gladesville bridge
MARINA

Parramatta River
Port Jackson, Sydney NSW Australia

MARINA BERTH

DEMAND ASSESSMENT

Australian Marina Management Pty Ltd
marina consultants

September 2019

CONTENTS

EXECUTIVE SUMMARY

Gladesville Bridge Marina currently offers on-water boat storage for 99 recreational and tourist charter vessels with 50 floating marina berths for vessels up to 23m in length and 44 commercial swing moorings for vessels generally in the range of 5m to 15m

The floating marina at Gladesville Bridge has remained in its present configuration since it was updated in 1999 and is no longer able to meet current demand for on-water storage of larger sized vessels in the Parramatta River and in Sydney Harbour generally.

Proposed changes to its existing on-water vessel storage facilities and services include redeveloping the existing pontoons in a reconfigured layout to provide 115 new fully serviced berths of varying sizes designed to meet current and future demand. The changes include relinquishing 29 of the existing 44 swing moorings.

Australian Marina Management Pty Limited (AMM) has conducted a study to identify both current and anticipated future demand for marina berthing in Sydney Harbour for recreational vessels. Accordingly this report provides an assessment of existing and anticipated future demand for marina berths in NSW and in Sydney in order to further demonstrate demand for marina berths at Gladesville Bridge Marina.

Sydney Harbour, since the early 1800's, has provided for a wide range of community recreational boating activities including cruising, sailing, fishing, rowing and canoeing. Increasing high demand for on-water boat storage in Sydney Harbour saw the NSW Government introduce a system of private mooring licences, the licencing of private jetties to owners of waterfront properties, and the leasing (or licencing) of waterway sites for purpose-built marinas such as commercial marinas, club marinas for yachting and boating, and some private residential marinas.

Surveys were conducted by AMM in 2009, and again in 2019, of the total on-water boat storage available in Sydney Harbour. The following is a comparative summary of the two surveys.

TOTAL VESSEL STORAGE IN SYDNEY HARBOUR - 2009 AND 2019

TYPE OF FACILITY	WEST SYDNEY HBR		EAST SYDNEY HBR		TOTAL SYDNEY HBR	
	2009	2019	2009	2019	2009	2019
COMMERCIAL MARINAS	806	780	1,176	1,100	1,982	1,880
CLUB MARINAS	6	0	501	559	507	559
RESIDENTIAL MARINAS	325	350	89	76	414	426
COMMERC'L BOATSHEDS	183	161	249	276	432	437
CHARTER VESSELS	28	29	14	10	42	39
TOTALS	1,348	1,320	2,029	2,021	3,377	3,341
NSW M'TIME MOORINGS	2,521	2,519	2,330	2,472	4,851	4,991
TOTAL STORAGE	3,869	3,839	4,359	4,493	8,228	8,332

Source: Sydney Harbour Boat Storage Surveys – 2009 & 2019 – Australian Marina Management Pty Ltd

EXECUTIVE SUMMARY (CONTINUED)

In the 10 years from 2009 to 2019, there has been no growth at all in the on-water boat storage capacity in the western areas of Sydney Harbour in which Gladesville Bridge Marina is located. 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.

Marinas in the western Sydney areas evidence a high level of demand for marina berths with mid-winter occupancies averaging over 84% increasing to as much as 100% in summer periods.

Adding to the demand for marina berths west of Sydney Harbour has been the loss of Woodleys Marina in Berrys Bay and River Quays Marina on Parramatta River at Mortlake. The 2009 proposal for the new 170-berth Inner West Sydney Marina at Breakfast Point did not proceed and the NSW Government's Homebush Bay Master Plan to include a 50-berth marina has not eventuated.

There has therefore been no net increase in available commercial marina berths in the western areas of Sydney Harbour to meet the demand for such.

There are 350 private residential marina berths available in the west Sydney area but, of these, only 198 are occupied. None of the vacant 152 residential marina berths however are available for use by vessel owners in the wider community as their use is restricted to property residents only.

At the 2019 survey, the occupancy of marina berths at commercial boatshed facilities in the west of Sydney Harbour was 93% further demonstrating the high demand for on-water storage for recreational vessels.

There is a shortage of suitable berthing facilities for charter vessels in Sydney Harbour. The 14-berth charter vessel facility at Blackwattle Bay has closed and the proposed new 22-berth charter vessel marina at Bank Street, Pyrmont has not materialised. These factors add to the demand by charter vessel owners for berthing at commercial marinas.

In 2004, private mooring licences issued by Government for the west of Sydney totalled 2,498. At July 2019 the west of Sydney private mooring licences totalled 2,519 underlining that there has been virtually no growth in NSW Government private mooring licences in the west Sydney areas for over 15 years.

The current 'waiting list' of applicants for 659 mooring licences in Sydney Harbour demonstrates a strong and unsatisfied demand for on-water boat storage on Sydney waterways. Of these, 102 are for moorings in west Sydney Harbour areas.

EXECUTIVE SUMMARY (CONTINUED)

Statistics sourced from NSW Government's maritime recreational vessel registration data from 1983, 2003, 2009 and 2019 show the following patterns of demand for ownership of recreational vessels 10.0m in length and above in New South Wales which are the size vessels predominantly driving the demand by boat owners for marina berth and on-water boat storage in marinas.

NSW RECREATIONAL VESSEL REGISTRATIONS
(10m and Above in Length)
1983 - 2003 – 2009 - 2019

VESSEL SIZES (M)	NSW 1983	% SIZE DIST'N	NSW 2003	% SIZE DIST'N	NSW 2009	% SIZE DIST'N	NSW 2019	% SIZE DIST'N
10 - 11.99	365	59.64	3,657	60.39	4,476	55.50	4,640	49.99
12 - 13.99	137	22.39	1,528	25.23	2,114	26.21	2,419	26.06
14 - 15.99	62	10.13	550	9.08	910	11.28	1,252	13.49
16 - 17.99	29	4.74	185	3.05	310	3.84	500	5.39
18 - 19.99	14	2.29	83	1.37	150	1.86	269	2.90
20M & >	5	0.82	53	0.88	105	1.30	202	2.18
TOTAL	612	100.00	6,056	100.00	8,065	100.00	9,282	100.00

NSW Transport (Maritime NSW) Recreational Vessel Registration Data 1983 - 2019
Australian Marina Management Pty Limited

The following comparative summary, for various periods, shows the actual growth in number, and the average growth per annum, of new vessels registered in NSW of 10.0m and above in length.

PERIOD	GROWTH IN VESSELS	AVERAGE ANNUAL GROWTH
1983 – 2003	5,444 vessels	272 vessels per annum
1983 – 2009	7,453 vessels	287 vessels per annum
1983 – 2019	8,670 vessels	241 vessels per annum
2003 – 2009	2,009 vessels	335 vessels per annum
2003 – 2019	3,226 vessels	202 vessels per annum
2009 – 2019	1,217 vessels	122 vessels per annum

Due to a reduction in the supply of new marina berths, the 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.

Nevertheless, in the 10-year period 2009 - 2019, ownership of vessels 10m and above grew in number from 8,065 in 2009 to 9,282 representing an increase of 1,217 vessels or a growth of 15.08% on the 2009 year base, or an average growth rate of over 1.5% per annum.

EXECUTIVE SUMMARY (CONTINUED)

The following summary shows the continuing trend for ownership of larger vessels. It compares the growing percentage of ownership of vessels 16m and above in length with that of vessels 10.0m to 15.99m in length.

	2003	%	2009	%	2019	%
Vessels 10.0m – 15.99m	5,735	94.7	7,500	93.0	8,311	89.5
Vessels 16.0m and above	**321**	**5.3**	**565**	**7.0**	**971**	**10.5**
Total Vessels 10.0m and Above	6,056	100	8,065	100	9,282	100

This trend increases demand for larger sized marina berths and needs to be taken into consideration when determining the berth size distribution for any marina design, expansion or re-configuration.

An examination of NSW vessel registration data raises the question as to why the annual growth in vessel registrations for the Sydney Harbour sector has been consistently lower than that for all of NSW and markedly lower than the annual growth in actual vessel registrations for vessels 10.0m and above in length.

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.

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 a size 10.0m and above in length ranges from a 'lower median' of 91 vessels to a 'higher median' of 218 vessels creating demand for marina berths.

With the growth in recreational boat licences in the Sydney Harbour sector being higher than that for NSW as a whole, it 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 be fulfilled due to the lack of on-water storage.

For the Sydney Harbour sector, based on the ratio of registered vessels per 100 licences method, it is calculated that there is a likely latent demand at June 2019, for marina berths in Sydney Harbour to accommodate an additional 234 vessels.

Mooring licences for Sydney Harbour have clearly not kept pace with the growth in boat registrations thus increasing the demand for marina berth storage. The current 'waiting list' of applicants for 659 mooring licences, including 102 in the areas west of Sydney Harbour Bridge, demonstrates a strong and unsatisfied demand for on-water boat storage in Sydney Harbour areas.

EXECUTIVE SUMMARY (CONTINUED)

There is also likely to be a sizable latent, or hidden, demand for moorings in the west Sydney Harbour areas. Considering that the total number of issued licences for Sydney Harbour are spread equally between the western and eastern zones it is arguable that with 557 mooring licences on the waiting list for the east Sydney area compared to only 102 for the west Sydney area, a latent demand could exist for a further 450 moorings in the west Sydney Harbour areas.

The ratios of NSW recreational vessel ownership per 100,000 of NSW population shows a continuing growth in demand for ownership of recreational vessels of a size 10.0m in length and above.

The expected level of vessel ownership by residents in the Greater Sydney Region will continue to strongly drive demand for suitably sized marina berths and moorings in Sydney Harbour.

In the 36-year period from 1983 to 2019, in NSW, ownership of vessels, 10.0m and above in length, has grown by 8,670 with the consequential increase in the demand for modern marina berths and on-water boat storage facilities.

Of importance to planners however is the clear trend in the demand for ownership of larger vessels.

- In 2009, vessels 16m and above (565) represented 7.00% of the total 8,065 vessels above 10m in length.
- At 2019, vessels in the size range 16m and above (971) represented 10.47% of the total 9,282 vessels above 10m in length.

The following comparative summary shows the actual 2019 demand and the forecast 2040 demand for ownership of vessels under 16m compared with 16m and above.

Vessel Size	Actual 2019	Forecasts 2040	Increase Vessels	Increase %
10.0m – 15.99m	**8,311**	**10,851**	**2,540**	**30.56%**
16.0m – 20m & above	**971**	**1,825**	**854**	**87.95%**

The proposed berths for larger sized vessels at Gladesville Bridge Marina are very much in line with the demand pattern evidenced above.

In conclusion, the study demonstrates that there is a known demand for on-water storage in Sydney Harbour for 659 vessels and a likely latent demand for marina berth and other on-water boat storage in Sydney Harbour of between 91 and 234 vessels.

Clearly some of this demand will be able to be satisfied by the proposed new berths at Gladesville Bridge Marina.

1 INTRODUCTION

Gladesville Bridge Marina, located on Parramatta River adjacent to the Gladesville Bridge viaduct structure, currently offers boat storage for 99 recreational and tourist charter vessels made up of:-

- 50 floating marina berths for vessels up to 23m in length;
- 44 commercial swing moorings for vessels generally in the range of 5m to 15m in length;

The floating marina at Gladesville Bridge has remained in its present configuration since it was updated in 1999. This configuration is however no longer able to meet the current demand for on-water storage of larger sized vessels nor to meet the forecast future vessel storage demand for the berthing of vessels in the Parramatta River and in Sydney Harbour generally.

Gladesville Bridge Marina owners are thus proposing to make changes to the property's existing vessel storage facilities and services as follows:-

- Redevelopment of existing pontoons by constructing a new modern marina with floating pontoons to provide 115 fully serviced berths of varying sizes designed to meet current and future demand and including structured access for community members with disabilities;
- Reconfigure the marina berth layout in order to improve vessel navigation and access;
- Relinquish and remove 29 of the existing 44 swing moorings;
- Discontinue the slipway repair services and demolish and remove the slipway structures;

It is noted that in the western areas of Sydney Harbour, including the Parramatta River, over the last 20 or so years, many waterfront industrial sites have been converted to residential properties. Some of these properties were re-developed with non-commercial marinas in which the use of berths was restricted only to owners of residences within the properties. Some of these residential marinas remain highly under-utilised at a time when the wider community demand for on-water boat storage at commercial marinas far exceeds the available supply of berths.

Australian Marina Management Pty Limited (AMM) has been engaged to identify both current demand and anticipated future demand for marina berthing in Sydney Harbour's western waterways generally and at Gladesville Bridge Marina.

Accordingly this report provides an assessment of existing and anticipated future demand for marina berths in NSW and in Sydney in order to further demonstrate demand for marina berths at Gladesville Bridge Marina.

2. OVERVIEW OF SYDNEY HARBOUR ON-WATER BOAT STORAGE

Sydney Harbour has an array of attractive waterways which, since the early 1800s, have provided a suitable venue for a wide range of community recreational boating activities including cruising, sailing, fishing, rowing and canoeing.

With its many tributaries, coves and bays, small boatsheds with moorings were established in the 1950s to moor and service those vessels requiring on-water storage. In addition to these boatshed "marinas", in order to meet increasing demand for on-water boat storage, the NSW Government expanded its system of private mooring licences.

Further high demand for on-water boat storage in Sydney Harbour saw the licencing of private jetties to owners of waterfront properties and the leasing (or licencing) of waterway sites for purpose-built marinas such as commercial marinas, club marinas for yachting and boating, and more recently, private residential marinas.

In addition to demand for on-water boat storage by the Sydney community, with its immediate access to the Tasman Sea and Pacific Ocean, Sydney Harbour is also an attractive destination for visiting boat owners from regional NSW, other States and overseas.

Additionally, Sydney Harbour is the backdrop to many major events such as the internationally renowned Sydney to Hobart yacht race classic, the New Year's Eve fireworks displays, and the Sydney Ferry Race as part of the Sydney Festival. All of these and many other events add to the demand for on-water mooring and berthing of vessels in Sydney Harbour.

From a survey conducted by AMM in June 2019, the following Table A.1 is a summary of the total on-water boat storage currently in Sydney Harbour. It shows the total number of available marina berths as well as moorings associated with the facilities surveyed. The Summary includes NSW Government mooring licenses and is divided into west and east Sydney Harbour using Sydney Harbour Bridge as the dividing point.

TABLE A.1
SYDNEY HARBOUR ON-WATER BOAT STORAGE – JUNE 2019

TYPE OF FACILITY	WEST SYD HARBOUR BDGE			EAST SYD HARBOUR BDGE			TOTAL SYDNEY HARBOUR		
	FACILITIES	BERTHS	MOOR'S	FACILITIES	BERTHS	MOOR'S	FACILITIES	BERTHS	MOOR'S
COMMERCIAL MARINAS	13	651	129	14	728	372	27	1,379	501
CLUB MARINAS	1	0	0	5	437	122	6	437	122
RESIDENTIAL MARINAS	9	350	0	3	76	0	12	426	0
COMMERC'L BOATSHEDS	10	82	79	7	67	209	17	149	288
CHARTER VESSELS	2	29	0	1	10	0	3	39	0
TOTALS	35	1,112	208	30	1,318	703	65	2,430	911
NSW M'TIME MOORINGS			2,519			2,472			4,991
TOTAL STORAGE	35	1,112	2,727	30	1,318	3,175	65	2,430	5,902

Source: Sydney Harbour Boat Storage Survey – June 2019 – Australian Marina Management Pty Ltd

2. OVERVIEW OF SYDNEY HARBOUR ON-WATER BOAT STORAGE (CONTINUED)

For comparison, the following Table A.2, from a survey undertaken by AMM in June 2009, is a summary of the total on-water boat storage in Sydney Harbour - 10 years earlier.

TABLE A.2
SYDNEY HARBOUR ON-WATER BOAT STORAGE – JUNE 2009

TYPE OF FACILITY	WEST OF SYD HARBOUR BDGE			EAST OF SYD HARBOUR BDGE			TOTAL SYDNEY HARBOUR		
	FACILITIES	BERTHS	MOOR'S	FACILITIES	BERTHS	MOOR'S	FACILITIES	BERTHS	MOOR'S
COMMERCIAL MARINAS	14	630	176	14	574	602	28	1,204	778
CLUB MARINAS	1	0	6	4	396	105	5	396	111
RESIDENTIAL MARINAS	8	325	0	3	89	0	11	414	0
COMMERC'L BOATSHEDS	11	84	99	7	40	209	18	124	308
CHARTER VESSELS	3	28	0	2	14	0	5	42	0
TOTALS	37	1,067	281	30	1,113	916	67	2,180	1,197
NSW M'TIME MOORINGS			2,521			2,330			4,851
TOTAL STORAGE	37	1,067	2,802	30	1,113	3,246	67	2,180	6,048

Source: Sydney Harbour Boat Storage Survey – June 2009 – Australian Marina Management Pty Ltd

From June 2009 to June 2019 there has been the loss of two commercial marina facilities both of which were in the western section of Sydney Harbour. A new small commercial berthing facility was commenced on Cockatoo Island. The closure of the Blackwattle Bay mooring facility saw charter vessels move to other locations such as Jones Bay Wharves.

Of the facilities lost, the first, Woodley's Marina in Berrys Bay, was planned for redevelopment as a new 80-berth marina facility. In 2013, Roads and Maritime Services and Government Property NSW, who own the land and water on the western shore of Berrys Bay, entered into a contract with Pacifica Developments. The old 32-berth marina was removed but subsequently, the new 80-berth marina plan was scrapped in 2018 with Government resuming the area for tunneling projects.

The second facility, 25-berth River Quays Marina at Mortlake, was sold to Jemena (AGL) as a land-water inter-face for remediation works at Kendall Bay in Parramatta River adjacent to Breakfast Point. Plans for a new modern 60-berth marina facility will now not eventuate as on completion of its remediation works, Jemena will likely sell off its freehold land to residential property developers.

In the 10-year period, increases in available marina berth in Sydney Harbour have mainly been in the eastern area with some small marina berth expansion projects at Rose Bay, Point Piper, Clontarf and two of The Spit marinas accounting for most of the 150 additional berths – albeit at the loss of some 220 commercial swing moorings.

The loss of 55 marina berths at Berrys Bay and River Quays, Mortlake in the western section of Sydney Harbour has to some degree been offset by a small number of new berths at Sydney Boathouse, Birkenhead Point Marina, Woolwich Marina and Cockatoo Island.

2. OVERVIEW OF SYDNEY HARBOUR ON-WATER BOAT STORAGE (CONTINUED)

Condensing the survey tables in A.1 and A.2 above, the following Table A.3 shows a comparative summary of the total on-water boat storage in Sydney Harbour at June 2009 and June 2019.

TABLE A.3

COMPARATIVE SUMMARY OF SYDNEY HARBOUR ON-WATER BOAT STORAGE

On-Water Storage	SURVEY - JUNE 2009			SURVEY - JUNE 2019		
	West Syd	East Syd	Total 2009	West Syd	East Syd	Total 2019
Marina Berths	1,067	1,113	2,180	1,112	1,318	2,430
Commercial Moorings	281	916	1,197	208	703	911
Maritime Moorings	2,521	2,330	4,851	2,519	2,472	4,991
Totals	**3,869**	**4,359**	**8,228**	**3,839**	**4,493**	**8,332**

Table A.3 clearly shows that, in the 10 years from 2009 to 2019, there has been a net loss in boat storage capacity in the western areas of Sydney Harbour in which Gladesville Bridge Marina is located. The 10-year growth of only 45 marina berths was offset by the loss of 73 commercial moorings whilst, as a result of limits on mooring numbers and sites, there was no growth in Maritime mooring licenses.

The 10-year growth in marina berths in the eastern areas of Sydney Harbour was 205. This was offset by the loss of 215 moorings some of which were relinquished in exchange for new marina berths similar to part of the proposed changes at Gladesville Bridge Marina.

From Table A.1 however, it is noted that, in 2019, of the 1,112 berths included in the west Sydney facilities there are nine (9) residential marinas which have a total of 350 marina berths representing 32% of the total number of western Sydney marina berths. These berths however are restricted private residential marina berths and are not available to the wider community.

Additionally, in the west of Sydney facilities, there are 29 charter vessel berths – or 5% of the total available berths. These are not in commercial marina facilities and are also not available to the wider community.

Thus, available in west Sydney marinas, for use by the wider community, are just 733 available commercial berths representing only 66% of the total berths in the western Sydney areas.

Details of the western and eastern segments of the various sectors in the Sydney Harbour Boat Storage Survey – June 2019 are included in the Appendices attached at the end of this study.

2. OVERVIEW OF SYDNEY HARBOUR ON-WATER BOAT STORAGE (CONTINUED)

The following Table B is a summary of the total private swing mooring licenses issued by the NSW Government (Transport – Maritime) for Sydney Harbour at July 2019

TABLE B
SYDNEY HARBOUR BOAT STORAGE SURVEY
PRIVATE MOORING LICENCES
JULY 2019

Mooring Areas	**Locations** Bays	**Mooring Licences**	**Waiting Lists**
Sydney Harbour East (Area A)	10	926	154
Sydney Harbour East (Area B)	15	887	6
Sydney Harbour East (Area C)	13	659	397
Sydney Harbour West (Area D)	15	721	68
Sydney Harbour West (Area E)	19	985	31
Sydney Harbour West (Area F)	22	813	3
Total Moorings Sydney Harbour	94	4,991	659

Source: Survey of NSW Maritime Private Moorings – July 2019 – Australian Marina Management P/L

In addition to the 4,991 Government private mooring licences in Sydney Harbour, there are 659 licence applications currently on waiting lists. This represents 13% of issued mooring licences and strongly evidences the high demand for on-water boat storage in Sydney Harbour.

The following summary shows that there has been negligible growth in private mooring licences issued by NSW Transport (Maritime) for Sydney Harbour in the last fifteen years and virtually no growth at all in moorings in those areas west of Sydney Harbour Bridge.

Year	**Sydney Harbour Moorings** Total	Western Harbour
2004	4,862	2,498
2007	4,857	2,517
2009	4,851	2,521
2012	4,715	2,532
2019	4,991	2,519

Both marina berths and private moorings are discussed in more detail in the following sections of this study.

3. CURRENT SITUATION – WEST SYDNEY HARBOUR BOAT STORAGE

The following Tables C, D and E, respectively show summaries, at June 2019, of the berths and berth occupancies at the commercial, residential and boatshed marinas on both the southern shores and northern shores of Sydney Harbour to the west of Sydney Harbour Bridge.

TABLE C

COMMERCIAL MARINAS – WEST OF SYDNEY HARBOUR BRIDGE

NAME OF MARINA	LOCATION	BERTHS	OCC	OCC %
Sydney Wharf 10	Pyrmont Bay	25	22	88.0
Sydney Wharf 9	Pyrmont Bay	29	25	86.2
Jones Bay Wharf	Jones Bay	26	23	88.5
Waterview Wharf Workshop	Mort Bay	9	7	77.7
Sydney Superyacht Marina	Rozelle Bay	32	28	87.5
Sydney Boathouse Marina	Rozelle Bay	50	40	80.0
Balmain Marina	P'matta R. Balmain	33	30	90.9
Camerons Marina	P'matta R. Balmain	14	10	71.4
Birkenhead Point Marina	Iron Cove	201	167	83.1
Gladesville Bridge Marina	Five Dock Point	50	40	80.0
Cabarita Marina - Strata Berths)	Hen & Chicken Bay	72	57	79.2
d'Albora Marina Cabarita)		52	46	88.5
Woolwich Marina	P'matta R. Woolwich	38	36	94.7
Cockatoon Island Marina	P'matta R. Cockatoo I	20	14	70.0
TOTAL FOR 13 COMMERCIAL MARINAS		651	545	83.7

Source: Sydney Harbour Boat Storage Survey – June 2019 – Australian Marina Management Pty Ltd

The high level of demand for marina berths in the west Sydney area is clearly evident from the above Table. With mid-Winter occupancies averaging around 84%, the management of these marinas report that occupancy is seasonal with the highest level of demand in the spring and summer seasons in many cases to 100%.

Unlike the eastern areas of Sydney Harbour, there are no sailing nor boating club marinas in the west Sydney area.

Adding to the demand for marina berths west of Sydney Harbour has been the loss, explained earlier, of Woodleys Marina in Berrys Bay and River Quays Marina on Parramatta River at Mortlake. The 2009 proposal for the new 170-berth Inner West Sydney Marina at Breakfast Point did not proceed and the NSW Government's Homebush Bay Master Plan to include a 50-berth marina has not eventuated.

There has therefore been almost no increase in available commercial marina berths in the western areas of Sydney Harbour in the past ten years to meet the demand for such.

3. CURRENT SITUATION – WEST SYDNEY HARBOUR BOAT STORAGE (CONTINUED)

TABLE D
RESIDENTIAL/PRIVATE MARINAS - WEST OF SYDNEY HARBOUR BRIDGE

NAME OF PROPERTY	LOCATION	BERTHS	OCC	OCC %
Pier 6/7 Walsh Bay	Walsh Bay	49	22	44.9
Hopetoun Quays, Balmain	P'matta R. Balmain	38	24	63.2
Balmain Cove	Iron Cove	31	24	77.4
St Georges Cres	Drummoyne	12	7	58.3
Abbotsford Cove (2)	Abbotsford Bay	22	15	68.2
Cape Cabarita	France Bay	24	18	75.0
Hilly Street Mortlake	P'matta R. Mortlake	16	1	6.3
Pulpit Point	P'matta R. Pulpit Pt	116	52	44.8
Wondakiah, Wollstonecraft	Balls Head Bay	42	35	83.3
TOTAL FOR 9 RESIDENTIAL/PRIVATE MARINAS		350	198	56.6

Source: Sydney Harbour Boat Storage Survey – June 2019 – Australian Marina Management Pty Ltd

With the exception of the strata-berthed residential marina at Wollstonecraft, the occupancy of berths in residential private marinas in the west Sydney area is low.

As previously stated, these 350 private residential berths represent 31% of the total berths (1,132) available in the west Sydney area but, of these, only 198 are occupied. None of the vacant 152 marina berths however are available for use by vessel owners in the wider community.

The residential marina at Pulpit Point is a notable example of private berths at residential marinas being under-utilised with the vacant berths not being available to meet the strong demand for such from other boat owners in the community.

Pulpit Point residential marina, at Hunters Hill, on the Parramatta River, was built in the late 1980s. It was designed with 112 berths, with one berth attached to each of the 112 residences at Pulpit Point developed by the Londish Group as it was known.

Having regard to the current occupancy of Pulpit Point marina, and some of the other larger residential marinas, it is very clear that not all of the occupants of each and every residence desire to be boat owners.

In consequence, at Pulpit Point, there are sixty-four (64) vacant marina berths which have been vacant now for some 20 years and are not available to meet wider community demand.

3. CURRENT SITUATION – WEST SYDNEY HARBOUR BOAT STORAGE (CONTINUED)

TABLE E
COMMERCIAL BOATSHEDS - WEST OF SYDNEY HARBOUR BRIDGE

NAME OF BOATSHED	LOCATION	BERTHS	OCC	OCC %
Campbell Street Balmain	Mort Bay	12	10	83.3
Fountains Boatshed	Snails Bay	12	12	100.0
President Shipwright	P'matta R. D'moyne	4	4	100.0
Abbotsford Boatshed	P'matta Riv. Ab'ford	2	2	100.0
Waterview Rd Marine Centre	P'matta R. Putney	10	10	100.0
Woolwich Dock	Lane Cove R. W'wich	8	8	100.0
Stanard Marine	Berrys Bay	14	10	71.4
McMahons Point Boatshed	Lavender Bay	0	0	0.0
Lavender Bay Boatshed	Lavender Bay	0	0	0.0
Seawind Catamarans	Rozelle Bay	20	20	100.0
TOTAL FOR 10 BOATSHEDS		82	76	92.7

Source: Sydney Harbour Boat Storage Survey – June 2019 – Australian Marina Management Pty Ltd

The occupancy of marina berths at the west of Sydney commercial boatshed facilities listed above further demonstrates the high demand for on-water storage for recreational vessels. Predominantly these facilities are vessel service and repair facilities and the berth occupancies at them are at a peak during the sailing and boating season.

TABLE F
CHARTER VESSEL BERTHING - WEST OF SYDNEY HARBOUR BRIDGE

NAME OF MARINA	LOCATION	BERTHS	OCC	OCC %
King Street Wharf	Darling Harbour	7	7	100.0
Sydney Aquarium	Darling Harbour	8	8	100.0
TOTAL FOR 2 CHARTER FACILITIES		15	15	100.0

Source: Sydney Harbour Boat Storage Survey – June 2019 – Australian Marina Management Pty Ltd

The 14 charter vessel berthing facilities at Blackwattle Bay ceased to be available following NSW Government plans for the redevelopment of the Fish Market and Blackwattle Bay sites.

In early 2018, the NSW Government issued a tender for the development of a new charter vessel marina with 22 berths at Bank Street, Pyrmont. This proposed development has not commenced.

The Charter Vessel Association continually reports a shortage of suitable berthing facilities for charter vessels in Sydney Harbour thus generally adding to the demand for berthing at commercial marinas.

3. CURRENT SITUATION – WEST SYDNEY HARBOUR BOAT STORAGE (CONTINUED)

In the previous section 2, Table B showed that, at July 2019, NSW Transport (Maritime) has issued a total of 4,991 private mooring licences for Sydney Harbour waterways.

Of these mooring licences, 2,519 are for locations west of Sydney Harbour Bridge.

The total of private moorings issued by Government for the west of Sydney, in 2004, totalled 2,498 and underlines that there has been little or no growth in the issue of NSW Government private mooring licences for over 15 years.

With a ceiling having been set on the levels of moorings in Sydney Harbour generally, it is unlikely in the foreseeable future that there will be any increases in private mooring licences in the western sections of Sydney Harbour waterways.

Increased boat sales and registrations however will have created added demand for marina berths and moorings in these areas.

The current 'waiting list' of applicants for 102 mooring licences in the areas west of Sydney Harbour Bridge demonstrates ongoing strong and unsatisfied demand for on-water boat storage in west Sydney Harbour areas.

4. EXISTING DEMAND PATTERNS, TRENDS AND STATISTICS

Existing demand patterns, trends and statistical data have been examined and are now reported upon as follows:-

4.1 NSW Recreational Vessel Registrations
4.2 NSW Recreational Boat Licences
4.3 NSW Recreational Vessel Private Moorings
4.4 Vessel Ownership Demand – By Population
4.5 Boat Size Distribution and Trends

4.1 NSW Recreational Vessel Registrations

Statistics sourced from NSW Government's maritime recreational vessel registration data from 1983, 2003, 2009 and 2019 are set out in Table G and show the following patterns of demand for ownership of recreational vessels of all sizes in New South Wales. The numbers exclude personal watercraft.

TABLE G
NSW RECREATIONAL VESSEL REGISTRATIONS
BOAT SIZE DISTRIBUTION COMPARISONS
1983 - 2003 - 2009 - 2019

VESSEL SIZES (M)	NSW 1983	% SIZE DIST'N	NSW 2003	% SIZE DIST'N	NSW 2009	% SIZE DIST'N	NSW 2019	% SIZE DIST'N
0 -3.99	25,636	27.27	63,688	34.31	64,646	30.12	63,817	28.73
4 - 5.99	63,760	67.84	97,793	52.69	117,017	54.52	120,852	54.40
6 - 7.99	3,321	3.53	12,611	6.79	18,389	8.57	21,785	9.80
8 - 9.99	663	0.71	5,476	2.95	6,497	3.03	6,431	2.89
10 - 11.99	365	0.39	3,657	1.97	4,476	2.09	4,640	2.09
12 - 13.99	137	0.15	1,528	0.82	2,114	0.99	2,419	1.09
14 - 15.99	62	0.07	550	0.30	910	0.42	1,252	0.56
16 - 17.99	29	0.03	185	0.10	310	0.14	500	0.23
18 - 19.99	14	0.01	83	0.04	150	0.07	269	0.12
20M & >	5	0.00	53	0.03	105	0.05	202	0.09
TOTAL	93,992	100.00	185,624	100.00	214,614	100.00	222,167	100.00

NSW Transport (Maritime NSW) Recreational Vessel Registration Data 1983 - 2019
Australian Marina Management Pty Limited

The 20-year period 1983 – 2003 showed a very strong growth in demand for the ownership of vessels generally but particularly for vessels 10m in length and above. The growth in these size of vessels from 612 registered in 1983 to 6,056 registered in 2003 amounted to 5,444 vessels requiring on-water storage.

This was a period when new marinas were developed throughout the State and older marinas and yacht club marinas were expanded and modernised with floating marina berths replacing older fixed jetty type berths.

Clearly that period released much of the latent demand existing at that time for the ownership of larger vessels, as identified in various Department of Public Works studies undertaken in 1987.

4. EXISTING DEMAND PATTERNS, TRENDS AND STATISTICS (CONTINUED)

4.1 NSW Recreational Vessel Registrations (Continued)

Table G on page 16 clearly demonstrates the continuing growth in demand for ownership of vessels 10m and above in length.

From Table G, data has been extracted for those vessels 10.0m and above in length and summarised in Table H below. It is considered these are the sizes of vessels which predominantly drive the demand by boat owners for on-water boat storage preferably in marinas.

TABLE H
NSW RECREATIONAL VESSEL REGISTRATIONS
(10m and Above in Length)
1983 - 2003 – 2009 - 2019

VESSEL SIZES (M)	NSW 1983	% SIZE DIST'N	NSW 2003	% SIZE DIST'N	NSW 2009	% SIZE DIST'N	NSW 2019	% SIZE DIST'N
10 - 11.99	365	59.64	3,657	60.39	4,476	55.50	4,640	49.99
12 - 13.99	137	22.39	1,528	25.23	2,114	26.21	2,419	26.06
14 - 15.99	62	10.13	550	9.08	910	11.28	1,252	13.49
16 - 17.99	29	4.74	185	3.05	310	3.84	500	5.39
18 - 19.99	14	2.29	83	1.37	150	1.86	269	2.90
20M & >	5	0.82	53	0.88	105	1.30	202	2.18
TOTAL	612	100.00	6,056	100.00	8,065	100.00	9,282	100.00

NSW Transport (Maritime NSW) Recreational Vessel Registration Data 1983 - 2019
Australian Marina Management Pty Limited

From Table H, it is noted that, in the 10-year period to 2019, ownership of vessels **under 10m** grew in number from 206,549 in 2009 to 212,885 in 2019. This represents an increase of 6,366 vessels or a **growth of 3.06% on the 2009 year base**.

By contrast, in the same 10-year period, ownership of vessels **10m and above** grew in number from 8,065 in 2009 to 9,282 in 2019. This represents an increase of 1,217 vessels or a **growth of 15.08% on the 2009 year base**.

Table H further highlights the progressive trend for ownership of larger vessels. The following summary shows the growth in ownership of vessels 16m and above in length expressed as a percentage of the increasing number of total vessels 10.0m and above in length.

	2003	%	2009	%	2019	%
Vessels 10.0m – 15.99m	5,735	94.7	7,500	93.0	8,311	89.5
Vessels 16.0m and above	**321**	**5.3**	**565**	**7.0**	**971**	**10.5**
Total Vessels 10.0m and Above	6,056	100	8,065	100	9,282	100

This trend creates demand for larger sized marina berths and needs to be taken into consideration when determining the berth size distribution for any marina design, expansion or re-configuration.

4. EXISTING DEMAND PATTERNS, TRENDS AND STATISTICS (CONTINUED)

4.1 NSW Recreational Vessel Registrations (Continued)

From Table H, the following comparative summary, for various periods, shows the growth in the actual number of new vessels registered in NSW of 10.0m and above in length and resulting in increased demand for marina berths and on-water storage:-

PERIOD	GROWTH IN VESSELS	AVERAGE ANNUAL GROWTH
1983 – 2003	5,444 vessels	272 vessels per annum
1983 – 2009	7,453 vessels	287 vessels per annum
1983 – 2019	8,670 vessels	241 vessels per annum
2003 – 2009	2,009 vessels	335 vessels per annum
2003 – 2019	3,226 vessels	202 vessels per annum
2009 – 2019	1,217 vessels	122 vessels per annum

The rate of growth in new vessels in the period from 1983 to 2009 has not however continued in the last 10 to 15 years. This has partially been due to a reduction in growth of new marina berths, the limitations on private mooring licences, a range of planning constraints, the loss of existing facilities and a period of economic downturn.

These factors will have acted as a constraint to those desirous of purchasing vessels requiring on-water storage which in turn will add to an unfulfilled latent demand for boat ownership and marina berths.

From surveys undertaken in 2009 and 2019, extracts from Tables A.1, A.2 and A.3, in section 2, the following Table I shows the 10-year comparison in the number of available commercial marina berths in Sydney Harbour, including those at 'members-only' yacht clubs. For further comparison the number of mooring licences is also shown.

TABLE I
COMMERCIAL & CLUB MARINA BERTHS AND PRIVATE MOORING LICENCES
SYDNEY HARBOUR – 2009 & 2019

TYPE OF FACILITY	WEST SYD HARBOUR BDGE			EAST SYD HARBOUR BDGE			TOTAL SYDNEY HARBOUR		
	2009	2019	VARIANCE	2009	2019	VARIANCE	2009	2019	VARIANCE
COMMERCIAL MARINAS	630	651	21	574	728	154	1,204	1,379	169
CLUB MARINAS	0	0	0	396	437	41	396	437	41
TOTAL STORAGE	630	651	21	970	1,165	195	1,600	1,816	216
MOORINGS	2,521	2,519	(- 2)	2,330	2,472	142	4,851	4,991	140

In the 10-year period to 2019, there has only been a net increase of 216 marina berths in Sydney of which 195 are located east of the Sydney Harbour Bridge and 21 located in the western part of the Harbour.

4. EXISTING DEMAND PATTERNS, TRENDS AND STATISTICS (CONTINUED)

4.1 NSW Recreational Vessel Registrations (Continued)

From NSW Government data, recreational vessel registrations, for NSW and the Sydney Harbour sector, show the following patterns of growth. The numbers exclude personal watercraft.

NSW Recreational Vessel Registrations

Year	Total NSW	Sydney Harbour	NSW Registered Vessels 10.0m and Above
2003	185,624	16,011	6,056
2009	214,614	17,144	8,065
2019	222,167	17,571	9,282
Average Growth Per Annum			
2003 – 2019	+ 1.23%	+ 0.61%	+ 3.29% (Higher Median)
2009 – 2019	+ 0.35%	+ 0.25%	+ 1.51% (Lower Median)

In the 16 years from 2003 to 2019 the average annual increase in total NSW vessel registrations of 1.23% evidences the continuing long-term demand for recreational boat ownership.

Of more relevance to this study is the strong demand evidenced for ownership of vessels 10.0m and above in length. In the same 16-year period, from 2003 to 2019, the average annual increase for ownership of these vessels was 3.29%.

An examination of the above summary of vessel registrations raises the question as to why the annual growth in vessel registrations for the Sydney Harbour sector has been consistently lower than that for all of NSW and markedly lower than the annual growth in actual vessel registrations for vessels 10.0m and above in length.

The most likely reason is that, 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 as is shown in Table I above.

The vessel registration data for the Sydney Harbour sector makes it clearly evident that the scarcity of marina berths in Sydney Harbour has acted as a heavy constraint to growth in boat ownership when compared to the total growth for the State.

It is already evident, from the survey of NSW Maritime private moorings, discussed earlier, that there is an actual known demand for on-water boat storage for 659 vessels in Sydney Harbour.

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 in Sydney arising from those in the community who have refrained from purchasing vessels due to the lack of suitable and modern on-water vessel storage facilities in Sydney Harbour.

4. EXISTING DEMAND PATTERNS, TRENDS AND STATISTICS (CONTINUED)

4.1 NSW Recreational Vessel Registrations (Continued)

In order to quantify the potential latent demand in Sydney Harbour, the following summary shows the expected level of registered vessels at June 2019 for the Sydney Harbour sector by applying the actual NSW average per annum growth rates (Higher and Lower Medians) of registrations for vessels 10.0m and above in length to the 2009 base of Registered Vessels - Sydney Harbour sector - June 2009, being 17,144 vessels.

	Lower Median 1.51% pa	Higher Median 3.29% pa
Registered Vessels - Sydney Harbour sector - June 2009	17,144	17,144
Applying 10-year growth rate 2009-2019	2,589	5,640
Notional Registered Vessels – Sydney Harbour – June 2019	19,733	22,784
Actual Registered Vessels – Sydney Harbour sector – June 2019	17,571	17,571
Potential Latent Demand – Registered Vessels - Sydney Harbour	**2,162**	**5,213**

From Table G on page 16, it is calculated that of the 222,167 total NSW registered vessels at 2019, 9,282 of these (4.18%) are 10m and above in length.

By applying the rate of 4.18% to the total Sydney Harbour sector potential latent demand figures shown above, it is calculated that the potential latent demand for ownership of vessels in the Sydney Harbour sector, of a size 10.0m and above in length, is in the following range:

	Lower Median	Higher Median
Potential Latent Demand – Vessels - Sydney Harbour Sector – 10.0m >	**91**	**218**

4. EXISTING DEMAND PATTERNS, TRENDS AND STATISTICS (CONTINUED)

4.2 NSW Recreational Boat Licences

Statistics from NSW Transport (Maritme), as set out below, show the demand for recreational boat licences in New South Wales and for the Sydney Harbour sector. Licences held by Victorian residents have been excluded from the statistics as have licences for personal water craft (PWCs) such as wave-runners and jet-skis.

Year	NSW Licences	NSW Growth	Sydney Hbr Licences	Sydney Hbr Growth
2008	394,369		36,308	
2013	436,660	+10.72%	39,824	+ 9.68%
2018	453,603	+ 3.88%	43,964	+10.40%
Average Annual Growth – 10 years		+ 1.50%		+ 2.11%

It is noted from the above summary that the growth in boat licences for the Sydney Harbour sector over the 10 years to June 2018 has been higher than for the State. Since 2013, NSW licences have shown a relatively low average annual growth rate of 0.78%. In the same period Sydney Harbour licences have had a higher average annual growth rate of 2.08%.

With the growth in recreational boat licences in Sydney Harbour being higher than that for NSW as a whole, it would be reasonable to expect that the growth in vessel registrations for Sydney Harbour would also be stronger than that for NSW.

The summary in section 4.1 however shows that Sydney Harbour vessel registration growth is lower than for NSW. This evidences the likelihood of a strong latent demand for boat ownership in Sydney Harbour sector unable to be fulfilled due to the considerable lack of available marina berths and on-water storage in Sydney Harbour

To understand and quantify the potential latent demand for boat ownership in the Sydney Harbour sector, it is relevant to examine the ratios of recreational boat registrations to boat licences. For consistency, registrations and licences for personal water craft (PWCs) have been excluded.

NSW Ratio of Boat Registrations to Boat Licences:

Year	NSW Registrations	NSW Licences	Vessels per 100 Licences
2008	217,183	394,369	55.07
2013	228,616	436,660	52.35
2018	237,660	453,603	52.39

4. EXISTING DEMAND PATTERNS, TRENDS AND STATISTICS (CONTINUED)

4.2 NSW Recreational Boat Licences (Continued)

The number of registered recreational vessels per 100 recreational boat licences for NSW has shown a consistent pattern clearly demonstrating a steady demand for boat ownership. As a consequence the consistent growth in vessel registrations and licences will generate growth in demand for marina berths.

The same ratios are now examined for the Sydney Harbour sector.

Sydney Harbour Ratio of Boat Registrations to Boat Licences:

Year	Registrations	Licences	Vessels per 100 Licences
2008	17,043	36,308	46.95
2013	17,375	39,824	43.63
2018	17,424	43,964	39.63

As can be seen from the above summaries the ratio of registered vessels to boat licences is much lower for the Sydney Harbour sector than for NSW overall. It is also noted that, for Sydney Harbour, since 2008, there has been a small but consistent decline in boat ownership per 100 licences. This supports the view that a strong latent demand likely exists for ownership of vessels requiring berths in Sydney Harbour but the demand cannot be fulfilled due to the lack of on-water storage.

If the NSW ratio of vessel registrations per 100 licences at June 2018 (52.39) is applied to the June 2018 Sydney Harbour licences (43,964) then, at June 2018, the number of vessels registered for the Sydney Harbour area could be expected to be 23,030 (52.39 x 439.6). This is 5,606 vessels more than the 17,424 Sydney Harbour vessels actually registered at June 2018.

This lower than total NSW ratios of boat ownership to licences indicates a likely strong latent demand in the Sydney Harbour area for boat ownership of all sizes of some 5,600 vessels.

From the earlier Table G on page 16 it is noted that, at 30th June 2019 there are 9,282 vessels registered in NSW which are 10m and above in length. This number of vessels, which require on-water storage, represents 4.18% of the total 222,167 NSW recreational vessel registrations at June 2019.

It is reasonable to apply this 4.18% ratio of vessels, 10m and above in length, to the foregoing estimated total latent demand for boat ownership in Sydney Harbour of some 5,600 vessels.

Accordingly, based on registered vessels per 100 licences method, it is calculated that there is a likely latent demand at June 2019, for marina berths in Sydney Harbour to accommodate an additional 234 vessels.

The proposed additional berths at Gladesville Bridge Marina will thus help meet some of this demand.

4. EXISTING DEMAND PATTERNS, TRENDS AND STATISTICS (CONTINUED)

4.3 NSW Recreational Vessel Private Moorings:

The following summary of Transport NSW (Maritime) data is presented to show the situation with regards to private swing mooring licences issued by the authority at each year.

Year	NSW Moorings	Sydney Hbr Moorings
2004	15,000	4,862
2009	15,777	4,851
2019	17,096	4,991

As evidenced from the above summary, in the fifteen years from 2004 to 2019, there has been a relatively small growth in new private moorings licences issued throughout the State. This has partially been due to Maritime policy in some areas. The additional moorings that have been released have mainly been in The Hunter, North Coast and South Coast regions.

As can be seen from the statistics for Sydney Harbour above, private moorings since 2004 have remained relatively static. Maritime has had a ceiling on the levels of private mooring licences in some Sydney Harbour areas and it is unlikely in the foreseeable future that there will be any increases in these.

Mooring licences for Sydney Harbour have clearly not kept pace with the growth in boat registrations thus increasing the demand for marina berth storage.

In section 2 of this study Table B sets out the NSW Maritime private mooring licences issued for west of Sydney Harbour Bridge with the corresponding applications for moorings on the waiting lists.

Detailed surveys of Maritime mooring licences for Sydney Harbour were conducted by Australian Marina Management Pty Limited at 30th June 2009 and 31st July 2019.

The following Table J, extracted from these surveys, shows a comparison of the private mooring situation for the waterways west of Sydney Harbour Bridge.

TABLE J
NSW MARITIME - PRIVATE MOORINGS
WEST OF SYDNEY HARBOUR BRIDGE

SURVEY DATE	LICENCES ISSUED	WAITING LIST	% OF ISSUED LICENCES
30th June 2009	2,512	286	11.38
31st July 2019	2,519	102	4.05

4. EXISTING DEMAND PATTERNS, TRENDS AND STATISTICS (CONTINUED)

4.3 NSW Recreational Vessel Private Moorings (Continued):

The summaries set out earlier in this section show that, whilst there has been some growth in the number of NSW Government private moorings issued in the last 10 years, the number of private moorings in Sydney Harbour overall has shown little increase whilst moorings west of Sydney Harbour Bridge have remained static.

Table J above shows that the waiting list for private moorings in the west Sydney area has dropped from 286 at June 2009 to 102 at July 2019. The fact that there has not been any increase in available moorings in the west Sydney Harbour areas in 10 years would likely act as a deterrent to some intending applicants whose prospects of obtaining moorings in the near future are highly unlikely. Other applicants have likely withdrawn their applications in frustration.

In addition to the 102 applicants on the waiting lists for moorings in the west Sydney areas, there Is thus likely also to be a substantial latent demand for moorings in the areas.

This likely latent demand can be clearly evidenced by comparing the west Sydney Harbour moorings situation with that for the east Sydney Harbour moorings. The following comparison is taken from the survey data contained earlier in Table B on page 11.

	WEST SYDNEY HARBOUR	EAST SYDNEY HARBOUR	TOTAL SYDNEY HARBOUR
Private Mooring Licences – July 2019	2,519	2,472	4,991
Priority Waiting Lists – July 2019	102	557	659
Waiting List % to Issued Licences	4.05%	22.53%	13.20%

Considering that the number of issued licences are spread equally between the western and eastern zones it is arguable that a latent demand could exist for some 450 moorings in the west Sydney Harbour areas.

Owners of larger vessels have a considerable investment in them. Members of the Marina Association of NSW report that these owners are generally not prepared to moor their vessels on a swing mooring whether it is a commercial or private mooring. There is the constant risk of damage from other vessels breaking free from moorings as well as from theft and vandalism. There is also a strong safety factor to be considered when accessing larger vessels from dinghies in adverse weather conditions.

Clearly the strongest demand is for berthing at a modern marina berth which provides owners with security and protection as well as safety for persons in accessing vessels.

The proposed increase in marina berths at Gladesville Bridge Marina therefore offers opportunity to satisfy the evident demand of boat owners for on-water storage in the west Sydney waterways.

4. EXISTING DEMAND PATTERNS, TRENDS AND STATISTICS (CONTINUED)

4.4 NSW Vessel Ownership Demand by Population

The following summary demonstrates the demand pattern of the population of NSW for the ownership of recreational vessels of a size 10.0m in length and above.

The NSW total population numbers, as sourced from the Australian Bureau of Statistics, are compared with the NSW recreational vessel registrations of a size 10.0m in length and above as shown in Table H on page 17.

	NSW Total Population	Registered Vessels 10.0m and Longer	Number of Vessels 10.0m+ Per 100,000 Population
1983	**5,373,800**	**612**	**11.38**
2003	**6,716,300**	**6,056**	**90.17**
2009	**7,191,500**	**8,065**	**112.15**
2019	**8,068,100**	**9,282**	**115.05**

There is clearly a continuing growth in demand in NSW for ownership of vessels of the size which require on-water storage thus driving the demand for suitably sized marina berths.

The population of the Greater Sydney Region at 2018 was estimated by Australian Bureau of Statistics at 5,230,330 with a growth rate of 1.8% over 2017. If an increase of 1.5% is applied to the year to June 2019 then the Greater Sydney population can be reasonably estimated to be 5,308,780 at June 2019.

From Australian Bureau of Statistics data the population of the Greater Sydney Region at June 2009 was estimated at 4,500,000.

Applying the above actual ratios of NSW recreational vessel ownership to 100,000 of population (115.05) to the Greater Sydney population, the following summary shows the expected demand from the Greater Sydney Region for ownership of recreational vessels of a size 10.0m in length and above.

	Greater Sydney Population	Number of Vessels 10.0m+ Per 100,000 Population	Expected Demand For Vessel Ownerhip 10m >
2009	**4,500,000**	**112.15**	**5,047**
2019	**5,308,780**	**115.05**	**6,108**

The expected level of vessel ownership by residents in the Greater Sydney Region will continue to strongly drive demand for suitably sized marina berths and moorings in Sydney Harbour.

The above summaries evidence the continuing growth in demand for the ownership of recreational vessels of a size 10.0m in length and above.

4. EXISTING DEMAND PATTERNS, TRENDS AND STATISTICS (CONTINUED)

4.5 NSW Boat Size Distribution and Trends:

Table G is brought forward from section 4.1 for further discussion.

TABLE G

NSW RECREATIONAL VESSEL REGISTRATIONS
BOAT SIZE DISTRIBUTION COMPARISONS
1983 - 2003 - 2009 - 2019

VESSEL SIZES (M)	NSW 1983	% SIZE DIST'N	NSW 2003	% SIZE DIST'N	NSW 2009	% SIZE DIST'N	NSW 2019	% SIZE DIST'N
0 -3.99	25,636	27.27	63,688	34.31	64,646	30.12	63,817	28.73
4 - 5.99	63,760	67.84	97,793	52.69	117,017	54.52	120,852	54.40
6 - 7.99	3,321	3.53	12,611	6.79	18,389	8.57	21,785	9.80
8 - 9.99	663	0.71	5,476	2.95	6,497	3.03	6,431	2.89
10 - 11.99	365	0.39	3,657	1.97	4,476	2.09	4,640	2.09
12 - 13.99	137	0.15	1,528	0.82	2,114	0.99	2,419	1.09
14 - 15.99	62	0.07	550	0.30	910	0.42	1,252	0.56
16 - 17.99	29	0.03	185	0.10	310	0.14	500	0.23
18 - 19.99	14	0.01	83	0.04	150	0.07	269	0.12
20M & >	5	0.00	53	0.03	105	0.05	202	0.09
TOTAL	93,992	100.00	185,624	100.00	214,614	100.00	222,167	100.00

NSW Transport (Maritime NSW) Recreational Vessel Registration Data 1983 - 2019

Australian Marina Management Pty Limited

Marina Industry operatives generally report that it is the owners of vessels of a length of 10m and above who create the demand for marina berth storage for their vessels.

Table G clearly shows the enormous growth in 36 years in the number of vessels requiring on-water storage and marina berthing.

At June 1983 there were 612 registered vessels of a length of 10m and above. This represented 0.65% of the total 93,992 NSW recreational vessel registrations.

By June 2003, twenty years later, registered vessels 10m and above in length had grown to a total of 6,056 vessels representing 3.26% of the total 185,624 NSW recreational vessel registrations.

By June 2019, a further 16 years later, registered vessels 10m and above in length had grown to a total of 9,282 vessels representing 4.18% of the total 222,167 NSW recreational vessel registrations.

Numerically, in the 36-year period from 1983 to 2019, in NSW, there has been an increase in the ownership of boats, 10.0m and above in length, of 8,670 vessels with the consequent increase in the demand for modern marina berths and boat storage facilities.

As stated earlier in this study, marina industry operatives have reported that owners of larger vessels do not wish to locate their vessels on swing moorings. They consider swing moorings a risk environment and expect, in the twenty-first century, to have their vessels moored at a modern and secure marina berth with safer and more appropriately managed access.

4. EXISTING DEMAND PATTERNS, TRENDS AND STATISTICS (CONTINUED)

4.5 NSW Boat Size Distribution and Trends (Continued):

The 36-year comparative summary in Table G above shows the trends in boat size ownership demand for various periods from 1983 to 2019.

Of importance to planners is the clear trend shown by Table G in the demand for ownership of larger vessels.

In this 36-year period from 1983 to 2019 the following trends are noted from Table G:

- Vessels in the size range 16m and above in 1983 (48) represented 3.11% of the total of vessels above 10m in length
- By 2003, vessels in the size range 16m and above (321) represented 5.30% of the total of vessels above 10m in length
- Six years later, in 2009, vessels 16m and above (565) represented 7.00% of the total of vessels above 10m in length
- At 2019, vessels in the size range 16m and above (971) represented 10.47% of the total of vessels above 10m in length

There has been a corresponding reduction in the demand for ownership of vessels in the size range under 12m in length whilst demand for ownership of vessels in the size range 12m to 15.99m has been reasonably steady.

Clearly the proposed berths for larger sized vessels at Gladesville Bridge Marina are in line with the demand pattern evidenced above.

5. ANTICIPATED DEMAND PROJECTIONS 2025, 2030 & 2040

The following Tables show the anticipated future projections for ownership of vessels in NSW of a length 10m and above being the size of vessels which drive the demand for marina berths. The anticipated demand projections have been calculated to show the growth from three bases:-

- The ten-year period 2009 to 2019 (Short Term Base);
- The sixteen-year period 2003 to 2019 (Medium Term Base); and
- The thirty-six year period 1983 to 2019 (Long Term Base).

From these three bases the anticipated future vessel ownership in NSW for the years 2025, 2030 and 2040 has been calculated using the average growth factor arising from each base.

Table K below has been based upon the 10-year growth pattern from 2009 to 2019.

Referencing the summary of NSW Vessel Registrations in section 4.1 it is noted that the average annual rate of growth in new vessel registrations has declined in the last ten years compared to the previous ten-year period. This is an important factor in adopting the 10-year base as the lower median for forecasting future growth.

TABLE K

SHORT TERM- 2009 BASE USING AVERAGE 10-YEAR GROWTH PATTERN TO 2019

Vessel Sizes (m)	Vessels 2009	Vessels 2019	10-Year Growth	% Growth P/Annum	Anticipated Vessel Ownership		
					2025	2030	2040
10 - 11.99	4,476	4,640	164	0.37%	4,741	4,824	4,989
12 - 13.99	2,114	2,419	305	1.44%	2,601	2,753	3,058
14 - 15.99	910	1,252	342	3.76%	1,454	1,624	1,964
16 - 17.99	310	500	190	6.13%	614	709	899
18 - 19.99	150	269	119	7.93%	342	402	522
20m & >	105	202	97	9.24%	260	309	406
TOTAL	8,065	9,282	1,217		10,012	10,621	11,838

The above Table shows that, using the short term basis, the predicted growth in the ownership of new vessels in NSW of a size 10m and above in length will average 122 per year. The table also highlights however that there is a much higher rate of growth in ownership of larger size vessels of 16m and above in length compared to those in the 10.0 – 15.99m range. This is highlighted by the following comparison:-

Vessel Size Range	Vessels 2019	Vessels 2040	Growth Number	Growth %
10.0m -15.99m	8,311	10,011	1,700	20.45
16.00m >	971	1,827	856	88.16
TOTAL	9,282	11,838	2,556	

5. ANTICIPATED DEMAND PROJECTIONS (CONTINUED)

Table L below has been based on a more "medium" term of growth for the six years 2003 to 2009 in which (as can be calculated from the summary in section 4.1) the average annual growth rate in new vessels registrations was 2.73%.

TABLE L

MEDIUM TERM - 2003 BASE USING AVERAGE 16-YEAR GROWTH PATTERN TO 2019

Vessel Sizes (m)	Vessels 2003	Vessels 2019	16-Year Growth	% Growth P/Annum	Anticipated Vessel Ownership		
					2025	2030	2040
10 - 11.99	3,657	4,640	983	1.68%	5,009	5,316	5,931
12 - 13.99	1,528	2,419	891	3.64%	2,753	3,032	3,589
14 - 15.99	550	1,252	702	7.98%	1,515	1,735	2,173
16 - 17.99	185	500	315	10.64%	618	717	911
18 - 19.99	83	269	186	14.00%	339	397	513
20m & >	53	202	149	17.57%	258	305	398
TOTAL	6,056	9,282	3,226		10,492	11,502	13,515

The above Table shows that using this "medium" term basis, the growth in new vessels of a size 10m and above in length averages 201 vessels per year. The Table again highlights the strong demand for ownership of vessels in the size range 16m and above in length.

The following Table M has been calculated using the long-term thirty-six (36) year growth statistics from 1983 to 2019.

TABLE M

LONG TERM - 1983 BASE USING AVERAGE 36-YEAR GROWTH PATTERN TO 2019

Vessel Sizes (m)	Vessels 1983	Vessels 2019	36-Year Growth	% Growth P/Annum	Anticipated Vessel Ownership		
					2025	2030	2040
10 - 11.99	365	4,640	4,275	32.53%	5,352	5,946	7,134
12 - 13.99	137	2,419	2,282	46.27%	2,799	3,144	3,750
14 - 15.99	62	1,252	1,190	53.32%	1,448	1,613	1,943
16 - 17.99	29	500	471	45.11%	578	644	775
18 - 19.99	14	269	255	50.60%	308	343	413
20m & >	5	202	197	109.44%	236	263	319
TOTAL	612	9,282	8,670		10,721	11,953	14,334

5. ANTICIPATED DEMAND PROJECTIONS (CONTINUED)

Table M on the previous page shows that using the "long-term" term basis, the predicted growth in new vessels of a size 10m and above in length averages 240 vessels per year. The predicted demand using this "long-term" base is not dissimilar to the predicted demand using the "medium-term" base.

Table N below now summarises the predicted levels of boat ownership of vessels 10m and above in length at 2025, 2030 and 2040 using all three methods discussed above.

TABLE N

GROWTH PATTERNS AND ANTICIPATED OWNERSHIP

SUMMARY OF PROJECTIONS BASED ON SHORT, MEDIUM & LONG TERM BASES

Vessel	Actual	Anticipated Vessels - Year 2025			Anticipated Vessels - Year 2030			Anticipated Vessels - Year 2040		
Sizes (m)	2019	Short Term	Med Term	Long Term	Short Term	Med Term	Long Term	Short Term	Med Term	Long Term
10 - 11.99	4,640	4,741	5,009	5,352	4,824	5,316	5,946	4,989	5,931	7,134
12 - 13.99	2,419	2,601	2,753	2,799	2,753	3,032	3,144	3,058	3,589	3,750
14 - 15.99	1,252	1,454	1,515	1,448	1,624	1,735	1,613	1,964	2,173	1,943
16 - 17.99	500	614	618	578	709	717	644	899	911	775
18 - 19.99	269	342	339	308	402	397	343	522	513	413
20m & >	202	260	258	236	309	305	263	406	398	319
TOTAL	9,282	10,012	10,492	10,721	10,621	11,502	11,953	11,838	13,515	14,334

The foregoing Table clearly evidences the continuing strong demand for ownership of vessels of the size which require on-water storage including modern marina berthing with associated service facilities.

It is considered reasonable that a prediction of boat ownership, based on an average of the "short-term" and "medium-term" forecasts in Table N, would be achievable subject to:

- availability of modern marina berths and on-water boat storage facilities
- a stable economy
- no unforeseen events which could adversely affect boating or boat ownership

5. ANTICIPATED DEMAND PROJECTIONS (CONTINUED)

Based on the forecast growth and on the above assumptions, the demand for boat ownership in NSW of vessels 10m and above in length could be expected to achieve the following levels of registered recreational vessels in 2025, 2030 and 2040:-

	Actual		Forecasts	
Vessel Size	2019	2025	2030	2040
10.0m – 11.99m	4,640	4,875	5,070	5,460
12.0m – 13.99m	2,419	2,677	2,892	3,323
14.0m – 15.99m	1,252	1,484	1,679	2,068
16.0m – 17.99m	500	616	713	905
18.0m – 19.99m	269	340	400	518
20m & above	202	259	307	402
Total Vessels	9,282	10, 251	11,061	12,676

The foregoing predictions reflect a continuing strong demand for the ownership of vessels of a size which in turn will continue to drive a strong demand for modern marina berthing.

Of relevance to the size of the proposed new berths at Gladesville Bridge Marina is the trend for ownership of vessels 16.0m in length and above. The above forecasts, based on current ratios of ownership by size, have been collated into two size ranges with the 2040 forecasts compared with the actual number of registered vessels in 2019.

The following comparative summary shows the demand for ownership of vessels 16.0m in length and above is extremely strong.

Vessel Size	Actual 2019	Forecasts 2040	Increase Vessels	Increase %
10.0m – 15.99m	8,311	10,851	2,540	30.56%
16.0m – 20m & above	971	1,825	854	87.95%

As stated previously, the proposed berths for larger sized vessels at Gladesville Bridge Marina are in line with the demand pattern evidenced above.

6. CONCLUSION

This study clearly demonstrates there is actual and potential unfulfilled demand for marina berths and other on-water boat storage in Sydney Harbour as follows:

- Number of applications on Waiting List for Sydney Harbour moorings (July 2019) including 102 for west Sydney Harbour: **659**

- Calculated latent demand based on ratio of NSW registrations To Sydney Harbour sector registrations: **91 (low) 218 (high)**

- Calculated latent demand based on ratio of registered vessels per 100 Sydney Harbour licences: **234**

The proposed additional berths at Gladesville Bridge Marina will be able to satisfy some of the existing unfulfilled demand for modern berthing of recreational vessels in Sydney Harbour.

In addition, the proposed new berths for larger sized vessels at Gladesville Bridge Marina are in line with the demand patterns evidenced in this study.

APPENDIX 1

SURVEY AT JUNE 2019

COMMERCIAL MARINAS - EAST OF SYDNEY HARBOUR BRIDGE

NAME OF MARINA	LOCATION	BERTHS	OCC	OCC %	MOOR'S
Rose Bay Marina	Rose Bay	60	43	71.7	20
Point Piper Marina	Rose Bay	50	41	82.0	20
Double Bay Marina	Double Bay	45	42	93.3	25
d"Albora Marina	Rushcutters Bay	95	80	84.2	0
Elizabeth Bay Marina	Elizabeth Bay	16	12	75.0	20
Neutral Bay Marina	Neutral Bay	12	10	70.0	5
Mosman Bay Marina	Mosman Bay	36	35	83.3	40
Short Marine (Fergusons)	The Spit	52	52	100.0	0
d'Albora Marina - Mosman	The Spit	160	128	80.0	60
Cammeray Marina	Long Bay	24	24	100.0	60
Northbridge Marina	Sailors Bay	26	26	100.0	60
Roseville Bridge Marina	Echo Point	62	62	100.0	0
Clontarf Marina	The Spit	60	58	96.7	12
Davis Marina	North Harbour	30	28	93.3	50
TOTAL FOR 14 COMMERCIAL MARINAS		728	641	88.0	372

COMMERCIAL MARINAS - WEST OF SYDNEY HARBOUR BRIDGE

NAME OF MARINA	LOCATION	BERTHS	OCC	OCC %	MOOR'S
Sydney Wharf 10	Pyrmont Bay	25	22	88.0	
Sydney Wharf 9	Pyrmont Bay	29	25	86.2	0
Jones Bay Wharf	Jones Bay	26	23	88.5	0
Waterview Wharf Workshop	Mort Bay	9	7	77.7	0
Rozelle Superyacht Marina	Rozelle Bay	32	28	87.5	
Sydney Boathouse Marina	Rozelle Bay	50	40	80.0	
Balmain Marina	P'matta R. Balmain	33	30	90.9	27
Camerons Marina	P'matta R. Balmain	14	10	71.4	18
Birkenhead Point Marina	Iron Cove	201	167	83.1	
Gladesville Bridge Marina	Five Dock Point	50	40	80.0	44
Cabarita Marina - Strata Berths)	Hen & Chicken Bay	72	57	79.2	
d'Albora Marina Cabarita)		52	46	88.5	
River Quays Marina	Mortlake	0	0	0.0	20
Woolwich Marina	Woolwich	38	36	94.7	20
Cockatoo Island Marina	Cockatoo I	20	14	70.0	
TOTAL FOR 13 COMMERCIAL MARINAS		651	545	83.7	129

	BERTHS	OCC	OCC %	MOOR'S
MARINAS - EAST OF SYDNEY HARBOUR BRIDGE - 14	728	641	88.0	372
MARINAS - WEST OF SYDNEY HARBOUR BRIDGE - 13	651	545	83.7	129
COMMERCIAL MARINAS SYDNEY HARBOUR - 27	1,379	1,186	86.0	501

Source: Sydney Harbour Boat Storage Survey – June 2019 – Australian Marina Management Pty Ltd

APPENDIX 2

SURVEY AT JUNE 2019

CLUB MARINAS - EAST OF SYDNEY HARBOUR BRIDGE

NAME OF CLUB	LOCATION	BERTHS	OCC	OCC %	MOOR'S
Royal Motor Yacht Club	Rose Bay	100	92	92.0	10
Cruising Yacht Club of Australia	Rushcutters Bay	214	200	93.5	3
Royal Sydney Yacht Squadron	Kirribilli	11	11	100.0	57
Middle Harbour Yacht Club	Parriwi Head	102	98	96.1	12
RANSA	Rushcutters Bay	10	8	80.0	40
TOTAL FOR 5 CLUB MARINAS		437	409	93.6	122

CLUB MARINAS - WEST OF SYDNEY HARBOUR BRIDGE

NAME OF CLUB	LOCATION	BERTHS	OCC	OCC %	MOOR'S
Drummoyne Sailing Club	P'matta R. D'moyne	0	0	0.0	0
TOTAL FOR 1 CLUB MARINA		0	0	0.0	0

SUMMARY

	BERTHS	OCC	OCC %	MOOR'S
CLUB MARINAS - EAST OF SYD. HARB. BRIDGE - 5	437	409	93.6	122
CLUB MARINAS - WEST OF SYD. HARB. BRIDGE - 1	0	0	0.0	0
TOTAL CLUB MARINAS SYDNEY HARBOURR - 6	437	409	93.6	122

Source: Sydney Harbour Boat Storage Survey – June 2019 – Australian Marina Management Pty Ltd

APPENDIX 3

SURVEY AT JUNE 2019

RESIDENTIAL/PRIVATE MARINAS - EAST OF SYDNEY HARBOUR BRIDGE

NAME OF PROPERTY	LOCATION	BERTHS	OCC	OCC %	MOOR'S
Toff Monk Marina Trust	Elizabeth Bay	12	2	16.7	0
Woolloomooloo Wharf East	Woollomooloo Bay	32	22	68.7	0
Woolloomooloo Wharf West	Woollomooloo Bay	32	23	71.9	0
TOTAL FOR 3 RESIDENTIAL/PRIVATE MARINAS		76	47	61.8	0

RESIDENTIAL/PRIVATE MARINAS - WEST OF SYDNEY HARBOUR BRIDGE

NAME OF PROPERTY	LOCATION	BERTHS	OCC	OCC %	MOOR'S
Pier 6/7 Walsh Bay	Walsh Bay	49	22	44.9	0
Hopetoun Quays, Balmain	P'matta R. Balmain	38	24	63.2	0
Balmain Cove	Iron Cove	31	24	77.4	0
St Georges Cres	Drummoyne	12	7	58.3	0
Abbotsford Cove (2)	Abbotsford Bay	22	15	68.2	0
Cape Cabarita	France Bay	24	18	75.0	0
Hilly Street Mortlake	P'matta R. Mortlake	16	1	6.3	0
Pulpit Point	P'matta R. Pulpit Pt	116	52	44.8	0
Wondakiah, Wollstonecraft	Balls Head Bay	42	35	83.3	0
TOTAL FOR 9 RESIDENTIAL/PRIVATE MARINAS		350	198	56.6	0

SUMMARY

	BERTHS	OCC	OCC %	MOOR'S
RESIDENT'L MARINAS - EAST SYD HARB BDGE - 3	76	47	61.8	0
RESIDENT'L MARINAS - WEST SYD HARB BDGE - 9	350	198	56.6	0
TOTAL RESIDENT MARINAS SYDNEY HARBOUR - 12	426	245	57.5	0

Source: Sydney Harbour Boat Storage Survey – June 2019 – Australian Marina Management Pty Ltd

APPENDIX 4

SURVEY AT JUNE 2019

COMMERCIAL BOATSHEDS - EAST OF SYDNEY HARBOUR BRIDGE

NAME OF BOATSHED	LOCATION	BERTHS	OCC	OCC %	MOOR'S
Pattons Slipway	Careening Cove	5	4	80.0	8
Balmoral Boatshed	Hunters Bay	0	0	0.0	56
Smiths Boatshed	The Spit	50	50	100.0	1
Lyons Boatshed	Willoughby Bay	0	0	0.0	30
Sailors Bay Boatshed	Sailors Bay	0	0	0.0	23
Castlecrag Boatshed	Mowbray Point	12	12	100.0	52
Manly Boatshed	North Harbour	0	0	0.0	39
TOTAL FOR 7 BOATSHEDS		67	66	98.5	209

COMMERCIAL BOATSHEDS - WEST OF SYDNEY HARBOUR BRIDGE

NAME OF BOATSHED	LOCATION	BERTHS	OCC	OCC %	MOOR'S
Campbell Street Balmain	Mort Bay	12	10	83.3	0
Fountains Boatshed	Snails Bay	12	12	100.0	0
President Shipwright	P'matta R. D'moyne	4	4	100.0	16
Abbotsford Boatshed	P'matta Riv. Ab'ford	2	2	100.0	12
Waterview Rd Marine Centre	P'matta R. Putney	10	10	100.0	0
Woolwich Dock	Lane Cove R. W'wich	8	8	100.0	0
Stanard Marine	Berrys Bay	14	10	71.4	1
McMahons Point Boatshed	Lavender Bay	0	0	0.0	10
Lavender Bay Boatshed	Lavender Bay	0	0	0.0	40
Seawind Catamarans	Rozelle Bay	20	20	100.0	0
TOTAL FOR 10 BOATSHEDS		82	76	92.7	79

SUMMARY

	BERTHS	OCC	OCC %	MOOR'S
BOATSHEDS - EAST OF SYDNEY HARBOUR BDGE - 7	67	66	98.5	209
BOATSHEDS - WEST OF SYDNEY HARBOUR BDGE - 10	80	66	82.5	79
TOTAL BOATSHEDS - SYDNEY HARBOUR - 17	147	132	89.8	288

Source: Sydney Harbour Boat Storage Survey – June 2019 – Australian Marina Management Pty Ltd

APPENDIX 5

SURVEY AT JUNE 2019

CHARTER VESSEL BERTHING - EAST OF SYDNEY HARBOUR BRIDGE

NAME OF MARINA	LOCATION	BERTHS	OCC	OCC %	MOOR'S
Landseair	Careening Cove	10	9	90.0	0
TOTAL FOR 1 CHARTER FACILITY		10	9	90.0	0

CHARTER VESSEL BERTHING - WEST OF SYDNEY HARBOUR BRIDGE

NAME OF MARINA	LOCATION	BERTHS	OCC	OCC %	MOOR'S
King Street Wharf	Darling Harbour	7	7	100.0	0
Sydney Aquarium	Darling Harbour	8	8	100.0	0
TOTAL FOR 2 CHARTER FACILITIES		15	15	100.0	0

SUMMARY

	BERTHS	OCC	OCC %	MOOR'S
FACILITIES - EAST OF SYDNEY BRIDGE - 1	14	14	100.0	0
FACILITIES - WEST OF SYDNEY BRIDGE - 2	15	15	100.0	0
TOTAL CHARTER MARINAS SYDNEY - 3	29	29	100.0	0

Source: Sydney Harbour Boat Storage Survey – June 2019 – Australian Marina Management Pty Ltd