental Planning Policy (Infrastructure) 2007*;
- *State Environmental Planning Policy No. 55 – Remediation of Land*;
- *State Environmental Planning Policy No. 71 – Coastal Protection*;
- *Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005* (Sydney Harbour Catchment SREP); and
- *Canada Bay Local Environmental Plan 2008*.

The Department's assessment concludes that the project is inconsistent with the aims of the Sydney Harbour Catchment SREP.

A full copy of the relevant EPIs is provided in Appendix F.

2.4 Objects of the Environmental Planning and Assessment Act 1979

The Minister's consideration and determination of the application must be consistent with the relevant provisions of the EP&A Act, including the objects set out in the Act's section 5.

The Department has fully considered the objects of the EP&A Act, including the encouragement of ESD, in its assessment of the application.

In applying the precautionary principle, public decisions should be guided by careful evaluation to avoid, wherever practicable, serious or irreversible damage to the environment and an assessment of the risk-weighted consequences of various options. The Department has fully considered the objects of the EP&A Act, including the encouragement of ESD, in its assessment of the Kendall Bay Marina Project.

Whilst the Project represents an economic use of the site and proposes a form of containment of contaminated sediments, the Department considers that approval of the project would result in an unacceptable risk regarding the effectiveness and longevity of the proposed Sediment Protection System (SPS) and potential disruption of contaminated sediment to public health, particularly regular users of the waters of Kendall Bay. Therefore, the Department does not consider that the Project is consistent with key principles of ESD such as the precautionary principle and inter-generational equity.

2.5 Statement of Compliance

Under Section 75I of the EP&A Act, the Director-General's report is required to include a statement relating to compliance with the environmental assessment requirements with respect to the project.

The Department is satisfied that the environmental assessment requirements have been complied with.

3. CONSULTATION AND PUBLIC SUBMISSIONS

3.1 Exhibition

Under Section 75H(3) of the EP&A Act, the Director-General is required to make the Environmental Assessment (EA) of a project publicly available for at least 30 days. However, given the volume of information contained within the EA, it was made publicly available for a total of 60 days.

After accepting the EA for the project, the Department:

- made it publicly available from **30 September 2010** until **30 November 2010**:
 - on the Department's website, at the Department's Information Centre, City of Canada Bay Council Civic Centre, Ryde City Council Civic Centre and the Nature Conservation Council;
- notified landowners in the vicinity of the site about the exhibition period by letter;
- notified relevant State government authorities, the City of Canada Bay Council and Ryde City Council by letter; and
- advertised the exhibition in the Inner-west Suburbs Courier, the Northern District Times and the Ryde/Gladesville Weekly Times.

This satisfies the requirements in Section 75H(3) of the EP&A Act.

During the assessment process the Department also made a number of documents available for download on the Department's website. These documents included the:

- project application;
- Director-General's requirements for the environmental assessment of the project;
- Environmental Assessment; and
- the Proponent's Response to Submissions.

During the exhibition period, the Department received a total of 343 submissions on the project:

- 11 from public authorities (Office of Environment and Heritage, Sydney Ferries, Sydney Port Corporation, Sydney Water Corporation, Department of Industry & Investment, Transport NSW, NSW Maritime, Department of Primary Industries (formerly NSW Office of Water), the Roads and Traffic Authority, NSW Health and City of Canada Bay Council);
- 23 from special interest and community groups; and
- 309 from the general public.

3.2 Issues Raised in Submissions

Public Authorities

Of the 11 submissions received from public authorities **2 objected** to the proposal (Sydney Ferries and City of Canada Bay Council) and most other submissions received highlighted major issues of concern with the proposal. A summary of the 4 key government agency submissions is provided below.

City of Canada Bay Council (Council) engaged two consultants to independently assess the impact of the proposed marina on their behalf. Council's submissions objected to the proposal on the grounds that:

- the proposed marina and car park is inconsistent with the objectives, principles and provisions contained in the Sydney Harbour Catchment SREP;
- the scale of the proposed marina is inappropriate for Kendall bay;
- there will be detrimental impacts on views enjoyed by nearby residents and people using the foreshore;
- the local street network cannot sustain increased traffic and parking impacts resulting from the proposal; and

- there are a number of unresolved issues and uncertainties associated with the proposed SPS.

Sydney Ferries also objected to the proposal and raised serious concerns regarding:

- the negative impact of the proposed marina on ferries approaching and departing Cabarita ferry wharf including time delays;
- the potential for future compensation claims for damage to vessels or the SPS at the proposed marina as a result of waves produced by Sydney Ferries Rivercats;
- the need for the EA to consider Sydney Ferries most recent timetables;
- the likelihood for public transport movements by ferry to increase in the near future; and
- the fact Sydney Ferries has no intention to use the proposed ferry wharf.

The Office of Environment and Heritage (OEH) did not object to the proposal however, raised serious concerns regarding:

- the contamination of the sediments of the bed of Kendall Bay with petroleum hydrocarbons;
- the longevity of the proposed geo-textile blanket (with limited supporting information in case studies to demonstrate the geo-textile is degradation resistant); and
- the need for financial measures to be implemented to ensure responsibility for the long-term management of the geo-textile blanket.

OEH also requested that the proposed development does impact upon the proposed remediation of Kendall Bay by Jemena.

NSW Maritime did not object to the proposal, however raised serious concerns regarding:

- navigation and safety with the north-eastern corner of the marina envelope extending into a heavily used section of the Parramatta River; and
- the need for a reduction in the number of berths on the north-eastern corner of the proposed marina to assist in minimizing adverse impacts on navigational safety.

A full summary of the submissions received from public authorities is provided in Appendix B of the PAC's report (see Appendix E of this report).

Community and Special Interest Groups

Of the 23 submissions received from community groups and special interest, **20 objected** and **3 supported** the proposal.

General Public

Of the 309 general public submissions received, approximately **80 percent objected** to the proposal.

Submissions from community, special interest groups and the general public who **objected** to the proposal raised a broad array of concerns, which are summarised in Figure 2 below.

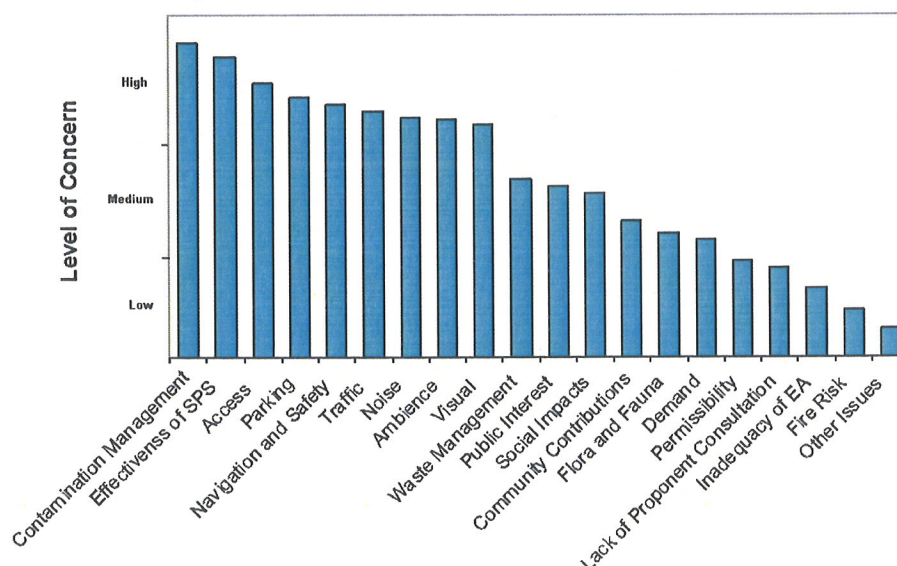


Figure 2: Summary of Issues Raised by Objectors by Level of Concern

Submissions from community, special interest groups and the general public who **supported** the proposal generally stated that it would:

- satisfy the high demand for on-water boat storage facilities in Sydney Harbour;
- improve public access to NSW waterways; and
- stimulate the local economy by providing local employment opportunities.

A full summary of all issues raised in submissions by community, special interest groups and the general public can be found in Appendix B of the PAC's report (see Appendix E of this report).

3.3 Response to Submissions

The Proponent has provided a response to the issues raised in submissions (see Appendix D).

3.4 Community Meeting and Site Visits

The Department also attended a community meeting arranged by the City of Canada Bay Council on 1 November 2010 at Massey Park Golf Club, Concord and visited the site on two separate occasions including one visit with the PAC on 22 December 2011.

4. PLANNING ASSESSMENT COMMISSION REVIEW

Due to the complex and controversial nature of the proposed marina including the potential for disturbance of contaminated sediments in Kendall Bay, the Minister requested that the Planning Assessment Commission (PAC) undertake a comprehensive review of the proposal to enhance the assessment of the merits of the Project by:

- enhancing the rigour and thoroughness of the assessment process;
- facilitating greater public involvement in the assessment process through public hearings; and
- strengthening the technical rigour of the assessment through the involvement of highly experienced and independent experts.

Consequently on 27 September 2010, a Direction to the PAC was signed by the Minister for Planning requesting that the PAC carry out a full review of the Kendall Bay Marina Project, and advise on:

- (a) the suitability of the site for the project;*
- (b) the environmental impacts of the project, and whether these impacts can be suitably managed or offset to ensure an acceptable level of environmental performance; and*
- (c) whether the project is in the public interest;*

The Direction also recommended that the PAC:

- appoint independent experts as casual members to provide expert independent advice on certain technical environmental issues associated with the proposed project; and
- conduct a public hearing and provide its final report on the matter to the Director-General as soon as practicable after the public exhibition period for the project closes.

Public Hearing

On Wednesday 23 February 2011, as a result of the abovementioned Direction, the PAC commenced a public hearing into the proposed Kendall Bay Marina Project. The hearing was held at Concord Community Centre, Concord from 9.30am until 5.00pm and continued from 9.30am until 1.00pm on Thursday 24 February 2011.

The PAC comprised of:

- Dr Neil Shepherd AM (Chair);
- Mr John Court; and
- Dr Graeme Batley.

Speakers at the public hearing included:

- Angelo Tsirekas – Mayor, City of Canada Bay Council;
- Gary Shiels – GSA Planning on behalf of City of Canada Bay Council;
- Adrian Kingswell - Environmental Impact Services on behalf of City of Canada Bay Council;
- Ian West – former Member of the Legislative Council, Australian Labor Party;
- John Sidoti - Member for Drummoyne;
- Pauline Tyrrell - Canada Bay Greens;
- Several representatives of the Breakfast Point Residents Group;

- Tony Robertson - Kendall Bay Inlet Strata Plan;
- Brian Lawrenson - Carolina Apartments; and
- Stephen Handley - Sydney Rowing Club.

All speakers at the public hearing **objected** to the proposed marina.

Persons who did not make a submission on the project during the Department's original exhibition period were also given an additional opportunity to make a written submission to the PAC by Tuesday 15 February 2011.

Findings of the PAC Review

The PAC provided its final report on the findings of its review including the findings of the public hearing and submissions to the Department on 21 April 2011 (see Appendix E).

Key issues and findings of the PAC's report included:

- overarching site constraints;
 - *the sediments in the Bay are heavily contaminated with a range of contaminants (most associated with the operation of the former Mortlake Gasworks). The sediments are subject to a Remediation Order that prohibits activities that would disturb them and there is currently a proposal to remediate two areas of the Bay that are considered to pose a particular risk to human health;*
 - *residential development around the foreshore of the Bay means that there is no direct vehicle access to the proposed Marina. The proposed car park is some 230 m by footpath from the Marina entrance and there is no buffer zone (e.g. commercial premises or public space) between the Marina and residences;*
- impacts of the proposed marina on management of sediment contamination;
 - *emplacement of the cap and associated piling would inevitably cause mobilisation of some fine sediments and associated sediment pore waters containing contaminants;*
 - *on the available evidence a much thicker Sediment Protection System (1.5m rather than 0.3m as proposed) consisting of geotextile covered by clean sand and gravel with rock armour on top would be necessary;*
 - *the life expectancy of the proposed geotextile barrier is untested but likely to be less than one third of the 100 plus years claimed by the Proponent;*
 - *given the current risk assessment and the available remediation technologies, the 'do not disturb' strategy adopted in the Remediation Order is appropriate to manage the Bay sediments other than those in the two specific areas to be remediated;*
- access to the proposed marina;
 - *the parking provisions proposed are inadequate as they are remote from the Marina and they do not include sufficient space for service vehicles and kiosk patrons;*
 - *access for essential services to the Marina (supplies, waste removal, boat servicing) is inadequate;*
 - *adequate access for emergency vehicles is unresolved and it is unclear whether emergency access to the Marina is sufficient to meet the requirements of NSW Fire and Rescue;*
 - *residents living in proximity to the Marina and the car park would inevitably be subjected to a range of anti-social behaviours occurring at all hours (including noise, littering and trespass);*
 - *by developing the site adjoining the foreshore for residential purposes, the Proponent has constrained the access options to the point that they would hinder the safe and efficient operations of a marina in Kendall Bay and would give rise to significant conflict between residents and the users of the Marina facilities;*
- navigation and safety;
 - *the proposal would be in direct conflict with current public recreational use of Kendall Bay and adjacent waterways;*
 - *the proposal would cause a reduction in ferry services based on the size of the current fleet and any such reduction would not be in the public interest;*
- visual impacts;
 - *the proposed Marina would be visible from most sites around Kendall Bay;*
 - *the proposal would have high or severe impacts on views from some vantage points around Kendall Bay;*
 - *the proposal is inconsistent with visual impact related provisions of the Sydney Harbour REP and Sydney Harbour DCP;*
 - *the extent and severity of visual impacts on private residents and the public in the vicinity of the proposed Marina are considered unacceptable;*
- pollution and waste associated with the construction and operation of the proposed marina;
 - *the Proponent has failed to ensure proper disposal of liquid and solid wastes at all times;*
 - *the Proponent has failed to demonstrate management of operational noise to adequately minimise impacts on Breakfast Point residents at all times;*
- demand for marina berths in Kendall Bay;
 - *there is unlikely to be strong demand for berths in Kendall Bay given there are alternative boat storage options proposed for the area, which would more than satisfy the demand as identified by the Proponent; and*

- the current demand is not considered sufficient to warrant alienating a significant public asset for a commercial marina.

Based on the above, the PAC recommended that the project be refused.

5. ASSESSMENT

In assessing the merits of the project, the Department has considered:

- the EA, submissions and response to submissions on the project (see Appendices B to D);
- the relevant environmental planning instruments, guidelines and policies (see Appendix F);
- the objects of the EP&A Act, including the object to encourage ecologically sustainable development; and
- the PAC's report on the project (see Appendix E).

The Department considers the four key issues for discussion are:

- contamination and the proposed Sediment Protection System;
- potential land use conflicts and amenity impacts;
- consistency with the Sydney Harbour Catchment SREP; and
- the public interest.

5.1 Contamination and Proposed Sediment Protection System (SPS)

Issue

Kendall Bay is highly contaminated with a range of chemicals, some classified as human carcinogens.

Consideration

The potential for the suspension of dissolved and particulate contaminants as a direct result of the proposed marina's construction and operation (i.e. from energy generated by the manoeuvring of large boats and boat propeller action) is high.

The Proponent has proposed the use of a geotextile blanket (6-7mm thick) covered in a layer of basalt rock fragments (average 300mm thick) or Sediment Protection System (SPS) to contain contaminated sediments within Kendall Bay and prevent their further suspension from the construction and operation of the proposed marina. Silt screens and curtains would also be used to contain mobilised sediments disturbed during construction activities.

A number of key concerns were raised in public and agency submissions regarding the potential for the proposal to disturb contaminated sediments and the effectiveness and longevity of the proposed SPS. These key concerns have been addressed in the PAC's report (see Appendix E).

The PAC considered the issue of contamination in detail and found that:

- *Emplacement of the cap and associated piling would inevitably cause mobilisation of some fine sediments and associated sediment pore waters containing contaminants. Great care would be required to minimise this and confine particle release behind silt curtains.*
- *The life expectancy of the proposed geotextile barrier is untested but likely to be less than one third of that claimed by the Proponent.*
- *The physical stability and integrity of the geotextile cover is questionable in the Kendall Bay environment.*
- *The ability of the proposed cap to prevent additional disturbance and migration of the contaminants in the bed sediments is highly questionable. On the available evidence a much thicker cap consisting of geotextile covered by clean sand and gravel with rock armour on top would be necessary. The thickness of the sediment layers required for Kendall Bay is unknown and substantial further study and modelling would need to be undertaken to determine this. Based on the available evidence the cap may need to be up to 1.5 m thick rather than 0.3 m thick as proposed. An increase of this magnitude would significantly reduce the area available for berthing large vessels.*
- *Remediation of the agreed near-shore sediments by Jemena should precede any consideration of cap installation because of likely impacts of this dredging on bed geomorphology.*
- *Remediation of the area of the proposed Marina at some future date is a possibility, especially with the development currently underway of new in situ treatment technologies.*
- *The presence of a cap would be a major impediment to the adoption of such remediation activities, especially if an appropriate depth of capping is used.*
- *The cap would destroy the integrity of the existing benthic ecosystem by sealing it off from the overlying water system.*

- Outside the two specific areas currently agreed to be remediated by Jemena, the 'do not disturb' approach adopted by DECCW to contaminated sediments in Kendall Bay is appropriate given the current risk assessment and available remediation technologies.
- Construction and operation of a commercial marina in Kendall Bay is not compatible with this 'do not disturb' strategy.

The Department agrees with these findings and considers that there is an unacceptable level of risk associated with the design and effectiveness of the use of the SPS over the long-term. Of particular concern is the unresolved risk associated with mobilisation of sediment pore waters containing contaminants during the construction of the proposed SPS and associated piling.

The Department acknowledges that the Proponent has provided some evidence in support of the use of the SPS. However, the Department considers that the Proponent has failed to provide proven examples of the use of equivalent geotextiles on contaminants in an environment comparable to Kendall Bay. Therefore, there is little comfort for the community, authorities or potential future regulators that the proposed SPS will be an effective containment system for the contaminants in Kendall Bay.

The Department agrees with the PAC's research that a much thicker cap (up to 1.5m thick rather than 0.3m as proposed) consisting of a geotextile covered by clean sand, gravel and a rock armour is likely to be necessary in order to effectively contain contaminated sediments in Kendall Bay. The Department considers using a thicker cap (that effectively raises the seabed) would significantly reduce the area available for berthing and potentially undermine the viability of the proposal altogether. In addition, the use of a thicker cap would require substantial further investigations to be undertaken by the Proponent and a number of major changes to the current marina design, thereby resulting in a substantially different proposal from the present.

The Department also agrees with the PAC that the life expectancy of the proposed SPS and associated geotextile is likely to be less than one third of the 100 years claimed by the Proponent. Uncertainties about the proposed SPS's effectiveness, appropriateness and longevity (should it fail or deteriorate more rapidly than claimed by the Proponent) are inconsistent with the principles of ESD including the precautionary principle and inter-generational equity.

In addition, the proposed SPS presents a major impediment to Jemena's remediation activities.

Besides the two areas agreed on for remediation by Jemena, OEH has indicated to the PAC that the 'do not disturb' order is currently the appropriate option for the rest of Kendall Bay based on Jemena's human health risk assessment/s and available remediation technologies. This is to ensure that future disturbances of the contaminated sediments within Kendall Bay are minimised.

Conclusion

The Department concludes that the proposed SPS and the method for management and containment of contaminated sediments within Kendall Bay by the Proponent is fundamentally flawed. Further, the assessment flaws were not rectified at Preferred Project or any other stage.

The Department considers that there is an unacceptable level of uncertainty and risk associated with the design and effectiveness of the SPS. It is noted that the PAC suggested that a new in-situ remediation technology may become available to be remediate the marina site at some future date. However, it is evident to the Department that the preferred option for the management of contaminated sediments in Kendall Bay (outside the areas to be remediated by Jemena) is 'do not disturb' at the present time.

5.2 Landuse Conflicts and Amenity Impacts

Issue

Whether or not the proposal would result in landuse conflict and amenity impacts.

Consideration

The proposed marina site has no direct vehicle access. The Proponent has proposed parking provision (58 spaces) on a separate parcel of land, approximately 100m west of the proposed marina site.

As discussed in the background (section 1.2 of this report), the 2002 Master Plan for the site approved by Council indicated that a marina may be contemplated in the future at Kendall Bay.

The 2002 Master Plan also indicated that a 'waterfront activity precinct' would be located on the land immediately adjacent the proposed marina. In addition, provision was made for 100 marina car parking spaces.

However, the Proponent subsequently applied to Council to develop the 'waterfront activity precinct' site into the Hunter's Wharf residential development. This is now an established residential area. The result of this change in landuse and layout has meant that the land-based components/infrastructure necessary to support any future marina proposal at this site will now be separated from the water-based components by dense residential development.

Further, the access arrangements for any marina (as proposed) would involve traversing approximately 230 - 300m of Community Association owned footpath and an established residential area. This is expected to result in a number of adverse impacts including:

- insufficient emergency vehicle access arrangements;
- sleep disturbance for adjacent residents from patrons on boats accessing their vehicles, marina berths and the 24 hour jetty with no realistic means of after hours on-site management;
- logistical problems with disposal of liquid and solid wastes at the marina; and
- social conflict between marina users and the residents of Breakfast Point.

The Department does not find these access arrangements acceptable.

Moreover, the Department considers that the opportunity for a substantial marina proposal was lost when the link between the water-based components of the proposal was broken and the 'water activity precinct' was used for residential development. The transitional buffer between land uses has been lost and the result is an insurmountable conflict between marina users, the adjoining residential area and those frequenting the foreshore of Kendall Bay. The Department does not consider any amount of detailed design or conditioning could address this issue.

The Department concurs with the PAC's conclusion that there is insufficient parking provision at the proposed marina with no consideration of parking needs for kiosk patrons, service vehicles or charter vessels using the public jetty. The result of this will be unacceptable impact on traffic flow and amenity at Breakfast Point with the likelihood of overflow parking on local streets with limited alternate parking availability. The Department considers that due to the development of the former 'water activity precinct', options to increase marina parking provision also appear to be highly limited.

The Department also agrees with the PAC's conclusion that the day to day logistics of operating a commercial marina that is 230m from the carpark and services, without significant amenity impacts and landuse conflicts with residents, is considered operationally unworkable.

A number of other potential amenity impacts of the proposal have been raised in submissions and considered by the PAC. Of particular concern to the Department is the potential visual impact of the proposal, particularly on residents immediately adjoining the proposed marina site and users of the foreshore of Kendall Bay.

The Department has reviewed the PAC's findings and considers that the bulk and scale of the proposed marina means it would have medium to high impacts on views from most vantage points around Kendall Bay. In addition, the Department considers that unlike most marinas in Sydney, the separation of land and water-based components of the proposed marina also means that these impacts would be exacerbated for those residents immediately adjoining the proposed marina site. Therefore, the visual impacts on both private and public receptors are considered unacceptable.

As concluded in PAC's report, the proposal is also inconsistent with visual impact related provisions of the *Sydney Harbour Foreshores and Waterway Area Development Control Plan 2005* and the Sydney Harbour Catchment SREP in that the proposal would substantially alter the character of Kendall Bay and would have adverse impacts on views and vistas to and from public places. A further discussion on the proposals inconsistency with the general aims of the Sydney Harbour Catchment SREP is provided in section 5.3 below.

Conclusion

The Department considers the proposal will result in unacceptable landuse conflict and amenity impacts, particularly to residents adjoining the proposed marina site and users of the foreshore of Kendall Bay.

5.3 Inconsistency with the Sydney Harbour Catchment SREP

Issue

The proposal is inconsistent with the general aims of *Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005* (the Sydney Harbour Catchment SREP).

Consideration

The Sydney Harbour Catchment SREP is the principal planning instrument guiding development on and around Sydney Harbour.

The Department has considered the following aims of the Sydney Harbour Catchment SREP in its assessment of the proposal consistent with the PAC:

1. (d) *to ensure a prosperous working harbour and an effective transport corridor;*
2. (a) *Sydney Harbour is to be recognised as a public resource, owned by the public, to be protected for the public good;*
(b) *the public good has precedence over the private good whenever and whatever change is proposed for Sydney Harbour or its foreshores; and*
(c) *protection of the natural assets of Sydney Harbour has precedence over all other interests.*

In relation to aim 1(d) above, the Department considers that the proposed marina does not ensure an effective transport corridor on Sydney Harbour. This is because the proposed marina will encroach into the path of public ferries arriving and departing from the adjacent Cabarita Public Ferry Wharf resulting in the need for an altered public ferry route and reduced speed past the proposed marina.

In their submission, Sydney Ferries advised that this is expected to add approximately 1 minute to each service to Cabarita Wharf. This would add up to 53 minutes of additional service time to each weekday, resulting in the need for a significant change to ferry timetables and the loss of 1-2 ferry services per day on the Parramatta River.

Sydney Ferries object to the proposal on these grounds (among others) and has indicated that the number and frequency of ferry services on the Parramatta River is likely to increase in the future in accordance with the State Plan.

Therefore, the Department considers that the proposed marina would inhibit an effective transport corridor for Sydney Harbour.

The Department considers that the proposed marina is also inconsistent with aims 2(a) to (c) of the Sydney Harbour Catchment SREP which relate heavily to the public interest.

The protection of Sydney Harbour as a public asset is vested with NSW Maritime. NSW Maritime raised a number of major concerns with the proposal including issues with the bulk, size and scale of the proposed marina and resulting adverse impacts on navigation and safety. NSW Maritime considered that a reduction in the number of berths and reconfiguration of the north-east corner of the proposed marina envelope would assist in minimising these impacts. However, the Proponent did not amend the marina design at the Preferred Project stage.

The Department agrees with the concerns of NSW Maritime and the findings of the PAC's report that the proposal would create additional congestion in the Parramatta River's main channel. The Department considers that given the proposed marina takes up over half of Kendall Bay the proposal would alienate a large body of 'safe' water currently used by a range of competing users from the public and schools for passive boating recreation. Further, the Department is not convinced that the Proponent has demonstrated strong enough demand for the facility to justify the alienation of a significant public resource for private use.

The Department does not consider any of the above to be consistent with the above aims of the Sydney Harbour Catchment SREP or in the public interest.

A more detailed discussion on the public interest is found in section 6.4 below.

Conclusion

The Department concludes that the proposal is contrary to the aims of the Sydney Harbour Catchment SREP.

5.4 The Public Interest

Issue

Whether or not the proposal is in the public interest.

Consideration

Under the EP&A Act, the public interest is a mandatory consideration for the Director General in his report to the Minister. The Department has considered the issue of the public interest in relation to the proposal.

In doing so, the Department has read and assessed the 332 submissions from the community in relation to the project, the vast majority of which objected to the proposal. As noted in the PAC's report, public submissions objecting to the proposal came from a wide cross-section of the community (e.g. Council, Members of Parliament, Residents Associations, Schools, Clubs and individuals), covered the full spectrum of issues and were generally well researched.

Submissions from objectors were predominantly in personal letter format with some members of the public having considerable expertise in engineering, law and science related disciplines while others (such as the residences of Hunter's Wharf) engaged professional consultants in planning to prepare comprehensive submissions on their behalf.

Departmental officers also conducted multiple inspections of the project site and the areas surrounding the site, including various vantage points within Kendall Bay. Officers have also attended a community meeting organised by Council in relation to the proposal and attended the PAC's public hearing, in an effort to understand the issues raised by the public.

Key public authorities such as Council and Sydney Ferries objected to the proposal and many other agencies raised issues of concern. Council engaged consultants with considerable planning and environmental science expertise to independently assess the proposal. Council's submission generally concluded:

- there are a number of unresolved issues associated with the proposed SPS and remediation method;
- the proposed marina and car park is inconsistent with the objectives, principles and provisions contained in the Sydney Harbour Catchment SREP.
- the proposal will have an adverse impact on the amenity of Breakfast Point residents;
- the proposed means of access to the marina is legally and functionally unclear; and
- the proposed marina is not in the public interest.

As discussed in section 6.3 of this report, Sydney Ferries objected to the proposal on a number of grounds and concluded that *"the development would have a detrimental effect on Sydney Ferries public transport obligations to the public"*.

Generally, the 'public interest' relates to the overall welfare of the community as a result of a proposal. The Department considers there are three levels of public interest to assess in relation to this project. Firstly, the interest of prospective marina users and users of the proposed jetty and kiosk; secondly, the interest of residences adjoining the proposed site; and thirdly, the broader public interest of the community of Sydney and the users of Sydney Harbour.

The Proponent claims that the proposed marina would have a number of key public benefits including enhanced access to the waterway, enhanced community experience of the Breakfast Point foreshore through the provision of the jetty and kiosk, reduced disturbance of contaminants in Kendall Bay,

resulting in a public health benefit and satisfying the high demand for marina berths west of the Sydney Harbour Bridge.

However, the Department considers that:

- the 24 hour public jetty and kiosk would offer little public benefit to a limited number of people;
- the proposed access and layout of the marina would inevitably lead to a range of unacceptable landuse conflict and amenity impacts for the residents of Breakfast Point and users of the foreshore of Kendall Bay (see discussion in section 6.2 above);
- the proposed method for management and containment of contaminated sediments within Kendall Bay is fundamentally flawed (see discussion in section 6.1 above); and
- as demonstrated by the PAC's investigations, the current demand for marina berths west of the Harbour bridge did not support the Proponent's position and *"is not considered sufficient to alienate a significant public asset for a commercial marina"*.

In contrast, the Department is of the opinion that the proposal would in fact reduce public access to the waterway by causing a reduction in public ferry services. The Department does not consider this to be in the public interest.

At a broader level, the Department notes that proposed marina would isolate a large part of Kendall Bay (approximately 5.6 hectares or 56% of the bay's total area) for the purposes of a commercial marina which would only be used by a limited number of persons and mark the loss of one of the last remaining undeveloped bays on the Parramatta River.

The Department therefore considers that the proposed marina would put private interests ahead of the public good. The Department concurs with the PAC that it is clear there is a *"very strong view that the public interest would not be served by allowing development of a commercial marina in Kendall Bay"*.

Conclusion

On the balance, the Department concludes the proposal is contrary to the public interest.

5.5 Other Issues

The Department acknowledges that there were a number of other issues associated with the proposal highlighted in the PAC's report including:

- pollution and waste associated with the construction and operation of a commercial marina;
- navigation and safety;
- demand for marina berths in Kendall Bay
- hazards and risks;
- development standards and practices at Breakfast Point; and
- public consultation and information about the proposal.

However, the Department is of the opinion that the abovementioned issues alone are sufficient to warrant refusal.

6. CONCLUSION

The Department has assessed the merits of the project in accordance with the requirements in the EP&A Act. This assessment found that:

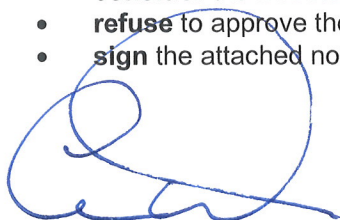
- the proposed Sediment Protection System and the method for management and containment of contaminated sediments within Kendall Bay by the Proponent is fundamentally flawed and presents an unacceptable level of uncertainty and risk;
- the proposal will result in unacceptable landuse conflict and amenity impacts, particularly to residents adjoining the proposed marina site and users of the foreshore of Kendall Bay;
- the proposal is inconsistent with the aims of the Sydney Harbour Catchment SREP; and
- the proposal is not in the public interest.

Consequently, the Department recommends that the project should be refused.

7. RECOMMENDATION

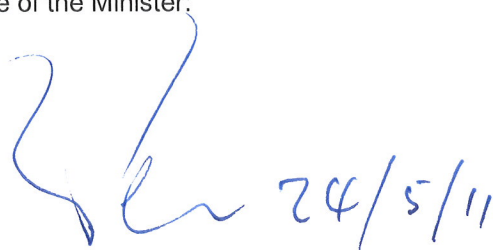
It is recommended that the Director-General, as delegate of the Minister:

- **consider** the Director-General's report;
- **refuse** to approve the project application; and
- **sign** the attached notice of refusal (tagged B)



Chris Wilson
Executive Director
Major Projects Assessment

24.5.11



Richard Pearson
Deputy Director-General
Development Assessment and Systems
Performance

APPENDIX A – NOTICE OF REFUSAL

APPENDIX B – ENVIRONMENTAL ASSESSMENT

APPENDIX C – SUBMISSIONS

APPENDIX D – RESPONSE TO SUBMISSIONS

APPENDIX E – PLANNING ASSESSMENT COMMISSION REPORT

APPENDIX F – ENVIRONMENTAL PLANNING INSTRUMENTS
