Strategic Review

Gladesville Bridge Marina Expansion

September 2019

NineSquared

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Abbreviations and Acronyms

GBM	Gladesville Bridge Marina
Harbour DCP	Sydney Harbour foreshores and waterways area Development Control Plan 2005
Harbour REP	Sydney Harbour Catchment Regional Environmental Plan 2005
Canada Bay LEP	Canada Bay Local Environment Plan
Canada Bay DCP	Canada Bay Development Control Plan
MIP	NSW Maritime Infrastructure Plan
CM SEPP	Coastal Management State Environmental Planning Policy
POEO	Protection for the Environment Operations Act 1997
SHBSS	Sydney Harbour Boat Storage Strategy 2013
CC	Construction Certification
HAMI	Health of the Australian Marina Industry Survey

1. Executive Summary

Sydney Harbour is one of the finest natural harbours in the world, with a foreshore perimeter of 310 km and a variety of land-water infrastructure assets such as boat ramps, pontoons, jetties, wharves and marinas. The recreational boating sector across NSW has been growing steadily since 2003 at a rate of 2.9% per year. Vessel growth in Sydney Harbour, however, is below the State average and was reported in 2010 as the lowest of all major waterways with only 8% of the state's recreational vessels located in and around Sydney Harbour. Since 2003, there has been negligible growth in both commercial marina berth and private mooring capacity in Sydney Harbour – particularly in the waters west of Sydney Harbour Bridge. Considering the lower than State-average vessel registration statistics for the Sydney Harbour sector, there is very likely to be a strong latent demand for marina berths. The ability to facilitate future growth in the recreational boating sector on Sydney Harbour is highly reliant on the provision of adequate land–water interface amenities, and in particular, boat storage facilities.

Gladesville Bridge Marina has been in operation for almost 100 years, providing services to the growing recreational and commercial boating sectors. To meet the current and forecast storage demand, whilst facilitating safe and sustainable access for members and the public, Gladesville Bridge Marina proposes changes to its existing facilities and storage infrastructure. The proposed amendments include increasing the carrying capacity of the marina through extending the existing marina boundary, making more efficient use of space and shifting focus of the site away from boat repair/maintenance operations and towards facilitating access to Sydney Harbour. Investment is also proposed to ensure the site continues to be environmentally sustainable.

This proposal and Environmental Impact Statement has been prepared in line with reference requirements set out in a number of statutory instruments and strategic land use plans including the EP&A Act (Part 4), Water Management Act, POEO Act, SEPP Coastal Management Act, Canada Bay and Sydney Harbour respective LEPs and REPs as well as other key strategic documents published over the last 9 years. The proposed development is classed as a Regionally Significant Development under Section 7 of the State Environmental Planning Policy (State and Regional Development) 2011 which dictates that the development will be assessed by council and then determined by the relevant Planning Panel. Under Schedule 3, Part 1 (23) of the Environmental Planning and Assessment Regulation 2000, Gladesville Bridge Marina and its proposed extensions are also classed as a designated development and as such require an environmental impact statement (EIS) which must be prepared in accordance with the Planning Secretary's requirements.

Where approvals/licenses are not required but documents reference considerations, these have been outlined and integrated into the strategic assessment. Whilst identifying these requirements, this review clearly demonstrates the complexity of the development approval process for an individual small to medium size marina where planning instruments overlap and are fragmented.

This strategic review indicates that the proposal strongly aligns with the strategic vision of the NSW state government in improving boat storage on Sydney Harbour and facilitating efficient and safe public access. Though State government proposed government/industry solutions have not yet emerged, this proposal makes a small but significant improvement to the problems identified by government. Deliberate consideration has also been given by the proponent to stakeholder engagement, the mitigation of environmental impacts and developing a marina and associated facilities that will service the needs of the boating community now and into the future.

2. Overview

2.1 Project scope

This Strategic Review report has been prepared as part of an Environmental Impact Statement (EIS) to accompany a Development Application (DA), lodged with Canada Bay Council under Part 4 of the Environmental Planning and Assessment Act 1979 (EP&A Act).

The strategic review considers NSW Government regulatory, strategic and policy frameworks relevant to the proposed expansion of Gladesville Bridge Marina, approvals required, and the alignment with the Sydney Harbour maritime community vision.

Specifically, the review addresses the following SEARs **Strategic Context**[1] requirements:

- A detailed justification for the proposal and suitability of the site for the development (Section 1 and 3)
- A demonstration that the proposal is consistent with all relevant planning strategies, environmental planning instruments, development control plans, or justification for inconsistencies (Section 2)
- A description of how the proposed expansion integrates with existing on-site operations (Section 5)
- A list of any approvals that must be obtained under any other Act or law before the development may lawfully be carried out (section 6 and Attachment 1)
- A description of any additional licence(s) or approval(s) required to carry out the proposed development

This review describes the requirements for assessment to ensure that the project addresses legislative and planning policy requirements and potential impacts to the environment and community.

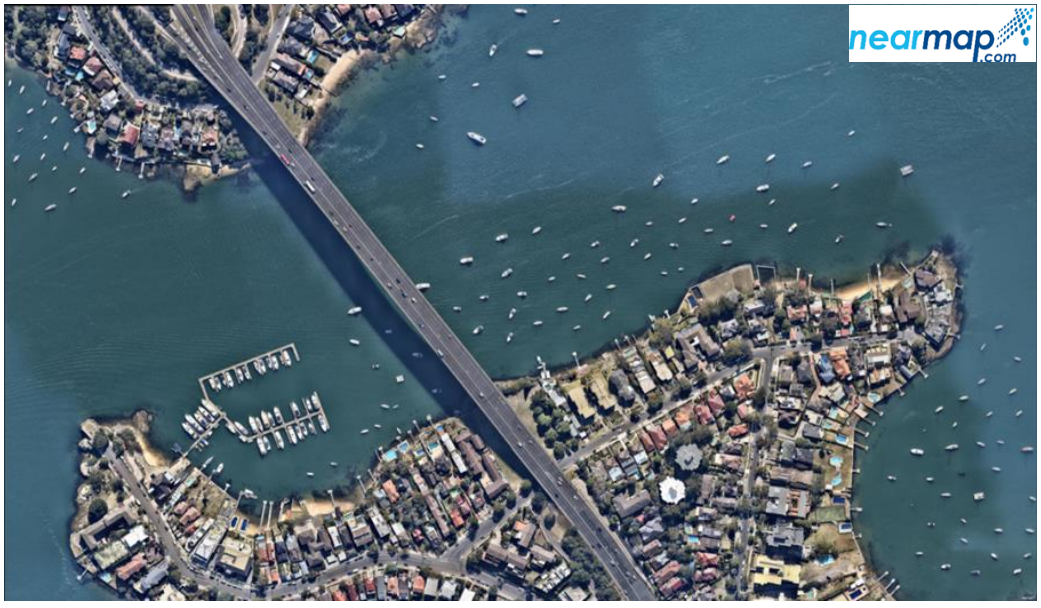


Figure 1 Aerial photograph of the site. Source GHD/NearMaps

[1] Critical State Significant Infrastructure Standard Secretary's Environmental Assessment Requirements (SEARs). NSW Department of Planning and Environment

2.2 Gladesville Bridge Marina

The Gladesville Bridge Marina includes a water-based structure and a land-based building, which is located at 380 Victoria Place, Drummoyne within the Canada Bay Local Government Area (LGA). The site is located on the eastern foreshore of Parramatta River, to the west of Gladesville Bridge.

The site is approximately 19,740m2 in area, comprising an approximate 1,740m2 land-based component and an approximate 18,000m2 of lease area, which accommodates the water-based component. The land-based component is held as freehold, allowing Gladesville Bridge Marina to directly negotiate any alterations with the adjoining wet land lease under government policy.

Gladesville Bridge Marina, has operated as a boatshed, boat repair and boat storage facility for almost 100 years, and for over 50 years as a marina, with associated boat building, repair and other services. Over this time, the marina has undergone a variety of upgrades to improve access for its members and the public, and to meet the growing demand for safe recreational boating access to Sydney Harbour. The marina is located at the centre of Sydney Harbour and is accessible from Sydney's central business district within 20 minutes by road or water. The marina currently has 50 large marina berths, 44 swing moorings and a slipway service, operating 7 days a week.

The proposed improvements are aimed at creating a contemporary and sustainable marina to meet the growing needs of Sydney's boating community. The improvements encompass an increase in boat storage from 99 to 130 boats, and continue provision of 15 commercial moorings whilst repurposing some historical industrial features of the site to better cater for recreational boaters. Key upgrade features include:

- Realigning the structure to reflect earlier sight lines of the marina, maximise view corridors and ensure safer accessibility for members and the public.
- Increasing the total capacity and berth spaces at the marina to meet demand for different boat sizes.
- Removing the slipway and cradles, reducing industrial noise.
- Improving overall amenity

Gladesville Bridge Marina undertook non statutory community consultation between October and December 2018 to seek preliminary feedback on the design and have provided up to date information to the community on an ongoing basis via their website http://gbmarina.com.au/facilities-improvement/

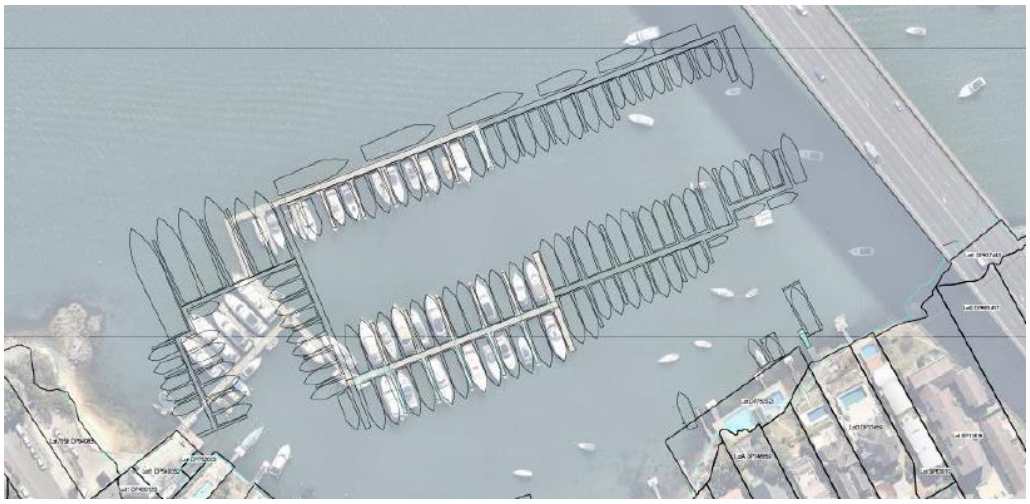


Figure 2 overlay of marine extension over existing marina

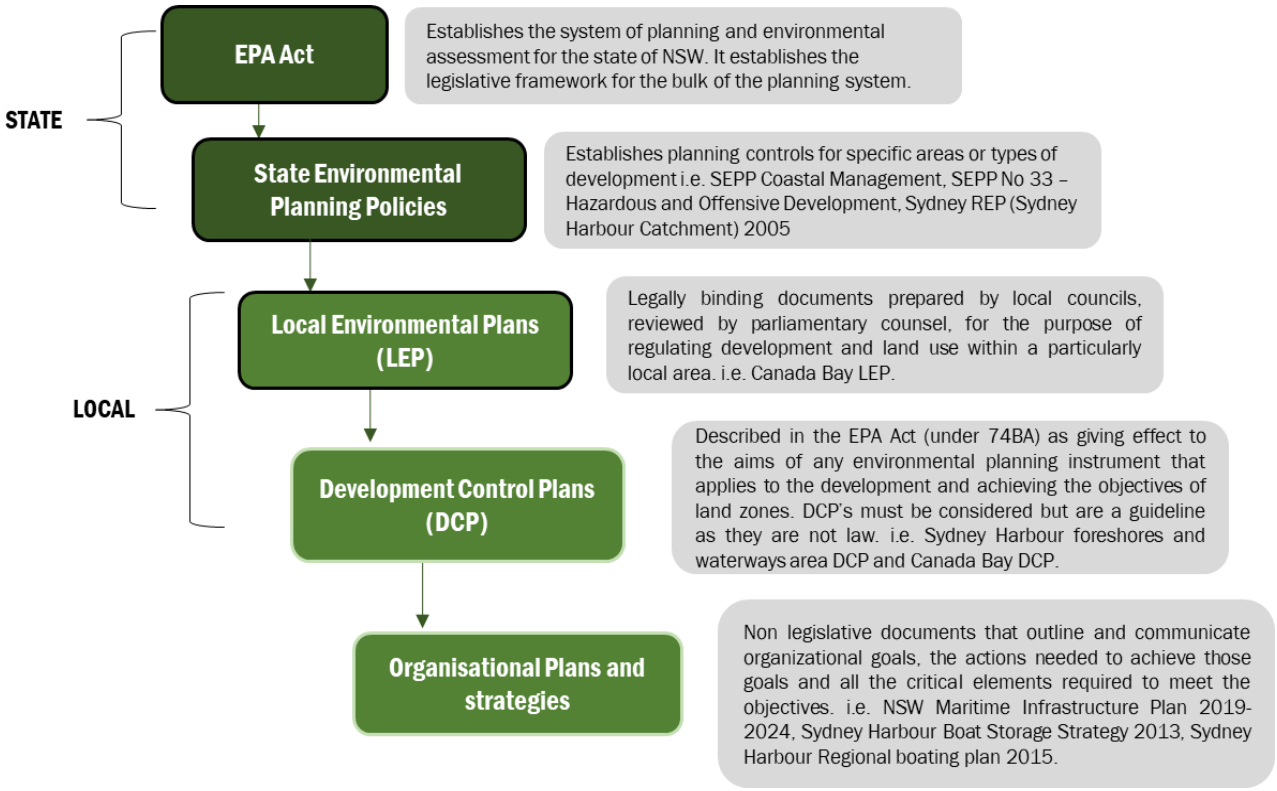
3. NSW regulatory framework

Marinas play an important role in facilitating safe access to and use of NSW waterways including Sydney Harbour. They provide social benefits through their direct services to the public (such as fuel, waste pump-out facilities, chandlery, boat repair and maintenance) and community events (such as 'try sailing' days), and waterway accessibility. Organisations operating Marinas contribute to the economy through purchasing products and services, employing staff, renting spaces to business tenants, engaging contractors and paying lease payments and taxes. NSW marina operators invest in capital expenditure to enhance the quality, diversity and accessibility of maritime facilities and services, which directly contribute to the economy and provide additional boat storage capacity (such as berths and pens, moorings, dry stack or hard stand)[2].

Under Schedule 3, Part 1 (23) of the Environmental Planning and Assessment Regulation 2000, Gladesville Bridge Marina and its proposed extensions are classed as a designated development and as such require an environmental impact statement (EIS) which must be prepared in accordance with the Planning Secretary's requirements[3] (Attachment 1).

As part of the EIS, Environmental planning instruments must be addressed, encompassing the statutory plans made under Part 3 of the EP&A Act that guide development and land use. These plans include State Environmental Planning Policies (SEPPs) and Local Environmental Plans (LEPs). Development Control Plans (DCPs) are designed to provide detailed planning and design guidelines to support the planning controls outlined in the respective LEP (Figure 3) and are administered by the respective local government authority. A full description of the environmental planning instruments relevant to this project can be found in Attachment 1.

StaFigure 3 Outline of the NSW planning approval pathway relevant to the Gladesville Bridge Marina facility improvement project (Border colours correspond with attachment 1).



[2] NSW Marine Estate Management Strategy 2018-2019, NSW Marine Estate Management Authority.
[3] As outlined to Gladesville Bridge Marina in November 2018, see correspondence between NSW Planning and Environment and Gladesville Bridge Marina.

As the marina lies within the Canada Bay LGA, the Canada Bay LEP (and DCP) will be addressed in conjunction with the Sydney Harbour REP and DCP due to the marina operating over adjoining lands. Whilst the Canada Bay LEP applies to the landside municipality area only, the Sydney Harbour REP applies to both foreshores and waterways areas, adding complexity to the regulatory planning process for this particular development.

The Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005 (Harbour REP) applies to the hydrological catchment of the harbour. It defines and contains provisions for the 'Foreshores and Waterways Area" and "Wetland Protection Areas" in which the Gladesville Bridge Marina falls. These principles consider issues relating to visual amenity, environmental impacts, maintaining a balance between public access and a working Harbour. These planning principles are taken into consideration in Environmental planning instruments and development controls plans under the Environmental Planning and Assessment Act 1979 and should be considered when undertaking environmental impact studies, master plans and development applications. This is required to ensure that all strategic land use decisions with the potential to impact on the harbour have regard to such impacts.

The proposed Gladesville Bridge Marina development is categorised within the Harbour REP as a "as Land/Water interface development" which is identified as a "regionally significant development" under Section 7 of the State Environmental Planning Policy (State and Regional Development) 2011 which means that the development needs to be notified and assessed by council and then determined by the relevant Planning Panel. The Sydney Harbour Foreshores Area Development Control Plan (Harbour DCP) has also been prepared to support the Harbour REP. The Harbour DCP provides detailed design guidelines for development and criteria for natural resource protection for the area identified as Foreshores and Waterways. Both the REP and DCP should be considered together in evaluating potential development impacts and planning requirements.

3.1 Addressing LEP and DCP considerations

3.1.1 The Harbour REP

The Harbour REP includes a range of matters for consideration by consent authorities assessing development within the Foreshores and Waterways Area of the Plan. These are aimed at ensuring better and consistent development decisions and include such issues as ecological and scenic quality, built form and design, maintenance of views, public access and recreation and working harbour uses. The REP includes provisions relating to heritage conservation and wetlands protection and provides planning controls for strategic foreshore sites. Key considerations identified for the Gladesville Bridge Marina include Wetland Protection and zoning as W1 Maritime Waters (Figure 4). The location is not identified as a strategic foreshore or heritage area and is therefore not required to address the respective planning principles under these areas.

Wetland Protection Areas

The Harbour REP identifies 'wetlands protection areas' comprising wetland habitats (which include mangroves, seagrasses, saltmarshes, sedgelands, wet meadows and mudflats) and a 40-metre buffer zone to address movement, growth and seasonal variation. The Harbour REP requires consent for certain types of development on land within a wetlands protection area that may have a detrimental impact on a wetland. The consent authority must be satisfied that that carrying out the development preserves and protects the Harbour's wetland habitats, which aligns with SEPP No. 14 (Coastal Wetlands) which lists restrictions on development on certain land. The contamination and biodiversity sections of the EIA are to address any potential impact.

Zone W1 Maritime Waters

Maritime Waters covers the main navigation channels, public transport, port and maritime industry activities of the Harbour and permits a breadth of waterway activities and facilities. The extension of the Gladesville Bridge Marina is aimed at improving ease of access and navigation in and out of the marina, changing the navigational corridor so that larger boats are less prominent in the marina and freeing up space currently used by existing swing moorings. A 15-metre clearance from the existing rowing course will be maintained as a result of consultation with local rowing clubs.

Boat storage facilities

The Harbour REP aims to retain a viable working harbour which supports commercial marinas around the harbour and retains and enhances public access to and along the foreshores and waterways through limiting the 'privatisation' of the foreshores and waterways. The intent is to identify and support those marinas that support public recreational use of the foreshore and waterway, as well as working harbour functions (e.g., commercial marinas that provide facilities and services available to the boating public). The distribution of boat storage facilities around the Harbour is controlled by the zoning provisions to ensure they are permissible in appropriate locations. Commercial marinas are permissible with consent in four zones (W1, W4, W5 and W6). The Gladesville Bridge Marina facilitates public access to the foreshore and waterways of Sydney Harbour whilst offering boat storage capability. As a commercial marina in the W1 zone, the REP supports the positioning and proposed growth of the marina from a strategic and public amenity position.

Sydney REP Wetland Protection Area (green)

Sydney REP zoning map (light blue - W1 Maritime Waters)

Figure 4: Sydney REP zoning for GBM for Wetland protection areas and zones W1 and W6 *(Source: The Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005)*

3.1.2 Sydney Harbour DCP Guidelines

The Sydney Harbour Foreshores and Waterways Area Development Control Plan (Harbour DCP) sets guidelines for commercial marina developments in permissible areas in the Sydney Harbour Region with the ultimate goal of supporting access and recreational use of the harbour. The guidelines outline a set of performance criteria for location; design and layout; facilities and services; visual impact; environmental management; and health and safety. The list of performance criteria and proposed development comments can be found in Attachment 2.

The Harbour DCP also sets out performance criteria to protect and enhance the Harbour landscapes through categorising areas of the Harbour into landscape character types and allocating specific criteria regarding visual impact for consideration by the consent authority[4]. Gladesville Bridge Marina aligns with character type 16 which applies to the dense residential areas of the Parramatta River including Fern and Drummoyne Bays. These areas have a high degree of built form with waterside commercial, residential, and industrial development distributed along the foreshore. The mix of uses provides a distinctive urban character, the maintenance of which is a key performance criteria. The intent for these areas is to encourage appropriate waterfront development while protecting the character and amenity of developed areas, foreshores and the shoreline. When considering the proposal, the consent authority will assess the visual impact against the nature of the proposal (height, width, scale etc), the landscape setting, the degree of change, and the ability of the proposal to integrate with the landscape character. The consent authority will also determine whether the proposal satisfies the following requirements:

- remaining natural elements along the foreshore are preserved;

[4] Sydney Harbour Foreshores and Waters Area Development Control Plan 2005

- public wharves and jetties are retained to enable continued maritime activities;
- visual continuity of elements such as beaches is maintained and generally not broken by development;
- design and mitigation measures are provided between potentially conflicting land uses to minimise noise and amenity impacts; and
- landscaped areas should be provided and incorporated with open space linkages where possible to minimise the contrast between built elements.

The Gladesville Bridge Marina expansion project will continue its operation as an historic facility and enhance existing maritime activities by improving access and improving the design layout of its jetties and pontoon structures. The landside development will involve more efficient use of space and more facilities for the community through the removal of the slipway. Gladesville Bridge Marina has undertaken non-statutory community engagement to discuss any concerns around noise and amenity impacts and are working closely with the community to ensure it meets its obligations under the Harbour DCP.

3.1.3 Canada Bay LEP

The Canada Bay LEP makes local environmental planning provisions for land in Canada Bay in accordance with the relevant standard environmental planning instrument under section 33A of the Act. The plan identifies the land in which GBM is on as R3 Medium Density Residential which aims to enable other land uses (that are not specified) that provide facilities or services to meet the day to day needs of residents. R3 prohibits the development of marinas and mooring pens however the LEP sets out a provision for 380 Victoria Place, Drummoyne for the development of marinas with development consent under Schedule 1, additional permitted uses, Section 10.

The Canada Bay LEP also identifies biodiversity areas for protection through terrestrial biodiversity maps (Figure 5). Both the Canada Bay LEP and the Harbour REP identify the GBM sits as Wetland Protection Area and will be considered by the consent authority to ensure there are no potential adverse impacts and inhibition of natural wetland function.

Figure 5: Canada Bay LEP zoning for biodiversity and land use (source: Canada Bay Local Environmental Plan 2013)

E5 Environmental zone showing Wetland Protection Area (etched)

Terrestrial biodiversity map (green shading)

Land zoning map (dark red indicating medium density residential).

3.1.4 Canada Bay DCP Guidelines

The purpose of this Development Control Plan (DCP) is to supplement the Canada Bay Local Environmental Plan (LEP) 2013 and provide more detailed provisions to guide development. The Canada Bay DCP sets out guidelines and requirements that relate to the proposed building and land use alterations such as storm water, waste, noise, and traffic. Among these are parking guidelines for marinas including 0.6 spaces per wet berth; 0.2 space per dry storage berth, 0.2 spaces per swing mooring and 0.5 spaces per employee. These guidelines have been adapted from the

Australian Standard guidelines for the design of marinas (AS 3962—2001)[5] which outlines acceptable parking requirements for parking adjacent to a marina. It is important to note that the standard is a guideline and should not be used as a design specification. The standard is also over 18 years old and is overdue for review. There is a strong view that the existing guidelines constrain growth and should be reviewed to reflect the increased availability of alternate parking, evolving levels of car ownership, public transport services and new transport solutions including ride share. It is understood that a review of the guideline is now underway and is likely to enable a more flexible for commercial marinas to better respond to increased demand for boat storage[6].

3.2 Landowner consent

In the same way as a local council is the consent authority for most land-based development, Roads and Maritime Services (RMS) is the seabed owner and subsequent consent authority for most water-based development within Sydney Harbour including jetties, wharves, boat lifts, slipways, pontoons, mooring pens and the like, and administer commercial marina leases. However, RMS policy states that it delegates its role as consent authority to the adjoining Council or regional panel (as the land-water interface consent authority[7]) for commercial marina development applications. Its policy further states that RMS is only assessing valid tenure, and any impacts to navigation and waterway usage.

RMS is notified of the intended development through the Permission to Lodge (PTL) process. To obtain landowners consent, a proponent must first obtain PTL which was obtained by GBM in February 2019. In granting the PTL, RMS is not endorsing the development, alternatively, they are providing consent to move to the next step of the process which is lodging the development application and relevant EIS documents. Once the consent authority has endorsed the development, the EIS and construction certificates will need to be supplied to RMS.

[5] AS 3962-2001 Guidelines for design of marinas SAI Global
[6] Sydney Harbour Boat Storage Strategy, Transport for NSQ
[7] Sydney Harbour Foreshores and Waters Area Development Control Plan 2005

4. Proposal Justification

4.1 Context

Recreational boating generates significant social, cultural, and economic benefits to the NSW community. An estimated two million people enjoy boating in the NSW marine estate each year[8]. The benefits from recreational boating are reliant on adequate land–water interface amenities, either through land-based infrastructure (such as boat launching ramps, pontoons, jetties, wharves, boat storage facilities, pump out facilities), or water-based infrastructure (such as navigation aids, moorings and marinas). Similarly, commercial operators, including those that provide tourism, require safe and ready access to facilities and services such as fuel, water, power, sewage pump-outs and lifts. Where there are gaps in the provision of these facilities and services in Sydney Harbour, waterway users need to travel further to service their vessels and enjoy the 'blue park' that is Sydney Harbour[9].

Gladesville Bridge Marina has been in operation for nearly a century, providing access to vessel storage, repair and facilities on Sydney Harbour. In recent years Sydney has witnessed growing demand for boat storage which has continued to grow steadily across Sydney Harbour. GBM has subsequently proposed infrastructure improvements to facilitate the storage of more vessels and a wider distribution of berth sizes to accommodate the need for larger berths, whilst also improving sustainability, access and amenity for members and the general public. GBM has consulted with the surrounding community through community information and feedback sessions to ensure community needs and wants are fully understood and incorporated in the development planning process. The initial non-statutory engagement phase between October and December 2018 involved feedback on the proposed development being received from 72 stakeholders. GBM has maintained up to date information on the development application process through their website, in the interests of transparency and ensuring adherence to development and DDA compliance.

4.2 Demand analysis

Forecasting demand for boat storage in Sydney Harbour is inherently challenging. Whilst registration data is available to the regulator and assessible to postcode level, there is no uniform method for boat storage across vessel owners; i.e. not all vessels are stored in the closest waterway, and likewise not all vessels stored in the waterway are owned by people who live in that geographical area. Additionally, there is no direct correlation between vessel size and water vs dry storage requirements (i.e. vessel owners may have no option to dry store the vessel regardless of size). Estimating demand for specific points within Sydney Harbour can be challenging because vessel owners have access to a number of waterways in close proximity i.e. those that live in Ryde have close access to Parramatta River and Lane Cove River. Demand analysis for vessel storage is therefore largely based on the application of state-wide trends for vessel ownership at the macro level but can be combined with local mooring use, and demand data for a smaller area. Latent demand will also be discussed in the context of marina trends in NSW and impacts on limiting registration growth.

4.2.1 Population growth and vessel ownership

Recreational vessel registrations across NSW steadily increased between 1999 and 2013 (Figure 6) according to the Sydney Harbour Boat Storage Strategy, published in 2013.[10] This shows vessel

[8] Social and economic background information report on the NSW marine estate (Vanderkooi Consulting for MEMA 2015)
[9] NSW Maritime Infrastructure Plan 2019-2024, NSW Government.
[10] Sydney Harbour Boat Storage Strategy 2013, NSW Roads and Maritime Service.

registrations almost doubling between 1999 and 2012 and highlighted that growth figures are likely to require an additional 300 new mooring spaces to be created by 2021. A 2010 report prepared by the NSW Maritime Management Centre investigating boat ownership and storage[11] stated that boat ownership in NSW was, at the time, expected to increase by an average rate of approximately 2.9% per year, creating a significant challenge in accommodating demand for both on-water and off-water boat storage facilities. The Report also highlighted that the total number of vessels over 6 metres has been growing at a faster rate than vessels under 6 metres, pointing to an increased need for water-based storage options (as vessels under 6 metres can generally be stored on a trailer). The 2010 Report, however, found that vessel growth in Sydney Harbour was below the State average and was the lowest of all major waterways, estimating that 8% of the States recreational vessels are located in and around Sydney Harbour.

More recent statistics reported through the 2018-19 NSW Roads and Maritime Services Annual Report indicate a slowing in the recreation vessel ownership trend across NSW (Figure 5). When applying the 8% vessel ownership estimate outlined in the 2010 Report, it is estimated that Sydney Harbour is home to approximately 17,900 vessels. The 2010 Report noted that a key factor in the apparent lower growth in Sydney Harbour was likely to be constraints associated with lack of on-water storage capacity and the limited space to store trailerable vessels given Sydney's higher housing densities. This assumption is supported by the recent demand study[12] which suggests that Due to a reduction in the supply of new marina berths, limitations on private mooring licences, a range of planning constraints, the loss of existing facilities and a period of economic downturn, the growth in new vessels in the last 10 to 15 years has not been at the higher earlier rates shown.

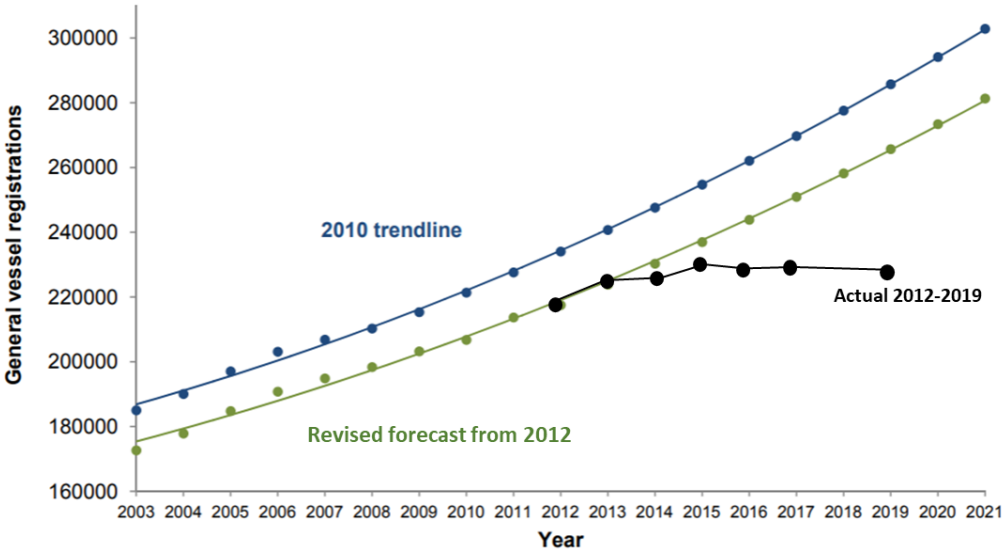


Figure 6 - NSW Recreational Vessel Registrations: Revised Forecast to 2021. Black line indicates data assembled by NineSquared, sourced from the most recent Roads and Maritime Services 2017-18 Annual report and data supplied by NSW RMS. Base image source: Sydney Harbour Boat Storage Strategy 2013, NSW Roads and Maritime Service.

Personal water craft (PWC) ownership on the other hand continues to steadily rise due to lower cost and ease of storage and transport. In comparison, recreational vessel registration is continuing to increase in QLD by an average of 4000 vessels per year [13] which may be supported by a

[11] NSW Boat Ownership and Storage: Growth Forecasts to 2026, NSW Maritime Management Centre
[12] Marina Berth Demand Study for Gladesville Bridge Marina. Australian Marina Management Pty Ltd marina consultants. September 2019
[13] Maritime statistics and reports library, recreational vessel census 2012-2016. Maritime Safety Queensland, Department of Transport and Main Roads.

combination of lower housing density in city areas and larger marina storage capacity when compared to NSW[14].

Whilst vessel registration numbers have recently been stable, the population of local government areas surrounding Sydney Harbour including the Inner West within a 10 km radius of Gladesville Bridge Marina have grown at an average compound annual growth rate of 2% from 2011 to 2018/19 (figure 7). Growth was observed across all areas with the greatest population growth observed in Inner Sydney, Burwood, Canada Bay, Cumberland, Parramatta, Ryde and Lane Cove.

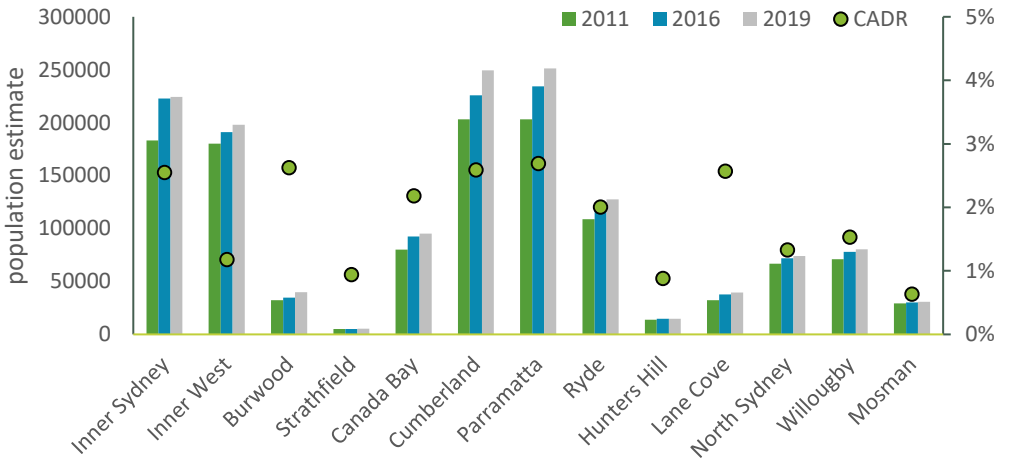


Figure 7 Estimated population statistics and compound annual growth rates. Source: Australian Bureau of Statistics, compiled by id.

4.2.2 Mooring statistics

Despite growing population numbers, there is unlikely to be an increase in recreational/private vessel ownership if market growth is not matched with an increase in boat storage options to support private boat ownership. The increasing population may result in an increase in latent demand, where there is an unmet desire for vessel storage by those living within the Sydney Harbour region. This is challenging to accurately quantity.

Sydney Harbour is home to the largest number of moorings of all waterways in NSW, with approximately 25% of all private moorings and 30% of all commercial moorings sites, with swing moorings being the most common mooring system making up 86% of all private mooring licenses[15]. Existing use and waiting lists for swing moorings in Sydney Harbour provides an indicator of unmet demand for vessel storage. Overall, there are currently 4,840 private moorings in Sydney Harbour spread across six zones, with 688 applicants awaiting mooring allocation on the priority waiting list. The total priority waiting list represents 15% of available capacity, with relative waiting lists increasing from the constrained inner harbour to most popular and less constrained outer harbour (40%) (Figure 8, Attachment 3).

The total number of swing moorings in Sydney Harbour, however, has effectively been capped for many years, with 4,870 reported in 2007, 4,715 in 2012 and 4, 840 in 2019 with an average waiting list of 1,146 between 2007[16] and 2012 and a current weighting list of 688. The existence of long and uncertain waiting times before a mooring may become available is a significant disincentive for purchasing a boat, and therefore limits the numbers of people on the list and is a likely reason for the reduced weighting list obserserved in 2019. On the other hand, the same person may be on

[14] Size and characteristics of the Australian marina sector (2010) Marina Industries Association of Australia
[15] Moorings Review Issues Paper (2014) NSW Government, Maritime Management Centre
[16] Sydney Harbour on-water boat storage – a critical challenge for industry and government. Australian Marina Management Pty Ltd 2012.

several lists, prepared to acquire a mooring in a less desirable location until a more preferable one becomes available.

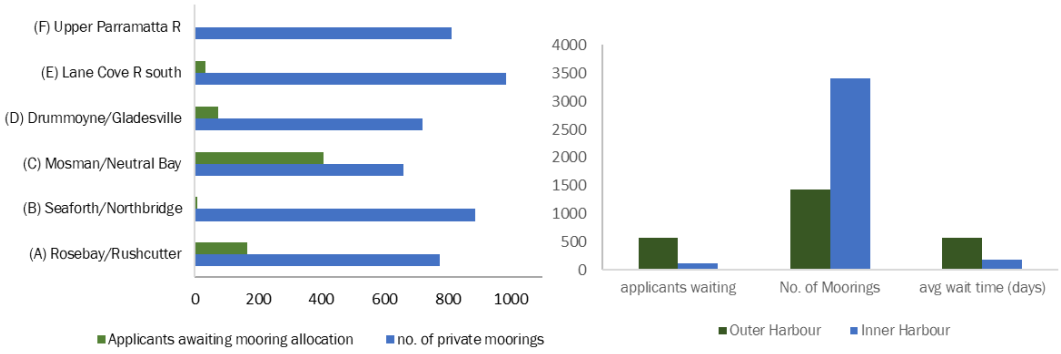


Figure 8 – (left) private mooring numbers and waiting list applicant numbers for Sydney Harbour. (right) mooring number and waiting list comparison between inner and outer Sydney Harbour, inner harbour defined as west of the Sydney Harbour Bridge. Source: Sydney Harbour mooing priority waiting lists, NSW Transport - Roads and Maritime Services.

The inner harbour area, Zone D in which Gladesville Bridge Marina is positioned, has the greatest applicants awaiting mooring allocation with average wait times of 6 months. Building capacity for in water storage in zone D and surrounding areas may take pressure off the priority mooring wait list as well as reducing pressure on the oversubscribed sites in outer harbour areas.

Data indicates that the majority of private mooring licences are for vessels between 5 and 10 metres, with vessels between 7 and 8 metres making up the largest percentage (21.7%). Vessels larger than 10 metres generally struggle to be allocated a mooring site due to mooring swing area requirements; the need for greater infrastructure to secure the vessel; and lack of security for assets of increasing value with size. Whilst marina berths are typically more expensive than moorings, the benefits can be attractive due to the convenience that marina berths provide particularly in facilitating safe access to the vessel; security; amenities and facilities (power, water, waste, repair); protection from the elements; and greater availability and coverage of insurance.

4.2.3 Marina industry overview and trends

The marina sector in Australia is growing as recreational boat ownership increases and the demand for storage capacity grows. The latest trend data over the 2012/13- 2016/17 period presented in the most recent Health of the Australian Marina Industry Survey (HAMI) shows a steady demand for marina boat storage with national storage occupancy at 85%, while 38% of marinas reported having summer waiting lists for berth spaces[17]. While there are fewer marinas in the most recent report, there has been a 3.9% increase in supply of berths to approximately 70,000 spaces. Despite the increase in berth numbers, the occupancy remains high. Supply of 24m plus berths also grew 17% over this period, however, there was a 7% reduction in marinas offering berths 20.1-24 meters. It is likely that a number of these berths were reconfigured to accept larger boats. The number of berths up to 10 meters available at across the same surveyed marinas decreased slightly (3.6%) since 2013.

Of importance to planners is the clear trend in the demand for ownership of larger vessels in NSW[18] where:

- In 2009, vessels 16m and above (565) represented 7.00% of the total 8,065 vessels above 10m in length.

[17] Club Marine 2017 Health of the Australian Marina Industry Survey.
[18] Marina Berth Demand Study for Gladesville Bridge Marina. Australian Marina Management Pty Ltd marina consultants. September 2019

- At 2019, vessels in the size range 16m and above (971) represented 10.47% of the total 9,282 vessels above 10m in length.

There has been a significant increase in average gross revenues for marinas, up from $2.1 million in 2015 to $3.2 million, and average capital expenditure has also increased from $640,000 per year in 2015 to an average of $850,000 per marina in the latest survey. Investment in environmental protection also more than doubled[16].

Marinas continue to invest in infrastructure, technologies, customer amenities and environmental protection. Marinas that made capital investments in their marinas increased approximately 9% from 2013 to 2017, and the average investment increased almost 34% averaging approximately $850,000 in 2016-17 fiscal year. The numbers of the marinas that invested in environmental protection increased 5.9% and their average investments in environmental protection more than doubled with the majority of environmental investment occurring across NSW marinas.

The 2017 HAMI report indicated that the total number of marina boat storage spaces including dry-land boat storage increased from 39,300 in 2010 to 65,000 in 2017, representing an increase from 5 to 7% of available boat storage relative to the total number of registered vessels in Australia (which was 800, 000 in 2010 and 910,000 in 2017)[19]. Across the 320 marinas in Australia, the average storage capacity was reported as 206 vessels, an almost two-fold increase from the 2010 report. While NSW was reported to have the most marinas (at 35%), Queensland had the most marina boat storage spaces with an average of approximately 272 vessels per marina. The report indicated that the average marina in NSW has a relatively small boat carrying capacity and has the highest percentage of marinas with a waiting list for boat storage during part or all of summer at 45.8%, followed by Western Australia at 44.8% and Tasmania at 37%.

The HAMI figures regarding NSW boat storage trends align with trends and boat storage forecast analyses for Sydney Harbour. A stocktake of Sydney Harbour vessel storage numbers undertaken in 2013 by NSW Roads and Maritime Services as part of the SHBSS[20] indicated there was a total of 4,080 marina berths in Sydney Harbour, of which 47% were commercial marina berths, 41% domestic berths and 12% private marina berths. The 2010 report also indicated that Sydney Harbour would likely experience an increase in the size of recreational vessels over 6 metres compared to those under 6 metres (from 41.5 to 45.1% by 2020). Based on this estimate, it is likely that of the 5000 additional vessels forecast in Sydney Harbour by 2021, around 2200-2300 will be vessels over 6 metres which, due to their size, are less likely to be stored on trailers. These boats will therefore need to be accommodated through a combination of increased on-water and dry-stack storage. The report found that future growth would require an expansion on all categories of boat storage and the effective collaboration of Government and industry to meet the needs of the boating community.

4.2.4 Sydney Harbour Marina Berth Demand and Trends

In the 10 years from 2009 to 2019, there has been no growth in the on-water boat storage capacity in the western areas of Sydney Harbour in which Gladesville Bridge Marina is located, as highlighted in the Marina Berth Demand Study[21]. Apart from a marginal increase in private mooring licences, in the same period, there also has been no growth in the boat storage capacity in the eastern areas of Sydney Harbour. The Study shows continuing growth in larger vessel ownership creating strong demand for on-water berthing and mooring in Sydney Harbour including the western Sydney Harbour waterways, where there has been no increase in available commercial marina berths to meet the demand.

The 2019 Demand study suggests that on the basis of registration statistics it has been calculated that the potential latent demand for ownership of vessels in the Sydney Harbour sector (of 10.0m and above in length) ranges from a 'lower median' of 91 vessels to 218 vessels. With the growth in recreational boat licences in the Sydney Harbour sector being higher than for NSW as a whole, it

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[19] Size and characteristics of the Australian marina sector (2010) Marina Industries Association of Australia

[20] Sydney Harbour Boat Storage Strategy 2013, NSW Roads and Maritime Service.

[21] Marina Berth Demand Study for Gladesville Bridge Marina. Australian Marina Management Pty Ltd marina consultants. September 2019

would be reasonable to expect that the growth in vessel registrations for Sydney Harbour would also be stronger than that for NSW. For the Sydney Harbour sector however, since 2008, there has been a small but consistent decline in the ratio of boat ownership per 100 licences compared to the NSW growth. This supports the earlier view that a strong latent demand exists for ownership of vessels requiring berths in Sydney Harbour, a demand which cannot currently be fulfilled due to the lack of on-water storage. The demand study further calculated that for the Sydney Harbour sector, based on the ratio of registered vessels per 100 licences, it is estimated that there is a likely latent demand (at June 2019) for marina berths in Sydney Harbour to accommodate an additional 234 vessels, a demand which is also not being met by mooring availabilty[20].

4.2.5 Gladesville Bridge Marina addressing storage demand

Gladesville Bridge Marina's current carrying capacity is 99 vessels, with just under half (46%) of its berths reserved for vessels of 20 metres in length overall (LOA) and to maximum of 25 metres. The proposed development will expand existing capacity to 115 berths overall including new berths for vessels between 25 and 45 metres, addressing the demand for larger vessel storage in Sydney Harbour. GBM's proposed berthing schedule has identified up to 11 new berths with capacity for vessels above 24 metres incorporating an additional 350 linear metres of space specifically to accommodate larger vessels including one 45 metre superyacht (figure 9). In Sydney Harbour, there are a limited number of berths designed to accommodate superyachts, which are vessels of 25 metres or more. The Sydney Superyacht Marina at Rozelle Bay is capable of storing up to 45 vessels and is the only dedicated marina for this size of vessel in Sydney Harbour[22]. Industry feedback suggests that demand for longer berths continues to rise.

[22] NSW Boat Ownership and Storage: Growth Forecasts to 2026, NSW Maritime Management Centre

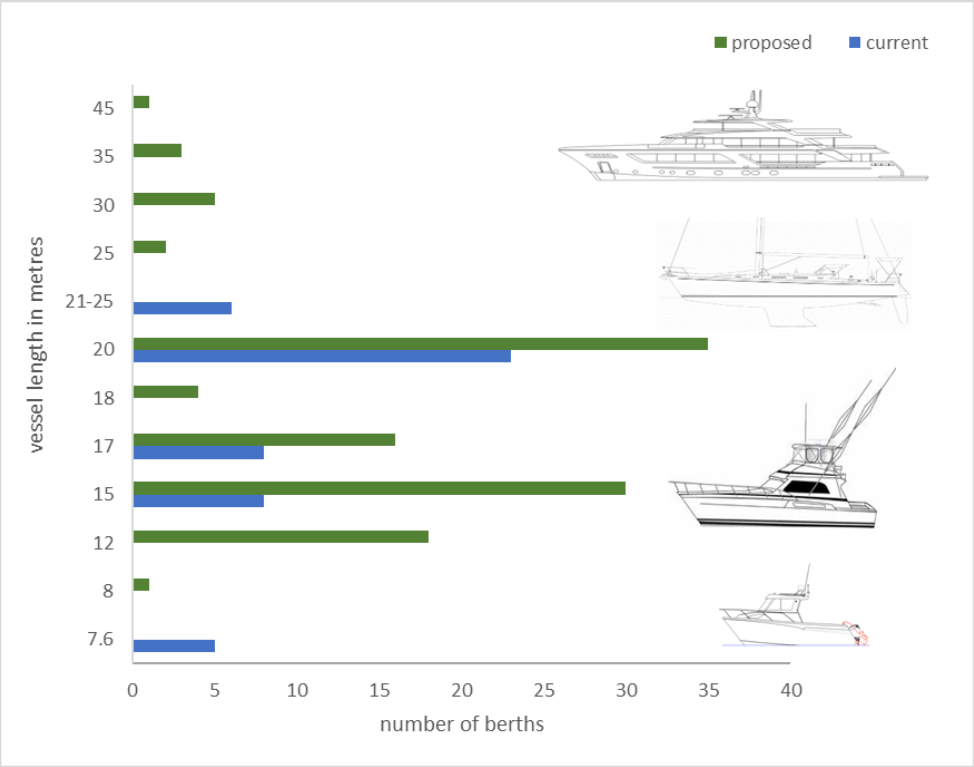


Figure 9: 2019 GBM berthing schedule showing current and proposed berth numbers by vessel linear metre classification.

One of the challenges in increasing marina capacity in a medium density residential zone is the ability to accommodate increase car parking capacity. The Australian Standard 3962-2001 – guidelines for design of marinas, provides guidance for consent authorities on parking adjacent to a marina. The Canada Bay DCP has adopted these guidelines with the following recommendations: 0.6 spaces per wet berth; 0.2 space per dry storage berth, 0.2 spaces per swing mooring and 0.5 spaces per employee. The Australian Standard, however, is over 18 years old and is currently under review with likely considerations given to changes in mobility culture, ride sharing services, and improved access to public transport networks. Gladesville Bridge Marina proposes to increase current car parking capacity to service the marina expansion through the addition of eight parking spaces provided within the slipway area, with a valet system proposed.

5. Strategic alignment

The importance of addressing storage capacity, environmental sustainability and increasing safe public access has been at the forefront of NSW Government maritime strategic plans, policies and industry agenda for the last decade. The Maritime Policy Agenda was launched at the Sydney International Boat Show on 3 August 2012[23], informed by advice from the Maritime Advisory Council and by issues raised at a major stakeholder forum held during April 2012. The Agenda included a commitment to develop boating safety plans and boat storage strategies for major waterways within NSW and called on the NSW Government to help facilitate development of boating infrastructure and reduce administrative burdens on industry and the community. Subsequently, the Sydney Harbour Boat Storage Strategy (SHBSS) was developed in 2013 and the Sydney Harbour Boating Destinations Plan was launched in October 2013. The proposal to expand the Gladesville Bridge Marina aligns directly with the objective of improving storage capacity on Sydney Harbour; improving and facilitating safe access, and ensuring a focus on environmental sustainability by the marina and its patrons.

5.1 Storage

Since 2010, the shortage in boat storage options for Sydney Harbour has been discussed widely across an array of strategic and industry publications, as previously outlined in section 3. Publications relating to moorings, marina storage and marine infrastructure all identify the need for investment in boat storage capacity in Sydney Harbour through a combination of building marina capacity through on water (births and moorings) and dry rack storage as well [24] as improving the management of private moorings[25]. Emphasis is also placed on Government and industry working together to ensure efficient outcomes for the boating community and to minimise the impact of any negative externalities on the general public (i.e. parking, noise and amenity). The SHBSS outlined a number of targets, informed by growth trends, to deliver required policy outcomes by 2021. The target of most relevance to this development proposal is the storage of vessels over 6m where an additional 2,300 vessels were forecast as requiring in water or dry stock storage by 2021. Dry stack storage typically caters for boats up to 12 metres in length and would be the most efficient way of storing vessels of this size, however, of the 2,300 vessels, the report forecast that the remaining 1,200 vessels greater than 12 metres would require in water storage comprising a combination of marina berths (private, commercial and domestic) and moorings.

The competition for boat storage in Sydney Harbour is growing, with the need to improve and facilitate sustainable and efficient storage strategies that do not impede on existing navigation corridors or impact on waterway users. Gladesville Bridge Marina's development proposal directly aligns with this key focus through the following core objectives:

- Increasing floating berths from 50 to 115 and providing a greater distribution of berth sizes
- Removing 29 existing swing moorings, improving safety of navigation and utilisation of blue space
- Ceasing slipway activities, improving overall sustainability of the development site.
- Improving existing car parking capacity to meet increase in marina patronage

5.2 Sustainability

Gladesville Bridge Marina is an accredited Level 3 Marina in the International Clean Marina Program administered by the Marina Industries Association (MIA). The International Clean Marina Program is

[23] Maritime Policy Agenda (2012) Transport for New South Wales.
[24] Sydney Harbour Boat Storage Strategy 2013, NSW Roads and Maritime Service.
[25] Moorings Review Issues Paper (2014) NSW Government, Maritime Management Centre

a voluntary, incentive-based education and outreach program that encourages environmental compliance and the use of best management practises for marinas. Level 3 accreditation status acknowledges the achievement of rigorous, auditable environmental management systems and compliance with the MIA Code of Ethics. GBM is also accredited as Fish Friendly under the same accreditation system which recognises the commitment of GBM to actively improve the marina's fish habitat and was one of the first marina's in Australia to be accredited as Fish Friendly. In May 2019, GBM reinforced its commitment to sustainability and marine conservation through taking the pledge to eliminate single use plastics. The Marina was one of 15 marinas in NSW to do so.

The proposed development seeks to remove the existing slipway and associated activities such as demolition and dry dock repair operations which will significantly reduce environmental risk and storage requirements of hazardous chemicals adjacent to a designated Wetland Protection Area (Sydney REP) and marine environment. A large percentage of boat repair and maintenance occurs at berths as recognised across the marina industry. This practice will continue at GBM as it has over the past 20 years, providing ongoing services to boaters.

5.3 Facilitating safe access

The proposed infrastructure improvements at Gladesville Bridge Marina aim to improve access through two main objectives. Firstly, through the repositioning and extension of existing pontoons, increasing the number of wet berths and removing 29 swing moorings, which will enable greater space for vessel operators to navigate and berth within the marina. Secondly, GBM is one of 19 marinas in Sydney Harbour that participates in the Sydney Harbour Boating Destinations Plan which supports the general boating public by providing a destination berth for temporary access to services and amenities such as sewage pump-out facilities, on shore toilets and other amenities.

6. Integration with existing on-site operations

The Gladesville Bridge Marina has operated as a boatshed, boat repair and boat storage facility for almost 100 years, and for over 50 years as a marina, with associated boat building and repair. After the new Gladesville Bridge was completed in 1964, and with increasing boat demand, the marina gradually grew to a holding capacity of 99 boats with a combination of moorings and wet berths, and continued to grow to its current capacity of 50 berths.

To enable GBM to continue to meet boat storage demand in the Canada Bay/inner harbour area and facilitate on water access to Sydney Harbour, it proposes to cease slipway and boat repair operations. GBM plans to shift its focus on increasing berth numbers and size distribution, and on improving amenities to facilitate access to Sydney Harbour for both members and the general public. The table below provides a list of current services and proposed amendments to services to clearly illustrate proposed development actions.

Current Services		**Retain**	**Alter**	**Remove**
1	50 floating berths; berth sizes range from 25' to 75.5' (7.6m to 23m)		x	
2	44 swing moorings; swing moorings are available for boats, with the most popular lengths from 17' (5.2m) up to 50' (15m), although there is no limit in length		x	
3	Total capacity for 99 boats		x	
4	Complimentary tender service available 7 days a week, transporting customers to and from the marina pontoons to their vessels on the swing moorings	x		
5	Dinghies availability for after-hours use	x		
6	Slipways – antifouling, boat surveys and painting. The slipway can accommodate vessels up to 60' (18m) LOA and 16' (5m) beam. Non-flybridge power vessels of up to 40' (13m) are able to be housed in our undercover slipway area for all weather painting and repair			x
7	Pump out facilities	x		
8	Food and beverage kiosk	x		
9	Boat repairs		x	
10	Shipwright Services			x
11	Mechanical Services (mobile, in water only)	x		
12	Work Berths			x
13	New/Used boat sales	x		
14	Charter operation (no boarding or disembarking)	x		
Proposed amendments and new services through the proposed development				
15	Construction of new floating berths of varying sizes, increasing from a total of 50 to 115 floating berths			

16	Reconfiguration of the marina berth layout to ease access and navigation			
17	Removal of 29 swing-moorings			**x**
18	Cessation of slipway activities and demolition of slipway			**x**
19	Demolition of demountable mezzanine level currently within the covered workshop area			**x**
20	An Addition of 8 new car park spaces			

7. Approval and Licencing Requirements

Section 1 has outlined the NSW regulatory framework for marina development including hierarchy of the planning process and Attachment 1 outlines the relevant approvals and licences that must/may be required under any relevant Act before the development may lawfully be carried out. Before the proposed development can commence, permission must be granted in the form of a development consent from the Sydney Regional Planning Panel. Roads and Maritime should then be supplied with both a copy of the "Notice of Determination" of development consent and a copy of the plans of the development, stamped as approved by the relevant consent authority.

EP&A Act and POEO Act

As the marina development is identified as requiring consent under Part 4 of the EP&A Act, consent must be obtained by the respective consent authority and once obtained, any development must be carried out in accordance with the consent and the instrument. Development consent may be obtained by the making of a determination by the consent authority to grant development consent. As the development is declared by the Canada Bay LEP and Sydney Harbour LEP as a regional significant development, the Sydney district planning panel will serve as the consent authority.

As GBM will be increasing capacity to over 79 berths, GBM will exceed the threshold outlined in Schedule 1 of the Protection of the Environment Operations Act 1997 (licenced activities) and will therefore require a licence under the schedule to conduct activities associated with the marinas.

Water Management Act - Controlled Activity Approval

Under the Water Management Act 2000 (WM Act) GBM will require an approval to undertake controlled activities on waterfront land, including carrying out of building work, such as erecting buildings and other structures, and the installation of infrastructure (including excavating or depositing material). Waterfront land is the bed of any river, lake or estuary and any land within 40 metres of the highest bank of the river, the lake shore or the mean high-water mark of the estuary. The purpose of an approval is to ensure that controlled activities are carried out in a way which avoids or minimises negative impacts on waterfront land and other water users. Council will advise if the development is complying development. A copy of the complying development certificate must be provided to the Natural Resources Regulatory as complying developments may still require a controlled activity approval if works within the bed or banks of a watercourse are involved.

Land Holder Approval and requirements

i) Development Approvals

Roads and Maritime should be supplied with both a copy of the 'Notice of Determination' of development consent and a copy of the plans of the development, stamped as approved by the relevant consent authority.

ii) Construction Approvals

Most development which has received development consent will also be the subject of a Construction Certificate (CC). This can be issued by either the consent authority or by an accredited certifier and confirms that the development will comply with the Building Code of Australia and any other applicable construction requirements. If the development was subject to a CC, Roads and Maritime Services should be supplied with a copy of this as well as the accompanying stamped approved plans. Further certification in addition to a CC may be required if the development includes pontoons or other floating structures which are not addressed within the CC. In these instances, the pontoons should either be explicitly covered by the CC or separate certification provided from a Registered Engineer.

Sydney Water – Section 73 Compliance Certificate

A Section 73 is a compliance certificate issued by Sydney Water to ensure that the development receives appropriate water, water waste and drainage and that the new building/development does not affect Sydney Water assets. GBM proposed development triggers a Section 73 due to a new building being erected.

8. Attachments

Attachment 1 – Legislation Review and applicability to project

	Legislation	Purpose	Requirement	GBM position	Requirement for consideration			
					License / approval	Critical	Desirable	Not required
1	Environment Planning and Assessment Act 1979	Under Part 4 of the (EP&A) Act 1979 (the Act), marinas may require development consent under an environmental planning instrument. Where consent is required, Schedule 3 of the EP&A Regulation 2000 (the Regulation) provides designation thresholds based on size, sensitivity of the environment and performance standards.	Requires approval under the Protection for the Environment Operations Act 1997 and the Water Management Act 2000		x	X		
2	Environmental Planning and Assessment Regulation 2000	Schedule 3. 23(1) Marinas or other related land and water shoreline facilities.	Marinas or other related land or water shoreline facilities that moor, park or store vessels (excluding rowing boats, dinghies or other small craft) at fixed or floating berths, at freestanding moorings, alongside jetties or pontoons, within dry storage stacks or on cradles on hardstand areas: that (b) have intended capacity of 30 or more vessels of any length (i) are located in non-tidal waters, or within 100 metres of a wetland or aquatic reserve, (ii) require the construction of a groyne or annual maintenance dredging, or (iii) the ratio of car park spaces to vessels is less than 0.5:1, or (c) that have an intended capacity of 80 or more vessels of any size	115 proposed births		x		

	Legislation	Purpose	Requirement	GBM position	Requirement for consideration			
					License / approval	Critical	Desirable	Not required
3	Coastal Management Act 2016	The objects of this Act are to manage the coastal environment of New South Wales in a manner consistent with the principles of ecologically sustainable development for the social, cultural and economic well-being of the people of the State. The CM Act defines the coastal zone, comprising 4 coastal management areas: coastal wetlands and littoral rainforests area coastal vulnerability area coastal environment area coastal use area.	See the State Environmental Planning Policy (Coastal Management) 2018 below for requirements: The State Environmental Planning Policy (Coastal Management) 2018 (CM SEPP) identifies and maps the coastal zone according to definitions in the CM Act. The CM SEPP streamlines coastal development assessment requirements. The CM SEPP identifies development controls for consent authorities to apply to each coastal management area to achieve the objectives of the CM Act.	Will need to address requirements under coastal use area in line with CM SEPP.		x		
4	State Environment Planning Policy No 33 – Hazardous and Offensive Development	Policy is designed to assess industry or storage and impose measures to reduce impact of the development if it is deemed as hazardous and offensive. Through the policy, the permissibility of a proposal to which the policy applies is linked to its safety and pollution control performance. Policy contains guidelines for different hazards.	Issues to consider: - Storage of dangerous materials - Applicability of SEPP 33 - Identify potential hazards from fire, explosion, chemical spill - Identify nearby sensitive areas Propose mitigation and management measures to control impacts and ensure compliance.	quantities, use or storage (including bunding) of fuels, chemicals or other hazardous materials - Ensure SMS is in place - Emergency Plan Independent hazard audits		X[2]		

	Legislation	Purpose	Requirement	GBM position	Requirement for consideration			
					License / approval	Critical	Desirable	Not required
5	State Environment Planning Policy No 55 – Managing Land Contamination Planning	State-wide planning approach to the remediation of contaminated land.	Planning authorities should consider the possibility that a previous land use has caused contamination of a proposed site. This is important as contamination may cause health or environmental risks, potentially leading to harm, long delays and high costs. Rezonings, development control plans and development applications should be backed up by information demonstrating that the land is suitable for the proposed use or can be made suitable, either by remediation or the way the land is used.	Addressing the Sydney Harbour DCP and REP performance criteria will address critical habitat requirements			x	
6	State Environmental Planning Policy (Coastal Management) 2018	State Environmental Planning Policy (Coastal Management) 2018, known as the Coastal Management SEPP, defines the coastal zone and establishes state-level planning priorities and development controls to guide decision-making for development within the coastal zone.	Assess the area of development to determine if it fits within the following areas: • coastal wetlands and littoral rainforests area - defined as areas with particular hydrological and ecological characteristics • coastal vulnerability area - defined as the area affected by any one of seven coastal hazards • coastal environment area - defined as the coastal waters of the state, estuaries, coastal lakes and foreshores including beaches, dunes, headlands and rock platforms as well as surrounding land • coastal use area - defined as land adjacent to the coast, where development is or may be carried out.	GBM does not fall within coastal wetlands, littoral rainforest or coastal vulnerability area. However, is listed as coastal use area under the policy. Addressing the Sydney Harbour DCP and REP performance criteria will address coastal zone habitat plan.			x	

	Legislation	Purpose	Requirement	GBM position	Requirement for consideration			
					License / approval	Critical	Desirable	Not required
7	State Environmental Planning Policy (Sydney Harbour Catchment) 2005	The Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005, (Harbour REP), covers all the waterways of the Harbour, the foreshores and entire catchment. It establishes a set of planning principles to be used by councils for the preparation of planning instruments.	The plan mirrors the REP and DCP combined. Addressing the REP and DCP requirements will address the aims of the State Environmental Planning Policy (Sydney Harbour Catchment	GBM will need to address the DCP and REP requirements whilst ensuring key objectives of this policy are met.			x	
8	Protection for the Environment Operations Act 1997	Achieve the protection, restoration and enhancement of the quality of the NSW environment	Schedule 1. 25(1) Marinas and boat repairs – boat mooring and storage with a capacity to handle more than 80 vessels at any time. GBM will also need to adhere to noise regulations and consider the Noise Policy for Industry (2017) as a proponent of the development and management of the premises as an identified 'maintenance and repair facility premises' in schedule 1 of the POEO Act.	Due to new capacity being 80 or more berths, GBM will need to apply for a licence	X			

	Legislation	Purpose	Requirement	GBM position	Requirement for consideration			
					License / approval	Critical	Desirable	Not required
9	Water Management Act 2000	Provides for the sustainable and integrated management of the water sources of NSW. GBM is triggered due to being categorised as undertaking a controlled activity.	Detail of any licensing requirements or other approvals under the Water Act 1912 and/or Water Management Act 2000 - An assessment of potential impacts on floodplain and stormwater management and any impact to flooding in the catchment; - Controlled activity approval is required to ensure that controlled activities are carried out in a way which avoids or minimises negative impacts on waterfront land and other water users.	GBM may have to apply for a controlled activity approval even if deemed as a complying development by council.	x		x	
10	Fisheries Management Act 1994 and associated Policy and Guidelines for Aquatic Habitat Management and Fish Conservation (1999)	Ensures fish stocks are conserved and no net loss of key fish habitats upon which they depend.	Direct consultation with the department recommended that the project is designed so that there is: - No propeller dredging associated with the use of the Marina - No harm of marine vegetation - Mitigation measures are in place to manage water quality impacts both during construction and operation of the facility.	EIS will need to address recommendations		x		
11	Sydney Harbour Regional Environmental Plan (REP)	Provides an improved and clearer planning framework and better environmental outcomes for Sydney Harbour and its tributaries. The Harbour REP applies to the hydrological catchment of the harbour and defines and contains provisions for the 'Foreshores and Waterways Area" and "Wetland Protection Areas" in which the Gladesville Bridge Marina falls within.	Considers ecological and scenic quality, built form and design, maintenance of views, public access and recreation and working harbour uses. The REP includes provisions relating to heritage conservation and wetlands protection and provides planning controls for strategic foreshore sites.	Key considerations - Identified wetlands protection area - Scenic waters Active Use (attachment #) - GBM is not a strategic foreshore site.		x		

	Legislation	Purpose	Requirement	GBM position	Requirement for consideration			
					License / approval	Critical	Desirable	Not required
12	Canada Bay Local Environment Plan 2013 (LEP)	This Plan aims to make local environmental planning provisions for land in Canada Bay in accordance with the relevant standard environmental planning instrument under section 3.20 of the Act.	Ensure development addresses planning provision for Canada Bay such as amenity, development control plan, ecological sustainability, facilitate public access, sustainable transport and urban form.	Address Canada Bay Local Environment Plan simultaneously with the Sydney Harbour Regional Environmental Plan.		x		
13	Sydney Harbour foreshores and waterways area Development Control Plan 2005 (DCP 2005). To be viewed in conjunction with the Harbour REP.	Applies to the Foreshores and Waterways Area as identified in the Harbour REP. The DCP includes design guidelines for development, assessment criteria for marinas (including guidelines for undertaking visual impact assessments), and criteria for natural resource protection.	The DCP is to be taken into consideration when preparing or assessing development applications within the area covered by the Foreshores and Waterways Area of SREP (Sydney Harbour Catchment) 2005. The DCP outlines performance based criteria for ecological community assessment for developments within and adjoining high and medium conservation communities.	Key elements for consideration by GBM include ecological communities (terrestrial and aquatic), landscape character type, adherence to guidelines that reinforce the local requirements.			x	
14	Canada Bay Development Control Plan (DCP)	The purpose of this Development Control Plan (DCP) is to supplement the Canada Bay Local Environmental Plan (LEP) 2013 and provide more detailed provisions to guide development.	Outlines parking requirements for marinas, waste management requirements, storm water management, environmental design.	Address Canada Bay DCP simultaneously with Sydney Harbour DCP.			x	

	Legislation	Purpose	Requirement	GBM position	Requirement for consideration			
					License / approval	Critical	Desirable	Not required
15	NSW Maritime Infrastructure Plan 2019-2024	A strategic plan that identifies key investment areas in maritime infrastructure for recreational and commercial boaters, including commercial fishing, aquaculture and tourism sectors, and provide certainty to industry.	Gladesville Bridge Marina improvement development should address and align with the strategies and objectives of the infrastructure plan.	Strong alignment with allowing improved access for recreational and commercial waterway users of Sydney Harbour			x	
16	Sydney Harbour Boat Storage Strategy 2013	This strategy uses trends in vessel registration figures to estimate demand for boat storage in Sydney Harbour to 2021. The strategy provides a stocktake of current boat storage facilities in and around Sydney Harbour to identify the likely increase in capacity that will be required to keep pace with demand.	Gladesville Bridge Marina improvement development should address and align with the strategies and objectives of the storage strategy when justifying the proposal.	Strong alignment with the documented need for greater on water storage of vessels, particularly greater than 24m in length.			x	
17	Sydney Harbour Regional boating plan 2015	identifies the boating safety, access and infrastructure actions across the region to be implemented over the next five years.	Outlines core uses of Sydney Harbour including Parramatta River. Provides some data for the area, and future demand (links to storage strategy), discusses access challenges and opportunities.	Alignment with storage actions (chapter 6), should be considered with the storage strategy discussion.			x	

	Legislation	Purpose	Requirement	GBM position	Requirement for consideration			
					License / approval	Critical	Desirable	Not required
18	Sydney Harbour Destinations Plan	RMS partners with 19 marinas to improve access to quality services and amenities on Sydney Harbour.	Glades Bridge Marina is an identified facility on the Destinations Plan providing berths (up to 1hr free), toilets, recreation facilities, water, sewage pump-out, waste disposal, and marine services to the public facilitating access across Sydney Harbour.	GBM is one of two marinas west of Gladesville Bridge participating in the boating destinations program. Supports strategic alignment with improving public accessibility to services.			x	
19	State Environment Planning Policy (Infrastructure) 2007	Guidelines for infrastructure delivery in NSW	Division 23 – waste or resource management facilities	Unless GBM is altering it's pump out facility, this policy is not relevant				x

[1] Dependant on existing licences
[2] critical if the development alters existing risk

Attachment 2 - Harbour DCP Guidelines for Commercial Marinas

Category	Comments	Reference Document
Location		
Marinas (where permissible) are to be located where they can be used by as many people as possible and are easily accessed from land and water;	The marina is listed in the NSW boating destinations plan and is accessible to the public	Marine Safety and Navigation Report, Wave Climate Report
marinas are to be located where there is adequate water depth or where minimal dredging of soft material will achieve an adequate water depth	No dredging is required	Geotechnical Report
marinas are to be located away from areas subjected to exposed wave environments;	-	Marine Safety and Navigation Report, Wave Climate Report
marinas are preferably to be located away from wetlands or the wetlands protection area (both as defined by the SREP) or where they or the vessels using them will physically damage or overshadow estuarine vegetation of high value. Clauses 61 to 63 inclusive of SREP (Sydney Harbour Catchment) 2005 indicate provisions relevant to wetlands protection;	The marina is located in a wetland protection zone as per attachment 2, is an established facility but may require approval from the consent authority before works may commence.	Marina Ecology Study
marinas are not to reduce the number of publicly available single (swing) moorings, jeopardise safe navigation or adversely impact other water users including small craft;	There are no existing public courtesy moorings. The extension of the marine will allow for more berths for use by the public through the boating destinations plan.	Marine Safety and Navigation Report
waterside structures are to minimise impacts on public water activities.	-	Marine Safety and Navigation Report
Design and Layout		
Buildings and other facilities are to be designed and sited so that natural or other attractive features are not obscured	There are no external changes to buildings and no new buildings.	Visual Impact Assessment and Construction Management Plan
buildings are to be designed so that their dimensions are not excessive and can reasonably meet the functional requirements of the proposed uses;	-	Marina Drawings, Construction Management Plan
marinas are to enhance public access to and along the shore and, where relevant, the inter tidal zone;	-	Marina Drawings, Construction Management Plan

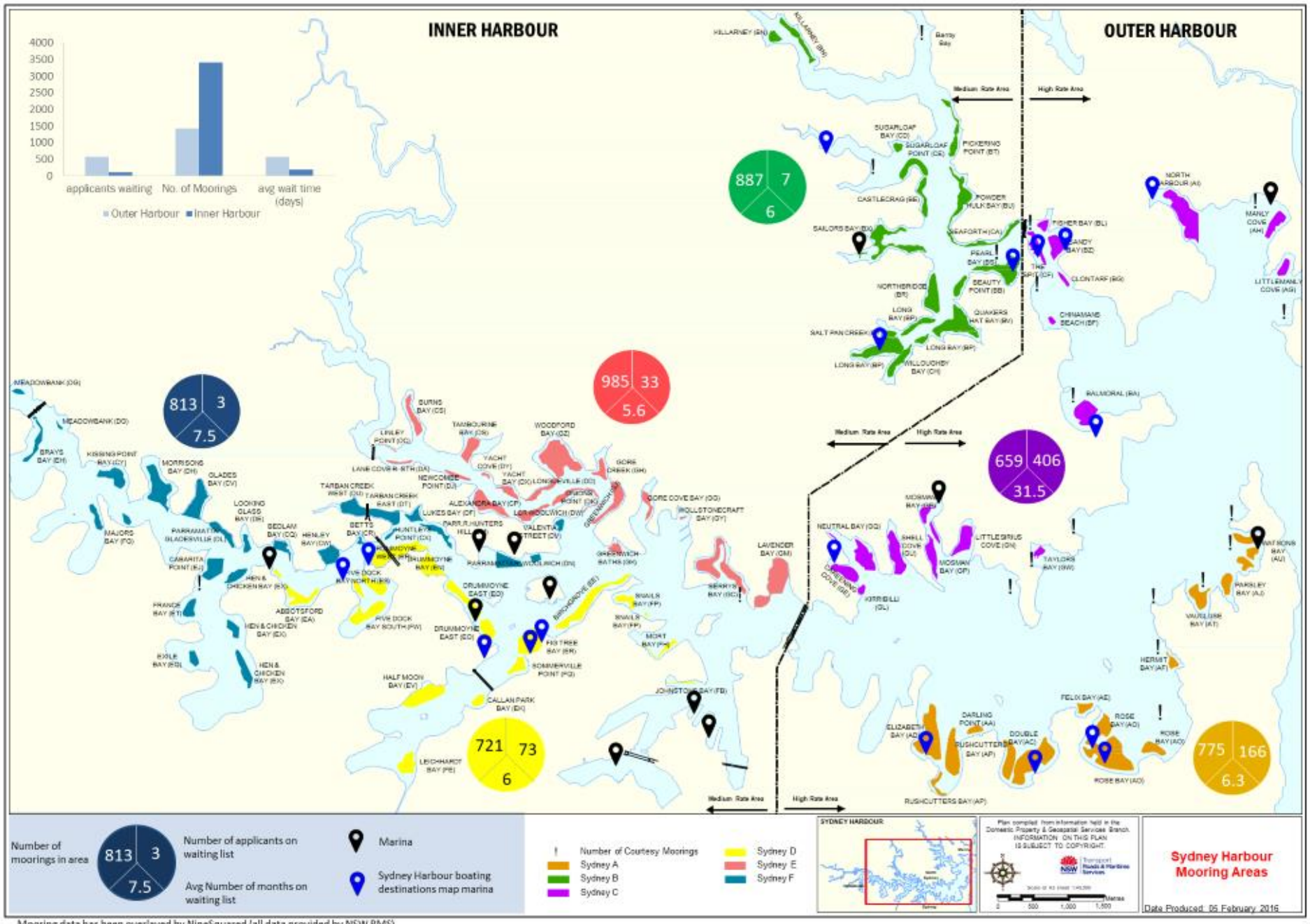
Category	Comments	Reference Document
Secure storage is to be provided in a controlled environment;	-	Marina Drawings, Construction Management Plan
the extent of development over water including waterside structures, berths, fairways and access channels is to be minimised and result in minimal alienation of the waterway;	There will not alienation of waterway with the proposal.	Marina Drawings
marinas are to be in the form of a series of interlinked pontoons which shall be restrained and held in position by a minimum number of piles or mooring lines to anchor points in the seabed;	-	Marina Drawings, Architectural Drawings
design of marina restraints shall take into account the flexibility and performance of the pontoon systems under environmental loads;	If approved, a contractor will be appointed to meet the requirement.	N/A
the colours, appearance and form of any associated buildings shall be compatible with the surrounding environment;	No external changes to buildings.	N/A
shiny or reflective materials are not to be used	No external changes to buildings.	N/A
the depth and width of berths and fairways of commercial marinas shall accommodate either a yacht or motor vessel. Restricted berths are to be nominated only where this will lead to an optimal environmental outcome;	-	Marina Drawings
commercial marinas are to provide a point of access to boats for disabled people where possible;	Proposal is DDA compliant.	N/A
marinas are to be designed to minimise the impact of vessels when in use on the environment including on air and water quality, marine habitat and bank stability; and	-	Geotechnical Report, Air Quality Assessment Report, Greenhouse Gas Assessment Report, Marine Ecology Report, Water Management Report
marina layouts are to be designed in accordance with the following publications: - Department of Environment and Conservation (NSW) "Environmental Information for Marinas, Boatsheds and Slipways" - NSW Maritime Authority "Engineering Standards and Guidelines for Maritime Structures"	-	Marina Drawings

Category	Comments	Reference Document
- NSW Fisheries Department's "Aquatic Habitat Management and Fish Conservation—Policy and Guidelines", 1998 - NSW Department of Primary Industries – Fisheries "Policy and Guidelines – Aquatic Management and Fish Conservation (1999)". - NSW Department of Primary Industries – Fisheries "Habitat Protection Plan No. 2: Seagrasses"; and - NSW Department of Primary Industries – Fisheries "Habitat Protection Plan No. 1: General".		
Facilities and Services		
commercial marinas are to provide boating service facilities such as fuel, water, toilet facilities or sewage pumpout where practicable and where such facilities are not yet locally available;	The Marina already provides these services and will continue to do so with greater capacity.	Marina Drawings
commercial marinas are to provide a mix and choice of boat storage facilities based on established demand as well as a range of marine services to the boating public; and	The Marina upgrades are aimed at increasing capacity for a greater range of vessel lengths based on demand.	Marina Drawings
commercial marinas are to provide benefits to both the general and boating public; and	The Marina is an active member of the Sydney Harbour Boating Destinations Plan.	Marina Drawings
vessels at the marina are not to be used as a permanent residence. A covenant shall be included on the lease to enforce this requirement	Marina does not allow permanent residents.	N/A
Visual Impact		
the visual contrast (derived from an analysis of form, line, colour and texture) between the marina and the existing or planned future character of its setting is to be minimised;	The current mooring area commences directly outside the marina footprint with a small navigation path for vessels accessing the site. Therefore, the new footprint has been minimised to cover area already occupied by moored vessels.	Visual Impact Assessment
the visual impact of the marina on people in the visual catchment (derived from an analysis of the potential number of viewers, their location within the landscape, distance from the marina, and duration of view) is to be minimised;	Community was offered the opportunity to have photos taken from their property and	Visual Impact Assessment

Category	Comments	Reference Document
	a small number took up the offer so that photo montage could present that view.	
any visual analysis shall consider the impact of the largest motor vessel(s) capable of being berthed at the marina;	The largest possible vessels are included in the visuals.	Visual Impact Assessment
the largest vessels (motorised or otherwise) to be berthed at the marina are to be located as far from shore as possible;	The largest vessels will be berthed furthest from shore to reduce visual impact.	Visual Impact Assessment
waterside structures and berthed vessels associated with marinas are not to block views from foreshore public open space or views to foreshore public open space from the waterway;	The largest vessels will be berthed furthest from shore to reduce visual impact.	Visual Impact Assessment
the bulk and scale of buildings and other structures on land is to be minimised through appropriate mitigation measures including landscaping, articulated walls, detailing of surfaces and by using smaller elements	No external changes to buildings and no new buildings	Visual Impact Assessment
the visual impact of car parking from the waterway is to be minimised; and	Existing parking will not change.	Visual Impact Assessment
all signage is to be located on dry land below the roofline (or parapet) of buildings. Advertising signs are not to detract from the visual quality or amenity of the foreshores and waterways when viewed from the waterways.	See previous DA 2014 for signage arrangements, no further changes planned.	Visual Impact Assessment
Environmental Management		
potential pollutant sources from the site must be controlled and meet established performance standards;	Slipway is being removed, therefore associated pollutant management will no longer be required. There are currently 100 vessels at Marina, Waste Management Plan considers increase to 130.	Waste Management Plan, Marine Ecology Report, Contamination Investigation and Remediation Action Plan
appropriate controls are to be in place and managed to prevent any pollutants entering the environment;	Spill kits are located on site at the marina to manage any oil/chemical spills.	Air Quality Assessment Report, Greenhouse Gas Emissions Report
marinas for nine or more vessels are to provide adequate and readily accessible facilities for the collection and disposal of wastes from vessels;	Marina has pump out system.	N/A
facilities for pumping out sewage holding tanks are to be provided onshore; and	Marina has pump out system.	N/A

Category	Comments	Reference Document
any waste that cannot be recycled is to be disposed of at an appropriate facility.	The Marina has a designated waste disposal area which will be aesthetically improved though the facility upgrades.	N/A
land-based impacts including traffic volumes and parking demand meet established performance standards;	--	Traffic and Transport Study
adequate car and trailer parking (based on the number and type of berths, associated activities and number of employees) is to be available onsite. Off-site parking is acceptable only where it will not reduce community amenity or generate adverse traffic impacts; and	-	Traffic and Transport Study
the adverse impacts of traffic and parking generated by boat storage facilities in terms of congestion, safety, air quality and noise are to be minimised.	-	Traffic and Transport Study
the adverse impacts of noise (considering hours of operation, existing background noise, expected departure/arrival times for vessels, noise level of marina patrons, noise level from repair and testing of vessels and motors) are to be minimised through appropriate design and management measures; and	-	Noise and vibration assessment
land-based impacts including noise emissions meet established performance standards	-	Noise and vibration assessment
the adverse impacts of lighting on night navigation and neighbours are to be minimised through appropriate design and management measures.	-	Lighting Assessment Report
Health and Safety		
Marinas are to be a safe place to work and adequate environmental safety and emergency response plans are in place.	Marina currently operates under Marina Operational Environment Plan which contains protocols for safety management and emergencies.	N/A

Attachment 3 – Private Mooring Statistics (May 2019)



Mooring data has been overlayed by NineSquared (all data provided by NSW RMS)