Appendix J-6



LANDSCAPED AREA ANALYSIS OF LOW-DENSITY RESIDENTIAL ZONED LAND

TO INFORM CONTROLS IN THE NORTHERN BEACHES LOCAL ENVIRONMENTAL PLAN

November 2023

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EXECUTIVE SUMMARY

Overview of methodology

This report provides a summary of data analysis undertaken to inform controls for landscaped area for low-density residential zoned land in the Northern Beaches Local Environmental Plan (LEP).

The analysis considered FSR data for 3,334 properties sourced from development applications lodged with the Northern Beaches Council (and former Manly, Warringah and Pittwater Councils) during the period 2011-2022.

The report also considers existing controls for landscaped area in the Manly, Warringah and Pittwater LEPs and DCPs, as well as such controls applied in other council areas throughout Sydney and under the NSW Housing Code.

Key findings

The key findings of the landscaped area data analysis are:

- There is a correlation between landscaped area and property location.
- There is some correlation between landscaped area and lot size.
- There is minimal correlation between landscaped area and land use zone within a suburb.
- There is mostly compliance on average with current DCP requirements for landscaped area.

Recommendation

The recommendation of this report is that:

- 1. The minimum landscaped area percentages for low-density residential zoned land be maintained or increased, as outlined in Table 10 below.
- 2. Consistent methods of calculating landscaped area and terminology be used across the Northern Beaches LGA for the landscaped area control.

This recommendation is based on:

- the findings of the landscaped area data analysis;
- review of current Manly, Warringah and Pittwater DCP requirements; and
- consideration of Priority 5 'Greener Urban Environments' of Council's Local Strategic
 Planning Statement Towards 2040 which identifies the importance of landscaped area for
 canopy tree planting, stormwater management, and maintaining the character of the
 Northern Beaches.

PART A - INTRODUCTION

A1. Purpose of this report

The purpose of this report is to outline the analysis work undertaken to inform controls for landscaped area for low-density residential zoned land in the Northern Beaches Local Environmental Plan (LEP). This report has been drafted as a supplement to Council's Planning Proposal for the new comprehensive Northern Beaches LEP.

In this report, "low-density residential zoned land" means land that is zoned:

- R2 Low Density Residential,
- C3 Environmental Management, or
- C4 Environmental Living;

However, it excludes C3 or C4 zoned land within non-urban or rural areas; and C4 zoned land under the current Manly LEP 2013 as this permits multi-unit housing and is not a typical low-density zone.

A2. Policy context

Local Strategic Planning Statement – Towards 2040 (March 2020)

Council's *Northern Beaches Local Strategic Planning Statement (LSPS) – Towards 2040* (March 2020) identifies planning priorities and actions to guide land use planning on the Northern Beaches over the next 20 years.

Many of these actions relate to developing planning controls for inclusion in the Northern Beaches LEP and Development Control Plan (DCP), often to harmonise inconsistencies in the current Manly, Warringah and Pittwater LEPs and DCPs.

Of relevance are Priority 5, Action 5.3 outlined in Table 1 below.

Priority	Action
5 – Greener urban environments	5.3 – Prepare design guidelines and develop LEP and DCP controls for urban tree canopy , urban heat and UV radiation. Tree canopy to be addressed by tree
	replacement ratio, deep soil requirements, landscaped area requirements and increased front building setbacks in road corridors

Table 1: Extract from Northern Beaches LSPS - Towards 2040

LEP/DCP Discussion Paper: Planning Our Sustainable Future (June 2021)

In June 2021, Council published *LEP/DCP Discussion Paper: Planning Our Sustainable Future* seeking community feedback on a range of land use planning issues to inform preparation of the Northern Beaches LEP and DCP.

The Discussion Paper outlined the proposed approach to address tree canopy through landscaped area requirements, among other provisions. Feedback published in the Community and Stakeholder Engagement Report (June 2022) included the following:

- Recent developments in the E4 zone [now known as C4] do not meet objectives, e.g., they are not low impact and have inappropriate landscaping.
- One of the priorities that was echoed in 306 comments was the need to protect and increase the tree canopy in the LGA.

PART B – BACKGROUND

B1. What is Landscaped Area?

"Landscaped area" is defined as a part of a site used for growing plants, grasses and trees, but does not include any building, structure or hard paved area. This is typically presented as a minimum percentage of the site area.

For example, for a 500sqm site, a minimum 50% landscaped area requirement would require at least 250sqm of the site to be landscaped area consistent with the definition above.

Landscaped area an important planning control to facilitate sufficient land for canopy tree planting and stormwater management, and most councils apply landscaped area controls to residential zoned land with varying minimum percentages. Most include the control in a DCP, and some in an LEP. DCPs typically provide further guidance on how landscaped area is to be calculated, such as minimum dimensions.

B2. What Landscaped Area controls currently apply on the Northern Beaches?

Currently, Landscaped Area is applied inconsistently across the Northern Beaches.

Manly DCP, clause 4.1.5, applies a 'Total Open Space Area' requirement of at least 55% to 60% of the site for most low-density residential zoned land (Total Open Space Areas 3 and 4), and of this, at least 35% to 40% is to be landscaped area. This equates to a minimum landscaped area of between 19.25% to 24% of the site. Minimum landscaped area requirements also apply to other residential zoned land.

Warringah DCP, clause D1, requires a minimum 40% of the site to be landscaped area for most low-density residential zoned land, and minimum 50% for certain sites identified in Allambie Road, Allambie Heights. Minimum landscaped area requirements also apply to other residential, employment and non-urban zoned land.

Pittwater DCP, Part D, requires a minimum 50% to 60% of the site to be landscaped area. The Landscaped Area Map associated with the DCP shows that all land currently zoned C3 or C4 in the Pittwater LEP 2014 is within Area 1 (60%), and all land zoned R2 is within Area 2 (60%) or Area 3 (50%) depending on its environmental value. Within the Pittwater Offshore Areas, the PDCP provides a maximum site coverage requirement based on lot size, which equates to a minimum landscaped area of around 67% or greater for lots over 500sqm in area. A lower rate applies to smaller lots (which are uncommon in the offshore areas).

A variations clause in the Pittwater DCP allows up to 6% of the 'landscaped area' to be impervious landscape treatments for outdoor recreational purpose (e.g., roofed or unroofed pergolas, paved private open space, patios, pathways and uncovered decks no higher than 1 metre above ground level (existing)). When accounting for this, the minimum landscaped area requirements are 44% to 54% for most land, and 61% or greater within the Pittwater Offshore Areas.

Landscaped area controls are not included in the current Manly, Warringah or Pittwater LEPs.

A summary of the different approaches across the Manly, Warringah and Pittwater LEP/DCPs is included in Table 2 below.

¹ Landscaped Area is defined in the Dictionary of the Standard Instrument – Principal Local Environmental Plan (2006). Appendix J-6 - Landscaped Area Analysis of Low Density Residential Zoned Land

Zone	Manly LEP 2013 and Manly DCP	Warringah LEP 2011 and Warringah DCP	Warringah LEP 2000 (deferred lands)	Pittwater LEP 2014 and Pittwater DCP
Residential zones	The DCP applies a 'Total Open Space Area' control, with a proportion of this required to be landscaped area – generally 19.25% to 24% for low-density zones, and 11.25% to 15% for higher density zones. There is no LEP control for landscaped area.	The DCP applies a landscaped area control requiring minimum 40% for most lowdensity zoned land and 50% on certain bushland sites; and 50% for medium-density zoned land in Dee Why, Narrabeen, Collaroy, Brookvale, Queenscliff and Belrose, and 40% in Manly Vale. Requirements differ for the Frenchs Forest Precinct. There is no LEP control for landscaped area.	N/A	The DCP requires a minimum 50-60% landscaped area for low and medium-density zones, and around 67-77% for the offshore communities. The DCP facilitates a 6% variation. Requirements differ for the Warriewood Valley Land Release. There is no LEP control for landscaped area.
Employment zones	There is no LEP or DCP control.	The DCP requires a minimum 20% landscaped area in Dee Why Town Centre which may be located on balconies, ground podium and roof top levels or green walls; and 33.3% in the business parks at Frenchs Forest and Belrose. There are no requirements for other employment zoned land. There is no LEP control for landscaped area.	N/A	The DCP requires a minimum 20% landscaped area or 35sqm per dwelling for shop-top development in an employment zone. There is no LEP control for landscaped area.
Non-Urban Zones	N/A	Controls are included in the DCP requiring a minimum 30-70% landscaped area depending on the location and zone of land. There is no LEP control for landscaped area.	Controls are included in the LEP requiring a minimum 30-50% landscaped area.	The DCP requires a minimum 80-96% landscaped area minus a 300-800sqm for residential development. Requirements for non-residential development also apply. There is no LEP control for landscaped area.

Table 2: Is a landscaped area control included in the LEP or DCP currently?

B3. How is Landscaped Area measured currently across the Northern Beaches?

The calculation of landscaped area differs across the three current DCPs.

The Manly DCP applies the LEP definition of landscaped area with such areas to have the following minimum dimensions: 3m in any direction, unbroken area of 12sqm, soil depth of 1m, and 0.5m measured from the inner side of the planter bed/ box, wall or any other structure which defines the landscaped area.

The Warringah DCP calculation of landscaped area excludes certain built/impervious surfaces (driveways, paved areas, roofed areas, tennis courts, car parking and stormwater structures, decks, etc) and any open space with a dimension of less than 2 metres, however, it includes the water

surface of a swimming pool, impervious surfaces that occur naturally (such as rock outcrops), and areas with a soil depth of minimum 1 metre. Inclusion of the swimming pool area is not typical.

The Pittwater DCP calculation of landscaped area excludes impervious areas less than 1 metre in width.

B4. What Landscaped Area controls apply in other council areas and under the NSW Housing Code?

Landscaped Area is a commonly applied planning control in NSW. A review of council local environmental plans applying in the Greater Sydney region found that very few included a landscaped area control within the LEP; instead, most councils included this control within the DCP.

Of the council LEP/DCPs reviewed, the minimum landscaped area required for low-density residential zoned was found to vary between council areas (and even within a council area), with some applying a set percentage of landscaped area per site area based on location, zone or type of development, and others applying a sliding or stepped scale based on lot size. The method of calculation also varied, with differing minimum dimensions of an area that could be included as landscaped area.

Minimum landscaped area requirements were found to range from 10% for smaller lots under the Hornsby DCP and NSW Housing Code, to more than 50% in the Ku-ring-gai and Willoughby DCPs for C4 zones. On average, most councils tend to apply minimum landscaped area requirement of 30-40% of the site area. Refer to Table 3 below.

Planning document	Minimum Landscaped Area required – R2, C3, C4 zones
NSW Housing Code SEPP	10-45% depending on lot size
Bayside DCP	25%
Camden DCP	30%
Canterbury DCP	15-25% depending on lot size
Georges River LEP 2021	20-30% depending on location and type of development
Hornsby DCP	10-45% depending on lot size
Ku Ring Gai DCP	R2 zone: 40-50% depending on lot size and no. storeys of dwelling. C4 zone: 50%+, increases with lot size
Lane Cove DCP	35%
Mosman LEP 2012	25-50% depending on lot size for both R2 and C4
Ryde DCP	35%
Strathfield DCP	35-45% depending on lot size
Sutherland LEP 2015	30-40% depending on location on map
Waverley DCP	20%
Willoughby DCP	R2 zone: 25-50% depending on lot size. C4 zone: 35-55% depending on lot size

Table 3: Landscaped Area applied in other council areas and in the NSW Housing Code

PART C – METHODOLOGY

C1. Data analysis overview

An analysis of data for 3,334 properties located across the Northern Beaches was undertaken to ascertain the average landscaped area of development and to consider whether any correlation existed between landscaped area and location, lot size, zone, or other factors. The data was obtained from development applications (DAs) lodged with the Northern Beaches Council and former Manly, Warringah and Pittwater Councils for dwelling-house developments on low-density residential zoned land over an 11-year period from 2011 to 2022.

C2. Source of data

For each DA, the data was sourced from either 'garden and lawn area' calculations on BASIX² certificates, or Council planner calculations for landscaped area in DA assessment. A quality check was undertaken to ensure that the data sourced from BASIX certificates was comparable with the data obtained from DA assessment reports given that different definitions and methods of calculation exist under BASIX and each of the Council DCPs. Although differences were apparent, the data was found to be useful for the purposes of this analysis.

The breakdown of the data sourced is indicated in Table 4.

Data Source	Period	Development Type	No. sample properties	Percentage of sample
BASIX certificate data lodged with DA across Northern Beaches	2011-2021	New detached dwelling-houses only	1,948	58.4%
DA assessment reports for Manly, Warringah and Pittwater DCP areas	2019-2022	New detached dwelling-houses, and alterations / additions to existing dwelling-houses	1,386	41.6%
		Total	3,334	100%

Table 4: Source of Landscaped Area data sampled in data analysis

C3. Location and zone of properties sampled

The data was sourced for properties located across the Northern Beaches within the range of low-density residential zones that currently apply. A breakdown of the location of properties sampled based on current LEP area and current zone is outlined in Table 5 below.

This breakdown generally aligns with the distribution of low-density residential zoned land across the Northern Beaches – that is, the Warringah LEP area is a larger area and so represented the bulk of properties sampled (1,912, 57.4%), followed by Pittwater (30.7%) then Manly (11.9%). Similarly, zone R2 is the predominant zone applied to low-density residential areas on the Northern Beaches and was reflected in the high proportion of such properties sampled (2,606, 78.2%), followed by C3 and C4 zoned properties (21.8%).

² Building Sustainability Index (BASIX) is a NSW Government planning tool which aims to reduce energy and water consumption in homes across NSW. It applies to all residential dwelling types and is part of the DA process in NSW.

Land zoned C4 in the Manly LEP area was excluded from the data sample as this is akin to a medium-density zone (permitting multi-dwelling housing and residential flat buildings) and not a low-density residential zone.

Location	Zone R2	Zone C3	Zone C4	No. sample properties
Manly LEP/DCP area	342	49	-	391
Warringah LEP/DCP area	1,913	-	6	1,919
Pittwater LEP/DCP area	350	34	640	1,024
	2,606	83	645	3,334

Table 5: Location and zone of properties sampled for Landscaped Area data analysis

C4. Permeable surfaces data

Permeable surfaces data for the Northern Beaches³ was also compared with the abovementioned BASIX and DA Assessment Report data. The permeable surfaces data utilises the Geoscape Surface Cover Layer created by Public Sector Mapping Agency (PSMA) Australia to calculate a permeable surfaces percentage for each street block across the Northern Beaches, ranging from 0-20% up to 60%+.

A 'permeable' surface is defined as land capable of being permeated or penetrated by water, for example, grasses, vegetation and so on, and excludes buildings, roads and the like.

An extract from this data layer is shown in Figure 1 below.

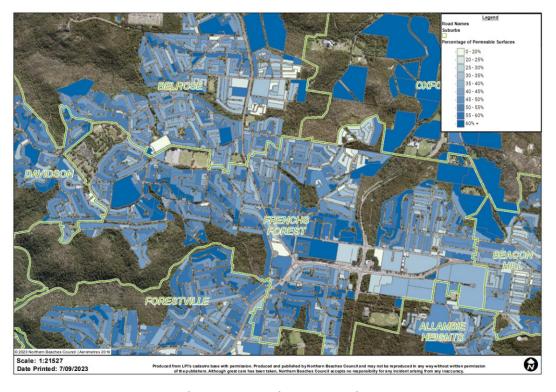


Figure 1: Extract from Percentage of Permeable Surfaces mapping layer

³ Sourced from *Urban Design Study Phase 1B Place Based Analysis* prepared by Allen Jack + Cottier and Tract Consultants, March 2021

Appendix J-6 - Landscaped Area Analysis of Low Density Residential Zoned Land

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PART D - FINDINGS

The four key findings of the Landscaped Area data analysis are:

D1. There is a correlation between landscaped area and property location

Whilst the average landscaped area for all 3,334 properties sampled across the Northern Beaches was 46% (of the site area), the data indicates some difference in landscaped area based on location. Table 6 below indicates the average landscaped area for each suburb and the number of low-density residential zoned properties sampled within that suburb. See also Figure 2 below.

Suburbs in the Pittwater Offshore areas tended to have a higher percentage of landscaped area of greater than 55% (although some small sample sizes may skew the data). Almost all suburbs in the Pittwater DCP area and the bushland suburbs in the Warringah DCP area (such as Frenchs Forest and Killarney Heights) tended to have an average landscaped area of around 45% to 55%, while all suburbs in the Manly DCP area and in the more urban Warringah DCP areas (such as Queenscliff and Dee Why) tended to have the lowest percentage of landscaped area, typically 32% to 45%.

Note that an insufficient number of sample properties was obtained for some suburbs. The data is not considered to be a reliable reflection of that suburb where fewer than ten properties were sampled.

These findings align with the permeable surfaces data which, for example, shows a high rate of permeable surfaces (60%+) in the Pittwater Offshore areas, and generally low rate (of 30-35% or lower) for low-density residential zoned land in the suburbs of Queenscliff and Manly.

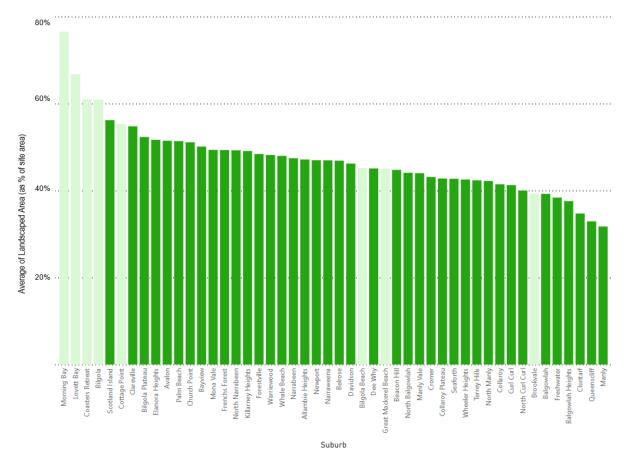


Figure 2: Average Landscaped Area by Suburb. (Suburbs with a low sample size of fewer than ten properties are shown in pale green).

Suburb	Average Landscaped	No. properties
	Area	sampled
Morning Bay	77%	1
Lovett Bay	67%	3
Coasters Retreat	61%	2
Bilgola	61%	7
Scotland Island	56%	24
Cottage Point	55%	4
Clareville	55%	32
Bilgola Plateau	52%	66
Elanora Heights	52%	66
Avalon	51%	210
Palm Beach	51%	95
Church Point	51%	34
Bayview	50%	33
Mona Vale	49%	117
Frenchs Forest	49%	144
North Narrabeen	49%	91
Killarney Heights	49%	60
Forestville	48%	170
Warriewood	48%	35
Whale Beach	48%	39
Narrabeen	47%	43
Allambie Heights	47%	112
Newport	47%	159
Narraweena	47%	77
Belrose	47%	89

Suburb	Average Landscaped Area	No. properties sampled
Davidson	46%	17
Bilgola Beach	45%	6
Dee Why	45%	108
Great Mackerel Beach	45%	4
Beacon Hill	45%	103
North Balgowlah	44%	116
Manly Vale	44%	71
Cromer	43%	62
Collaroy Plateau	43%	111
Seaforth	43%	190
Wheeler Heights	43%	28
Terrey Hills	42%	24
North Manly	42%	65
Collaroy	41%	124
Curl Curl	41%	76
North Curl Curl	40%	126
Brookvale	39%	8
Balgowlah	38%	25
Freshwater	38%	156
Balgowlah Heights	38%	103
Clontarf	35%	47
Queenscliff	33%	25
Manly	31%	26
Total	46%	3,334

Table 6: By Suburb: Average Landscaped Area and sample size

Manly DCP

Suburbs: Balgowlah, Balgowlah Heights, Clontarf, Manly, Seaforth

Warringah DCP

Suburbs: Allambie Heights, Beacon Hill, Belrose, Brookvale, Collaroy, Collaroy Plateau, Cromer, Curl Curl, Davidson, Dee Why, Forestville, Frenchs Forest, Freshwater, Killarney Heights, Manly Vale, Narrabeen, Narraweena, North Balgowlah, North Curl Curl, North Manly, Queenscliff, Terrey Hills, Wheeler Heights

Pittwater DCP

Suburbs: Avalon, Bayview, Bilgola, Bilgola Beach, Bilgola Plateau, Church Point, Clareville, Coasters Retreat, Cottage Point, Elanora Heights, Great Mackerel Beach, Lovett Bay, Mona Vale, Morning Bay, Newport, North Narrabeen, Palm Beach, Scotland Island, Warriewood, Whale Beach

Box 1: Suburbs listed in Table 6 above allocated by the DCPs that currently apply

D2. There is some correlation between landscaped area and lot size

The data shows some correlation between Landscaped Area and lot size, with the landscaped area percentage of a site generally increasing as lot size increases. This trend was found across the Northern Beaches LGA in most suburbs and zones – however it was not found to be as strong a correlation as was evident between FSR and lot size.

For example, broadly across the Northern Beaches, the average landscaped area for very small lots (below 300sqm) is 33%, which then increases to 39% for lots 300-499sqm, and 45% for lots 500-699sqm, before plateauing at 48-49% for medium to large lots (700-1499sqm). The data shows a dip to 46% for 1500-1999sqm lots, then an increase to 53% for larger lots (2000sqm and greater), although the sample sizes here are small in comparison to the other lot size ranges.

Breaking down the data by suburb, for example, in Avalon, the average landscaped area is 50% for lots 500-699sqm, then increases marginally to 53% or 54% for properties with a lot size between 700-1499sqm. The percentage is generally lower for lots under 500sqm and over 1500sqm, although small sample sizes may skew the data.

In Dee Why, the average landscaped area is 41% for smaller lots below 500sqm, then increases to 46% for lots within the range of 500-899sqm in area. Data for larger lot sizes may be skewed by small sample sizes. Refer to Figures 3 - 5 and Table 7 below.

Lot Size	Average Landscaped Area	No. properties sampled
<300sqm	33%	24
300-499sqm	39%	487
500-699sqm	45%	1396
700-899sqm	48%	857
900-1199sqm	49%	399
1200-1499sqm	49%	108
1500-1999sqm	46%	38
2000-3999sqm	53%	24
4000-9999sqm	51%	1
Total	46%	3,334

Table 7: Average Landscaped Area by lot size of all properties sampled across the Northern Beaches LGA.

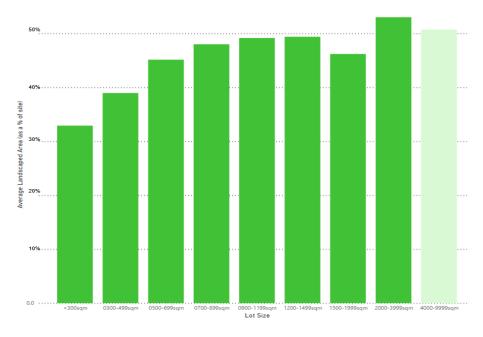
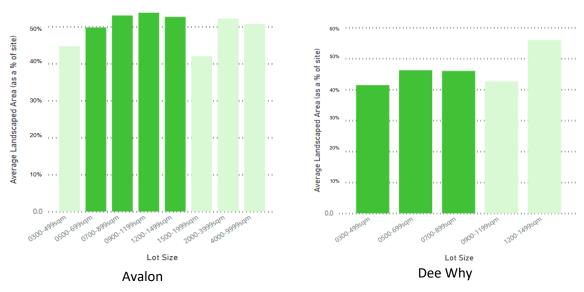


Figure 3: Average Landscaped Area by lot size of all properties sampled across the Northern Beaches LGA. (Lot size ranges with a low sample size of fewer than ten properties are shown in pale green).



Figures 4 and 5: Average Landscaped Area by lot size in Avalon and Dee Why. (Lot size ranges with a low sample size of fewer than ten properties are shown in pale green).

D3. There is minimal correlation between landscaped area and land use zone within a suburb

The data shows that the average landscaped area for land zoned R2, C3 or C4 was often very similar within a suburb, that is, the land use zone had no influence on the landscaped area of the development.

For example, in Elanora Heights a total of 66 properties were sampled with a mix of zones: R2 (29 properties) and C4 (37 properties). The average landscaped area for Elanora Heights by zone was found to be very similar: 53% for zone R2 and 51% for zone C4. Similarly, in North Narrabeen a total of 91 properties were sampled with the average landscaped area almost the same for the R2 zone (48%, 51 properties) compared to the C4 zone (51%, 40 properties). This same trend was found in Avalon, Clontarf and other suburbs shown in Table 8 below.

Note that an insufficient number of sample properties was obtained for some suburbs. The data is considered to be an unreliable reflection of average landscaped area for a suburb where fewer than ten properties were sampled.

Suburb	Current Zone	No. properties sampled	Landscaped Area %	Current Zone	No. properties sampled	Landscaped Area %
Avalon	R2	117	50%	C4	93	53%
Bayview	R2	9	50%	C4	24	50%
Bilgola Plateau	R2	7	50%	C4	59	53%
Clontarf	R2	37	35%	C3	10	35%
Elanora Heights	R2	29	53%	C4	37	51%
Manly	R2	4	25%	C3	22	32%
Mona Vale	R2	60	48%	C4	57	51%
Newport	R2	55	45%	C4	104	48%
North Narrabeen	R2	51	48%	C4	40	51%
Palm Beach	R2	7	48%	C4	88	52%
Seaforth	R2	176	42%	C3	14	49%
Warriewood	R2	16	47%	C4	19	49%

Table 8: By Suburb: Average Landscaped Area and sample size for R2 v C3/C4 zoned land

D4. There is mostly compliance on average with current DCP requirements for landscaped area

The data shows that, for most land, the average landscaped area provided met minimum DCP requirements.

In the Manly DCP area, the average landscaped area was found to be 39% of the site area (from 391 properties sampled), with a range of 32% to 43% for suburbs within the area. This is considerably higher than the minimum landscaped area requirement in the MDCP of 19.25% to 24% for low-density residential zoned land, indicating that review of the current requirement is warranted. The average landscaped area was found to exceed MDCP requirements in all suburbs and for all lot size ranges.

In the Warringah DCP area, the average landscaped area was found to be 44% of the site area (from 1919 properties sampled), with a range of 33% to 55% for suburbs within the area. This is generally consistent with the minimum landscaped area requirement in the WDCP of 40% that applies to most

low-density residential zoned land. The average landscaped area was found to exceed WDCP requirements in all suburbs apart from Queenscliff (average 33%) and Freshwater (average 38%), and for all lot size ranges apart from lots below 500sqm (average 36%).

In the Pittwater DCP area overall, the average landscaped area was found to be the highest across the Northern Beaches LGA at 50% of the site area (from 1024 properties sampled), with a range of 45% to more than 60% for suburbs within the area. This aligns with the permeable surfaces data which show generally a higher rate of permeable surfaces for low-density residential zoned land in the Pittwater DCP area and some bushland suburbs in Warringah DCP area, compared with elsewhere in the LGA.

When considering the Pittwater DCP area data by current Landscaped Area, it was found that in Area 3 (i.e., the non-sensitive R2 zoned land), the average landscaped area (of 48%) met PDCP requirements (of 45%). This trend was evident in all suburbs and for all lot sizes ranges. However, for Areas 1, 2 and Offshore (i.e., environmentally sensitive areas), the average landscaped area was found to be slightly below the PDCP requirements, although the extent of non-compliance was mostly less than 10%. Small sample sizes in the Offshore areas may result in skewed data in this location.

Table 9 provides an overview of compliance with the current DCPs. It is important to note that this table reflects the *average* of landscaped area provided on the more than 3,000 properties sampled for the purpose of this data analysis. There were properties that provided more landscaped area, and properties that provided less, than that shown in the table.

Minimum landscape in current	Data Analysis Findings			
DCP /Area	Requirement as % of site area	Average Landscaped Area %	No. properties sampled	Do properties meet current DCP requirement on average?
Manly DCP				
Open Space Area 3	19.25%	40%	269	Yes
Open Space Area 4	24%	38%	122	Yes
Warringah DCP				
Majority of land	40%	44%	1919	Yes
Pittwater DCP				
Area 1 Landscape Map	60%	51%	640	No – slightly less
Area 2 Landscape Map	60%	51%	127	No – slightly less
Area 3 Landscape Map	50%	48%	223	Yes
Offshore Areas	66% or greater for lots over 500sqm, based on lot size	57%	34	No – less, but small sample size may skew data
		Total	3,334	

Table 9: Comparison of DCP requirement and average landscaped area of properties sampled

PART E – CONCLUSION

E1. Recommendation

It is recommended that:

- 1. The minimum landscaped area percentages for low-density residential zoned land be maintained or increased, as outlined in Table 10 below.
- 2. Consistent methods of calculating landscaped area and terminology be used across the Northern Beaches LGA for the landscaped area control.

This recommendation is based on:

- the findings of the landscaped area data analysis;
- review of current Manly, Warringah and Pittwater DCP requirements; and
- consideration of Priority 5 'Greener Urban Environments' of Council's Local Strategic
 Planning Statement *Towards 2040* which identifies the importance of landscaped area for
 canopy tree planting, stormwater management, and maintaining the character of the
 Northern Beaches.

Location – Low Density Residential Zoned Land	Current DCP – Minimum Landscaped Area (as % of site area)	Recommended Minimum Landscaped Area (as % of site area)
Current Manly DCP area Suburbs: Balgowlah, Balgowlah Heights, Clontarf, Manly, Seaforth	19.25% to 24%	40% - increase
Current Warringah DCP Suburbs: Allambie Heights, Beacon Hill, Belrose, Brookvale, Collaroy, Collaroy Plateau, Cromer, Curl Curl, Davidson, Dee Why, Forestville, Frenchs Forest, Freshwater, Killarney Heights, Manly Vale, Narrabeen, Narraweena, North Balgowlah, North Curl Curl, North Manly, Queenscliff, Terrey Hills, Wheeler Heights	40% for most land 50% for certain bushland sites in Allambie Heights	40% - maintain for most land 45% - increase for bushland suburbs with higher average landscaped area, including Frenchs Forest, Forestville, Killarney Heights, Davidson, Belrose etc 50% - maintain certain bushland sites in Allambie Heights
Current Pittwater DCP Suburbs: Avalon, Bayview, Bilgola, Bilgola Beach, Bilgola Plateau, Church Point, Clareville, Coasters Retreat, Cottage Point, Elanora Heights, Great Mackerel Beach, Lovett Bay, Mona Vale, Morning Bay, Newport, North Narrabeen, Palm Beach, Scotland Island, Warriewood, Whale Beach	50% to 60%* for mainland 66% or greater* for lots over 500sqm in offshore areas based on sliding scale for lot size *but 6% variation allowed for	50% to 60% - maintain for mainland 66% or greater - maintain in offshore areas

Table 10: Recommended minimum landscaped area for low-density residential zoned land

E2. Comparison with other Sydney Councils

Maintaining the current landscaped area requirements – although with an increase for Manly DCP suburbs and Warringah DCP bushland suburbs – is comparable with the landscaped area minimums applied by other Sydney councils. On balance, the Northern Beaches generally requires the same or more landscaped area than other Sydney councils, as noted earlier in this report and shown below in Figure 6.

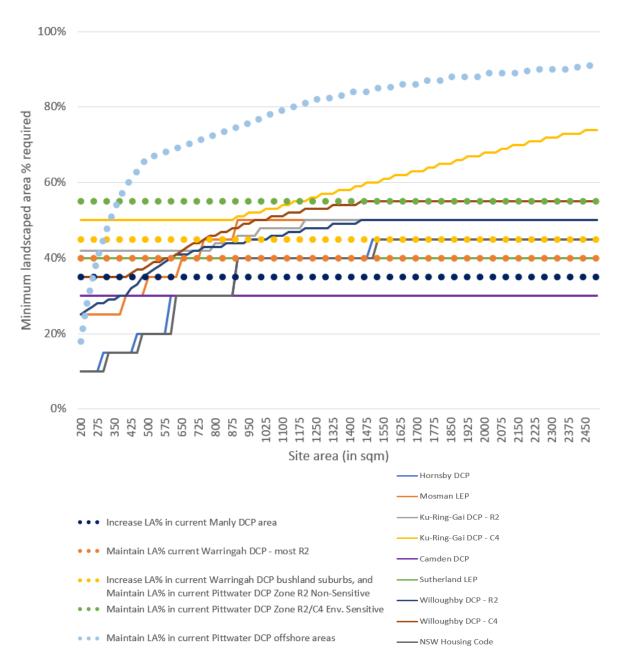


Figure 6: Comparison of Recommended Landscaped Areas (LA%) with percentages applied by other Councils and the NSW Housing Code

E3. Inclusion of landscaped area control in LEP or DCP

Landscaped area is a control currently included within the Manly, Pittwater and Warringah DCPs. For most other councils it is a control that is included within a DCP. However, there is some precedence for landscaped area to be included in an LEP, for example, in the LEPs for Georges River, Mosman, Inner West and Sutherland.

In the hierarchy of Council planning documents, an LEP has greater legislative weight than a DCP. Compliance with an LEP development standard must be achieved unless a variation to the standard is approved by the consent authority under clause 4.6 'Exceptions to Development Standards' of the LEP, with subclause (3) providing that:

- (3) Development consent must not be granted to development that contravenes a development standard unless the consent authority is satisfied the applicant has demonstrated that—
- (a) compliance with the development standard is unreasonable or unnecessary in the circumstances, and
- (b) there are sufficient environmental planning grounds to justify the contravention of the development standard.

Council considers that landscaping controls are critical in its response to climate change and urban heating and should therefore be given the same or greater weight to other "principal development standards" like height and FSR controls. A DCP provides more flexibility for a planning control to be varied by a consent authority without the rigorous assessment required by LEP clause 4.6, although an applicant must demonstrate that the DCP control objectives can be satisfied despite the noncompliance.

E4. Limitations

Small sample sizes

Although 3,334 properties were sampled as part of the landscaped area data analysis, when breaking the data down to focus on a particular suburb or lot size range, some small sample sizes were evident. This may result in skewed results in the analysis. Where analysis resulted in a sample of ten properties or less, this is generally noted in the report.

E5. Land excluded

The recommended landscaped area/s outlined in this report do not apply to the following land:

R2 zoned land in Karingal Crescent, Frenchs Forest – this land, located within the Frenchs Forest
Hospital Precinct and subject to previous detailed analysis, applies a minimum landscaped area
of 30% under Part G9, 5.3 of the Warringah DCP. This will be carried over into the Northern
Beaches DCP without change.