

## **HISTORICAL DEVELOPMENT CONSENTS IN NSW**

**Organisation:** Lake Wollumboola Protection Association Inc  
**Date Received:** 30 May 2024

Partially  
Confidential

# Lake Wollumboola Protection Association Inc

PO Box 90  
Culburra Beach NSW 2540



Email: [info@wollumboola.org.au](mailto:info@wollumboola.org.au)

30 May 2024

Clayton Barr  
Committee Chair  
Legislative Assembly Committee on Environment and Planning

## **Historical Development Consent – DP614607 Lot 1 East Crescent, Culburra Beach**

The Lake Wollumboola Protection Association Inc (LWPA) appreciates the opportunity to make a submission to the inquiry in relation to Lot 1. This parcel of land is bounded by the northern shore of Lake Wollumboola, East Crescent and public reserve [See attached map]. It has been the subject of numerous development applications since 1979 to this day. See History below.

Long term ownership of the land has been in the hands of Mr Warren Halloran whose legacy has continued via the Halloran Trust.

LWPA has campaigned to protect the Lake and its catchment from inappropriate development since 1993 when the first DA for an 837-lot subdivision on Long Bow Point was submitted to Shoalhaven City Council. It has been a long and tiring campaign, with many twists and turns, resulting in the inclusion of the Lake and south-west catchment in Jervis Bay National Park. The catchment to the west of the Lake was placed in stewardship in 2021 to be used as offset for the West Culburra and Callala Bay urban developments and then to be included in Jervis Bay National Park within the next few years.

There are three parts of the Lake catchment not included in the abovementioned protection:

- Long Bow Point peninsula, itself the subject of multiple DA's for urban development and golf course proposals.
- Adjacent part of the catchment on the north side of Culburra Road.
- Lot 1 East Crescent on the northern shore of the Lake.

They are all listed as Deferred Matters and any DA applying to them refers back to the 1985 Shoalhaven LEP (a 40 year old plan with inadequate environmental protections) instead of the current SLEP. [See attachments Deferred Matter maps]

As previously stated, Lot 1 has been the subject of numerous proposals, development and subdivision applications since the approved 1979 caravan park DA to the present 14 lot subdivision (SF/10071 and DS18/1491 modification). None have come to fruition.

Attached is our 2019 submission regarding the modified Lot 1 DA detailing our concerns and objections. [See attachment]

The conclusions made by three government inquiries into development in the region from 1995 to 2007 should be applied to the remaining unprotected catchment, including Lot 1.

- The Long Bow Point Commission of Inquiry 1995 to 2000 – refused the proposal due to unacceptable environmental impacts, including loss of water quality of the Lake, loss of fauna and flora including threatened species.
- The Coastal Lakes Inquiry 2002 – recommended “Comprehensive Protection” for the Lake and no development expansion in the catchment.
- The NSW South Coast Sensitive Lands Review 2006 – stated that land in the catchment of the Lake is considered unsuitable for urban development, should be zoned for conservation purposes and negotiate with land owner for land dedication and bio-banking sites.
- The South Coast Regional Strategy 2007 adopted recommendations of the above enquiries.

It appears that some developers exploit loopholes in the current legislation to advance their plans, and in the process creating potential problems down the track for buyers.

Lot 1 is flood prone and with sea level rise could soon become uninhabitable. [See attached Flood Map] When the Lake is near capacity and combined with torrential rain (as occurred recently) stormwater from the streets above collects at the lowest point which is East Crescent and Lot 1. Ground becomes so saturated that trees have fallen on the site. Legislation must change so that decision-makers such as Councils and the Land and Environment Court can do their jobs to protect the environment from unethical developers. [See attachment photos of recent and historical flooding of the site].

History of proposals:

1979 An 85-lot caravan park approved. No development occurred.

1983 Shoalhaven City Council attempted to rezone the land to 7(b) Estuarine Wetland Protection but did not proceed following representations from then owners St Vincent City and Suburbs Pty Ltd (a Halloran company).

1988 Council approved in principle a holiday resort which included holiday cabins, amenities buildings, manager’s residence, office and kiosk, a large recreational activity centre incorporating a swimming pool, tennis courts and barbecue facilities. Consent was valid for two years. No development ensued.

1990 the applicant applied for an extension for an additional 12 months. Plans had changed considerably from the original approval (from 1979) and included buildings fronting Lake Wollumboola and an indoor activity centre, as well as drainage works and a buffer zone and which could severely impact pedestrian access to the lake foreshore.

The plan was considered to have a negative visual impact due to the bulk and height of the buildings. Fifty-five submissions were received against the development, mainly from Culburra Beach residents. Never-the-less, Council recommended an extension of development consent for a further 12 months but recommended that plans be redrawn to address concerns. No development occurred.

2002 Fenfar Pty Ltd sought approval from Shoalhaven City Council for a manager’s residence and office associated with the 1979 approval for a caravan park. Council advised

that the approval had lapsed. Fenfar brought proceedings against Council in the Land and Environment Court listed for August 2003.

2003 LWPA sought legal advice from the Environmental Defenders Office and action from the Minister for Infrastructure, Planning and Natural Resources. The then Minister announced joining the Shoalhaven Council in defending the lapse of the caravan park development application in the Land and Environment Court. In October Fenfar discontinued court proceedings.

2006 September. Fenfar approach Council with proposal for a 24-lot subdivision over the 2(d) residential zone, approx two thirds of the site and dedication of part of the 6(b) land to Council. Catches to this proposal were a long list including:

- SEPP 71 sensitive coastal location zoning,
- SEPP 14 wetlands adjacent,
- flooding,
- traffic access,
- classification as an Endangered Ecological Community Bangalay Sand Forest (BSF) [Attachment 4 distribution of BSF],
- acid sulphate soils,
- threatened species,
- and the land to be dedicated to Council involved the use of the dedicated land for part of the required asset protection zones which would impose an ongoing maintenance burden for Council.

LWPA also added to these concerns with its list:

- the southern boundary of the development is within 5 metres of the Lake shore and a lesser distance from Sheepwash Creek which flows into the Lake,
- there is no provision for water quality control measures which was inconsistent with the 500m setback proposed to the recent Independent Inquiry into South Coast Sensitive Urban Lands,
- the 24-lot proposal was an attempt to avoid conditions that would apply to ministerial approval for either a tourist facility or 25 lot or more residential subdivision. The council agreed in principle to the proposal but no application was lodged.

2009 the 24-lot subdivision application was received for Lot 1. The NSW Department of Planning granted exemption from the Masterplan provisions of SEPP 71. Various studies including flora and fauna, bushfire and ground water were undertaken.

2010 Shoalhaven City Council then refused the application on these grounds:

- Bushfire issues
- Drainage issues
- SEPP 71 and Clause 26 of LEP 1985 with respect to potential impacts on Lake Wollumboola.

2011 The refusal was appealed by the owner's representative, Greg Thompson & Partners Pty Ltd in the Land and Environment Court. 15 June LEC Section 34 Conference onsite attended by Council staff, NPWS representatives, LWPA and other residents. All opposed to the subdivision application. Adjourned until 13 July to allow for applicant to provide further information to Council.



2012 The LEC granted consent for modified development of 14 lots, with conditions.

2013 Council Property Steering Committee recommended that Council accept the offer Mr Warren Halloran of the site between the approved development lots and Lake Wollumboola shore for a public reserve to be zoned then, E2 Environment Protection (part of the subdivision approval). In March/April Council accepted the offer. Arrangements not finalised.



2015 as part of the Gateway Approval for the Halloran Planning Proposal for Culburra Beach the entire Lot 1 site was identified as part of the Biodiversity Offset-Biodiversity Certification arrangements.

2018 The Halloran Trust applied to Council to modify the Subdivision Application. “Allen Price & Scarratts have been engaged by the owner of the abovementioned property to lodge a modification to development consent SF 10071 which was approved by the Land and Environment Court on 23 December 2012.”

LWPA members who are very familiar with the area dispute this claim of “physical work” and there is no evidence that any work occurred within the five-year time frame for commencement in the conditions of approval.

The Allen Price Scarratts letter of 30 November 2018 also advised that five of the lots were offered for sale including by auction on 16 February 2019. Advertising signs were erected. No auction occurred and no lots sold.

2021 Archaeological investigation of Lot 1 reveals at least 12,000 artifacts. A significant find for the Jerrinja Community. Many of the Jerrinja Community participated in the dig. Artifacts were removed from the site and stored with Heritage NSW. No known resolution.

2023 January. The Hon. Cate Faerhman, Member of the NSW Upper House, held a Press Conference at Crookhaven Heads Culburra Beach to raise public concern to the practise of long-term coastal land holders resurrecting old approvals known as “zombie” developments in sensitive locations on the NSW South Coast. Cate visited the Lot 1 East Cres site which the owner Company sought to sell for housing development despite the site’s close proximity to the fragile north shore of Lake Wollumboola and its significance as an archaeological site.

It is crucial that a moratorium on all developments still in abeyance be reassessed using current knowledge and some forward thinking to consider issues such as climate change, sea level rise, threatened species habitat, bushfire and flooding.

It is essential to protect the remaining parts of the Lake catchment from development by updating the Deferred Matter zoning to Environmental Protection and NSW Government purchase of Long Bow Point.

Outdated legislation and planning laws and processes lack the ability to review and revoke past decisions that are harmful to the wellbeing of the environment and community today and into the future.

Regards

Frances Bray, PSM  
President  
Lake Wollumboola Protection Association Inc

ATTACHMENTS:

LWPA submission to modified DA Lot 1 East Cres

Maps: Lot 1 zoning

Deferred Matter Halloran lands in Culburra Beach

Deferred Matter Lot 1

Shoalhaven Council Flood map Lot 1

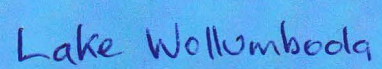
Photos of flooding of Lot 1 and East Cres







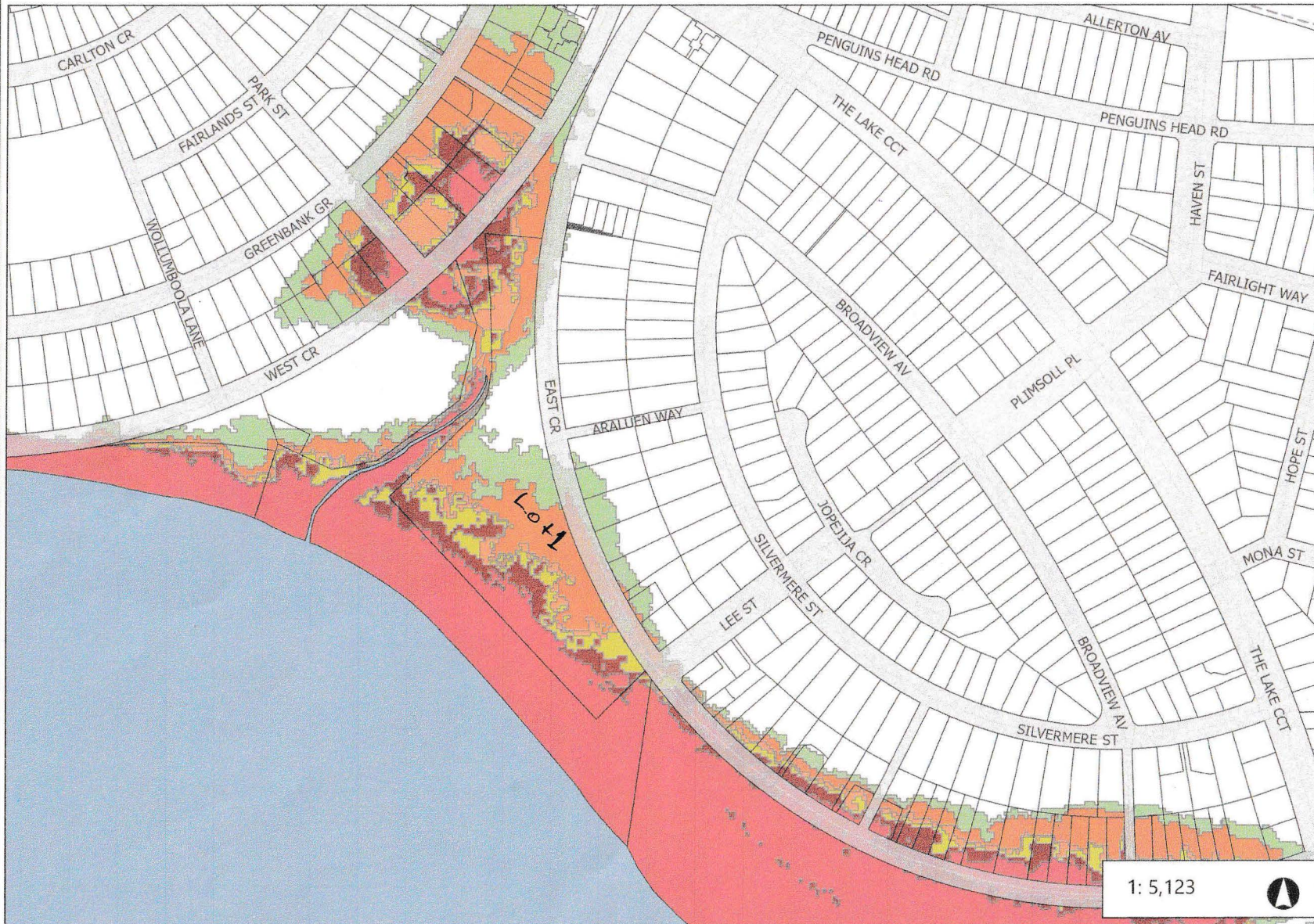




**Lot 1 DP614607 - Zoning Map**



# Flood Map Lot1 East Cres Culburra Beach



## Legend

- AEP1 Percent Existing
- AEP1 Percent 2050
- AEP1 Percent 2100
- FPA Existing
- FPA 2050
- FPA 2100
- PMF Existing
- PMF 2050
- PMF 2100

## Notes

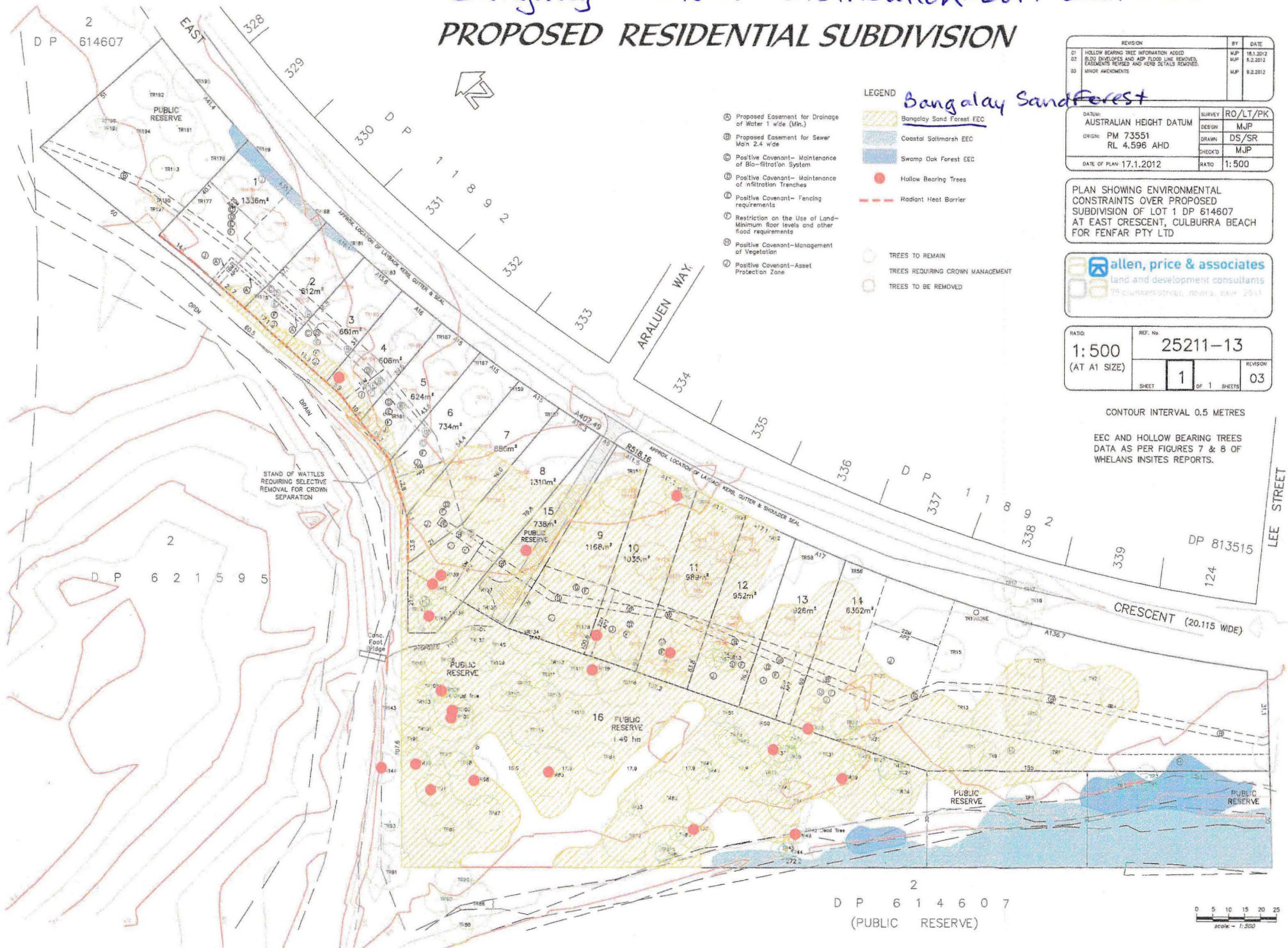
Notes

This map is a user generated static output from an Internet mapping site and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable.



# Bangalay Sandforest Distribution-Lot 1 East Cres

## PROPOSED RESIDENTIAL SUBDIVISION



REVISION	BY	DATE
01 HOLLOW BEARING TREE INFORMATION ADDED	MJP	18.1.2012
02 EEC DEVELOPES AND ADP FLOOD LINE REMOVED, EXISTENTS REVISED AND KERB DETAILS REMOVED.	MJP	18.2.2012
03 MINOR AMENDMENTS	MJP	9.2.2012

DRAWN: AUSTRALIAN HEIGHT DATUM	SURVEY: RO/LT/PK
ORIGIN: PM 73551	DESIGN: MJP
RL 4.596 AHD	DRAWN: DS/SR
DATE OF PLAN: 17.1.2012	CHECKED: MJP
	RATIO: 1:500

PLAN SHOWING ENVIRONMENTAL CONSTRAINTS OVER PROPOSED SUBDIVISION OF LOT 1 DP 614607 AT EAST CRESCENT, CULBURRA BEACH FOR FENFAR PTY LTD

**allen, price & associates**  
land and development consultants  
75 clunton street, dromana, vic 3931

RATIO: 1:500 (AT A1 SIZE)	REF. No: 25211-13
SHEET 1	OF 1 SHEETS
	REVISION: 03

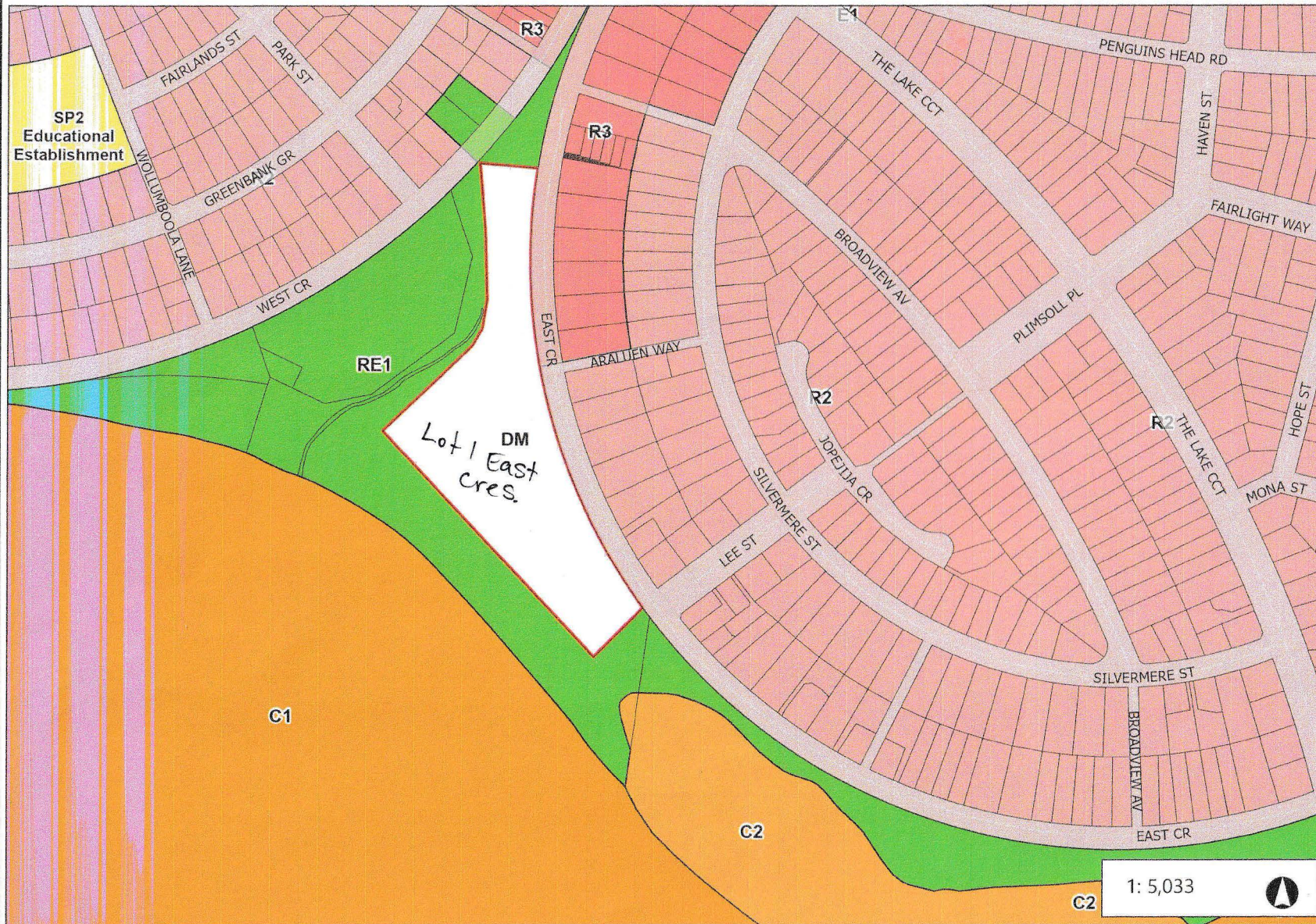
CONTOUR INTERVAL 0.5 METRES

EEC AND HOLLOW BEARING TREES DATA AS PER FIGURES 7 & 8 OF WHELAN'S INSITES REPORTS.

Attachment



# Deferred Matter Lot 1 East Cres Culburra Beach



## Legend

### Land Zoning (LZN)

- C1 National Parks and Nature Re
- C2 Environmental Conservation
- C3 Environmental Management
- C4 Environmental Living
- E1 Local Centre
- E2 Commercial Centre
- E3 Productivity Support
- E4 General Industrial
- MU1 Mixed Use
- R1 General Residential
- R2 Low Density Residential
- R3 Medium Density Residential
- R5 Large Lot Residential
- RE1 Public Recreation
- RE2 Private Recreation
- RU1 Primary Production
- RU2 Rural Landscape
- RU3 Forestry
- RU4 Primary Production Small Lot
- RU5 Village
- SP1 Special Activities
- SP2 Infrastructure
- SP3 Tourist
- W1 Natural Waterways
- W2 Recreational Waterways
- W3 Working Waterways
- W4 Working Waterfront
- DM Deferred Matter
- JE Shoalhaven LEP (Jerberra E:
- Waterway

## Notes

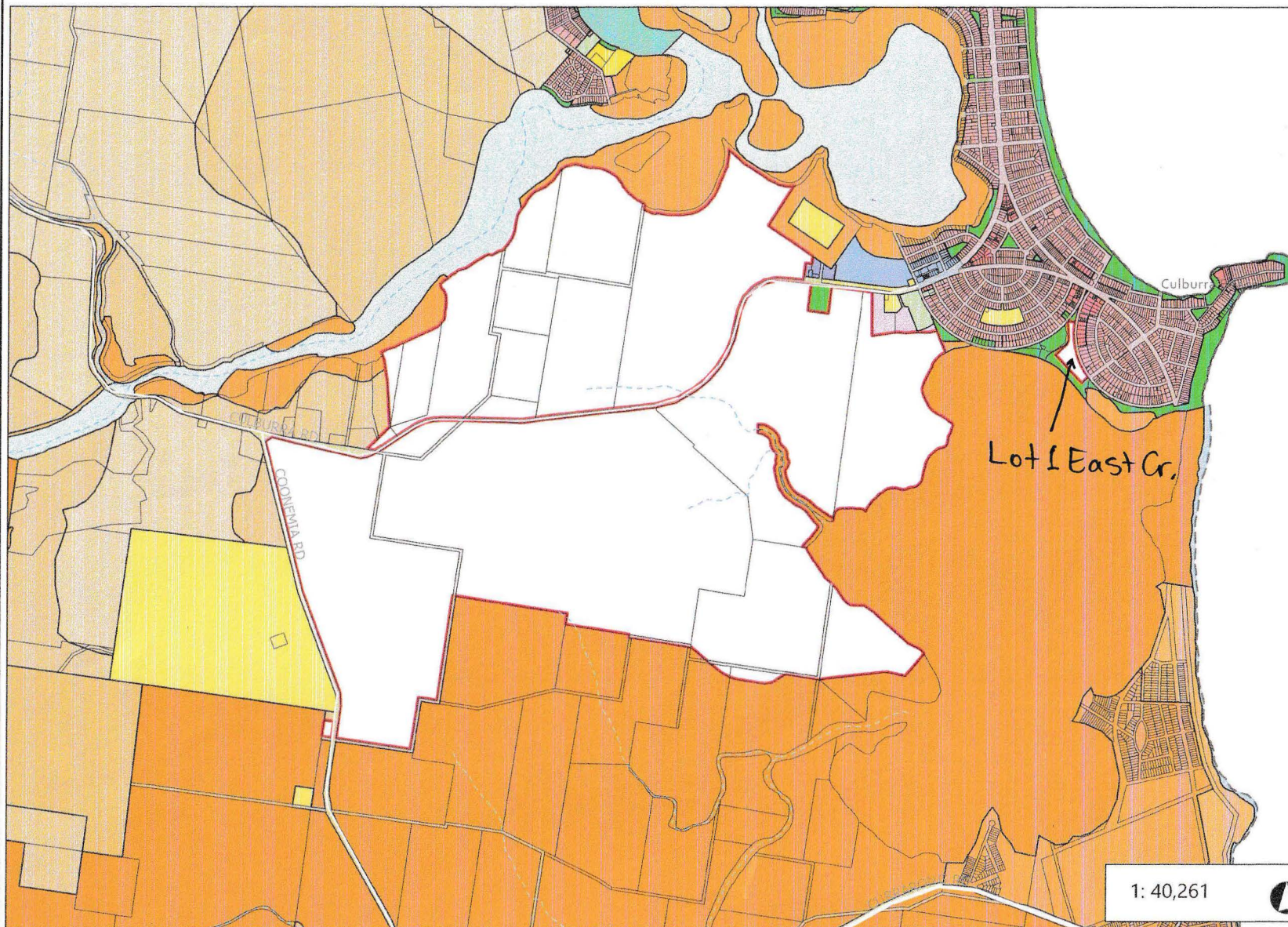
DM = site of approved DA for 14 housing lots

0.3 0.13 0.3 Kilometers

This map is a user generated static output from an Internet mapping site and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable.



# Deferred Matter - Halloran lands unzoned Culburra Beach



## Legend

### Land Zoning (LZN)

- C1 National Parks and Nature Re
- C2 Environmental Conservation
- C3 Environmental Management
- C4 Environmental Living
- E1 Local Centre
- E2 Commercial Centre
- E3 Productivity Support
- E4 General Industrial
- MU1 Mixed Use
- R1 General Residential
- R2 Low Density Residential
- R3 Medium Density Residential
- R5 Large Lot Residential
- RE1 Public Recreation
- RE2 Private Recreation
- RU1 Primary Production
- RU2 Rural Landscape
- RU3 Forestry
- RU4 Primary Production Small Lot
- RU5 Village
- SP1 Special Activities
- SP2 Infrastructure
- SP3 Tourist
- W1 Natural Waterways
- W2 Recreational Waterways
- W3 Working Waterways
- W4 Working Waterfront
- DM Deferred Matter
- JE Shoalhaven LEP (Jerberra E:
- Waterway

1: 40,261



2.0 0 1.02 2.0 Kilometers

This map is a user generated static output from an Internet mapping site and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable.

## Notes



# Lake Wollumboola Protection Association Inc

PO Box 90  
Culburra Beach NSW 2540



Phone/Fax: (02) 4447 2185  
Email: [info@wollumboola.org.au](mailto:info@wollumboola.org.au)

The General Manager  
Shoalhaven City Council  
Email [council@shoalhaven.nsw.gov.au](mailto:council@shoalhaven.nsw.gov.au)  
PO Box 44 Nowra NSW 2541

Dear Sir,

4<sup>th</sup> April 2019.

## **Objection to Application DS 18/1491 to modify Development Consent No. SF10071 Lot 1 DP 614607 Lot 1 East Crescent Culburra Beach 14-lot subdivision.**

I write on behalf of the Lake Wollumboola Protection Association Inc to object to the Allen Price and Scarratts (APS) application on behalf of Sealark Pty Ltd to modify the proposed 14-lot "Lakeside Park subdivision" at Lot 1 East Crescent Culburra Beach.

Our primary objection to the 30<sup>th</sup> November 2018 application to modify the 2012 consent is that this consent has lapsed and therefore cannot be revived or modified.

However, in the event that APS is able to provide evidence of commencement we have provided our objections to aspects of the proposed modifications as provided in **Attachment 1**.

The NSW Environmental Defenders Office (EDO) prepared a letter on behalf of LWPA Inc outlining our position that the Lot 1 East Crescent subdivision consent has lapsed. EDO sent that letter to Shoalhaven City Council on 13<sup>th</sup> March 2019. A copy of the letter is attached. **Attachment 2**.

The Association has long objected to development of Lot 1 East Crescent. In 2004 LWPA presented a submission to Council for purchase the site as an Environment and Aboriginal cultural heritage reserve because of its high conservation values including:

- its cultural significance for the Jerrinja people.
- its proximity to Lake Wollumboola which is internationally significant habitat for migratory and native bird species and likely to suffer cumulative impacts from polluted ground and surface runoff.
- the Bangalay Sand Forest Endangered Ecological Community which covers most of the site, is habitat for many threatened species.
- its role as a habitat corridor along the northern lake shore, which also protects the shore from damaging impacts of the existing residential area.
- its social and recreational value for the community with peaceful native bushland and stunning views across the lake as part of Council's Sheepwash Creek Walking Track.

With regard to lapsing of consent Part 4 division 4.9 Section 4.53 of the NSW Environmental Planning and Assessment Act 1979 No 203 "Lapsing of consent," specifies that an application has lapsed if it has not physically commenced within 5 years of the date on which consent was granted.

The APS application does not provide evidence to substantiate its claim that physical work for the subdivision such as building, engineering or construction work, commenced on the site within the 5 years between the NSW Land and Environment Court 15<sup>th</sup> February 2012 consent and the date when that consent would lapse in the absence of such work, that is 16<sup>th</sup> February 2017.

Members of the Association together with nearby residents are familiar with the site. Several of us undertake regular bushcare work adjacent to the site and together with other members of the Culburra Beach community, often walk through it to Council's Sheepwash Creek Walking track and to the Lake shore. Any physical work on the site would be immediately obvious and of concern to Association members because it would involve clearing and disturbance to the native forest and understory vegetation.

We have not observed any physical work taking place on the site since the Court approval that might constitute physical commencement. It was not until 8<sup>th</sup> February 2019 when one of our members observed work on site and reported it to Council. However, this work took place almost two years after consent would have lapsed and accordingly, we consider that this physical work should be considered as unlawful.

We are aware also that since approval of the application, representatives of the landowner pursued alternative plans for the site which conflict with claims that the subdivision has commenced.

At its 18<sup>th</sup> February 2013 meeting, Shoalhaven City Council's Property Steering Committee accepted the offer of donation of land, Lot 1 DP 614607 East Crescent Culburra and agreed to classify it as "Community Land." The Committee also agreed that Council write to the Foundation for National Parks and to the donor to express its appreciation of the donation. **Attachment 3** Page 45 of the SCC Minutes 18<sup>th</sup> February 2013.

In addition, the entire Lot 1 site is identified in several maps as part of the Halloran Planning Proposal which the NSW Department of Planning and Environment determined in November 2015 and again in 2018. A map included in a Shoalhaven City Council Report in 2017 shows Lot 1 included in the Halloran Planning Proposal. (HPP). A further Council map of the HPP which is available on the HPP part Council's website, identifies the entire site as "PP-Potential Public Reserve." **Attachments 4 and 5.**

The Association also understands that Lot 1 was offered as part of biodiversity offsets for any rezoning of Halloran lands for development as part of the Department of Planning and Environment's final Determination of the Halloran Planning Proposal, to be completed by 23<sup>rd</sup> February 2021. The Determination also states that land in the Lake Wollumboola catchment is to be zoned for Environment Conservation subject to catchment surface and ground water studies. Proceeding with the Lot 1 East Crescent subdivision conflicts with this Determination.

With regard to the proposed modifications, we disagree with the assessment that they would have "minimal environmental impact as all works are contained within the site and relate to facilitating the consent in a more practical and workable outcome."

Yours sincerely,

Frances Bray PSM BA, B Ed Dip Ed.

President.



## Attachment 1.

**LWPA Inc objections to application DS 18/1491 to modify Development Consent No. SF10071 Lot 1 DP 614607 Lot 1 East Crescent Culburra Beach 14-lot subdivision.****Background.**

We consider that any development proposal in the Lake Wollumboola catchment including modifications to Lot 1 East Crescent should take account of the New South Wales Joint Agency Report titled *"Environmental Sensitivity of Lake Wollumboola: input into considerations of development applications at Long Bow Point, Culburra."* Scanes P et al 2013. The Report presents evidence which strengthens the case for conservation of lands in the lake catchment, rather than pursuit of urban development expansion.

The NSW Joint Agency Report (2013) says:

- **"Lake Wollumboola is a unique system of high ecological value, characterised by high primary productivity and overall biological diversity, particularly for birds."**
- **"Any future development in the vicinity of Lake Wollumboola should be placed as far from the lake as possible to minimise risk of contamination of ground water aquifers."**
- **"The lake is vulnerable to a catastrophic state change if key processes are disrupted by nutrient enrichment ... the Lake would never recover ... resulting in loss of swans and other fauna."**
- **"The demonstrated ecological significance of the lake, the relative rarity of its biotype and its sensitivity to catastrophic change, justify the current limitations to development within the catchment."**

The Report emphasized that **"a sound conceptual and empirical understanding of the lake's physiology and ecology"** was necessary, as well as further detailed studies regarding its relationship with the surrounding catchment.

The Report also states that:

**"...back dune lagoons (such as Lake Wollumboola) where phosphorus concentrations are low in comparison to nitrogen, are extremely susceptible to eutrophication and excessive algal growth occurs if external nutrient inputs (particularly phosphorus) will increase."**

OEH Scientists undertook further research at Lake Wollumboola in 2015. They found evidence of ground water in the lake creeks and waters, including adjacent to wetlands. LWPA members also identified wetland soaks/ground water seepage in several locations around the lake shore including at Sheepwash Creek and adjacent to Lot 1.

Moreover, the NSW Government's Illawarra Shoalhaven Regional Plan 2015 accepts the Joint Agency document as its guide for protecting and conserving Lake Wollumboola and its catchment, stating as follows:

**"The NSW Government has also completed a joint agency study entitled the Environmental sensitivity of Lake Wollumboola. The outcomes of the Sensitive Urban Lands Review and the joint agency study will guide protection and conservation of the Lake Wollumboola catchment and future land use planning of the Culburra Beach site."**

The APS application makes no mention however of the Joint Agency study. Instead it claims that the development and its proposed modifications would have minimal impact on the environment including Lake Wollumboola.

In contrast we consider that the modifications to aspects of the application would contribute to cumulative degradation of Lake Wollumboola's water quality and ecology and should not be approved.

## **1. Lot 1 East Crescent Flood and Storm water issues**

### **Proposal to lower flood planning levels.**

**We object to proposals by the proponents to lower flood benchmarks and to modify conditions of consent which together would increase the potential for pollution of Lake Wollumboola.**

It is reckless in our view to propose to lower flood levels at Lot 1 when sea levels are rising and when parts of Lot 1 East Crescent and East Crescent itself are known to flood from a combination of overland stormwater and inundation from high water levels in Lake Wollumboola.

Such an approach encourages homes and other infrastructure to be built on lower parts of site subject to flooding and thus increasing the flood risk to housing and to the environment.

The APS application 30<sup>th</sup> November 2018 to modify development consent No SF 10071 over Lot 1 DP 61 4607 East Crescent Culburra Beach states in the **Modification purpose** section Page 1 that, "The purpose of this modification is to primarily address and incorporate flood level changes.." and to address other issues.

It goes on to say that, "As outlined in the supporting and updated detailed flood certified dated 14<sup>th</sup> August 2018 % AEP flood Level is now based on a revised year of 2050 is now 3.1 m AHD and not higher levels as detailed in the consent."

We disagree with the claim that the current Flood Certificate for Lot 1 East Crescent is based on the revised Shoalhaven City Council's 10<sup>th</sup> February 2015 decision to no longer use former NSW State Government sea level rise benchmarks and implement lower benchmarks.

The Flood Certificate issued for the site clearly states that, "according to the Lake Wollumboola Flood study (2015) this property East Cr Culburra Beach-Lot 1 DP 614607 is affected by the 1% AEP Flood level. It goes on to state that, "The new benchmarks will be incorporated into the flood information in future. Until studies incorporating the new benchmarks are undertaken Council will continue to use the best available information."

The Certificate also states that "all subdivisions and long-term planning must take into account the projected 2100 flood information."

To our knowledge further detailed studies incorporating the new benchmarks have not been undertaken and will not be for some time.

### **Expert advice regarding Flood risk**

The Lake Wollumboola Flood Study September 2015 discusses in substantial detail the risks of potential sea level rise in relation to intermittently closing and opening lakes/lagoons, particularly Lake Wollumboola. In its section on Key Study Outcomes it says,

"A significant flood risk to existing development is posed by potential sea level rise. Any sea level rise will result in an equivalent raising of the entire Lake Wollumboola system by a similar amount. A rise in sea levels (projected by 2100) would therefore be expected to raise all flood levels by the same amount. Under these circumstances the current 1% AEP could occur between five to ten years on average. The increase in flood risk and average annual damages to existing development below 3.2 m AHD in Culburra Beach would be severe."



The Lake Wollumboola Flood Study does not specifically address the flood risk to Lot 1 in its Table 37 "Culburra Beach Climate Change Analysis -1% AEP storm," although it lists developed sites on the higher side of East Crescent. This difference may be that the purpose of the study was to assess the flood risk to existing dwellings.

With ocean warming and sea level rise, scientists consider that the high water levels of intermittently closing and opening coastal lagoons such as Lake Wollumboola, would increase due to two factors. The base level will rise by an equivalent amount to sea level rise, when the entrance is open. In addition, when closed, the maximum water level would increase by an equivalent amount to sea level rise as this is controlled by the entrance berm height which is expected to rise contemporaneously with sea level.

Reference "Climate Change Impacts on Entrance Processes of Intermittently Open/Closed Coastal Lagoons in NSW, Australia. PE Haines and BG Thom Journal of Coastal Research SI 50 (Proceedings of the 9<sup>th</sup> International Coastal Symposium 242-246. Gold Coast Australia, ISSN 0749.0208.)

#### **Evidence of flooding of Lot 1.**

Photographic evidence of Lot 1 East Crescent in 1987 shows that most of the site south east of Araluen Way was flooded. **Attachment 6.**

Parts of the site were also flooded in July 2006, February 2008, May 2010 and twice in 2011. The area shown on the Allen Price and Scarretts sketch "1% AEP Flood Level Proposed Residential subdivision over Lot 1", is less than the observed flood levels on those parts of the site south east of Araluen Way and therefore cannot be relied on.

The 6<sup>th</sup> June 2016 natural opening of Lake Wollumboola during the major East Coast low provided insights into the potential impacts of ocean warming, sea level rise, high tides and storm surge on the potential for flooding of low-lying areas around the Lake Wollumboola shore. Waves generated by the extreme conditions of the east coast low overwhelmed the sand bar and washed into the north-east bay the reverse of usual openings. The result can be observed now with the sand-covered lake bed exposed due to drought.

Waves and high tides also washed inland, flooding the lake shore wetlands and depositing debris and pumice high on the foreshore, extending past Lot 1 and the Sheepwash Creek entrance. This event demonstrated the potential for flooding of low-lying areas of Lot 1 due to increased storminess and sea level rise even when the lake sand bar is open to the ocean.

#### **NPWS approach to maintaining natural lake levels.**

The NSW NPWS has made clear that it would not open Lake Wollumboola at lower than natural levels to accommodate Lot 1 homeowner owners, because of the likely damaging impacts on lake ecology of preventing flooding of the surrounding wetlands.

NPWS established its policy and entrance management controls for Lake Wollumboola in the Jervis Bay National Park and Woollamia Nature Reserve Plan of Management 2011. The policy was based on hydrological research into the natural maximum height of the Lake Wollumboola sand bar. Its purpose is to maintain a natural opening level for Lake Wollumboola. The water height of 2.75 AHD was established as the height where the Service would consider artificially opening the lake sand bar when there is a real threat of flooding at the floor level of existing houses.

It is likely that NPWS would review its entrance opening policy for the lake in accordance with expert advice on sea level rise projections.

With regard to new houses at Lot 1, the NPWS advised Council in 2003 that,

"Lot 1 may be subject to flooding well before significant assets (ie existing housing) are affected. Artificially opening the lake to mitigate flooding of Lot 1 would significantly compromise both the natural regime intended for this lake and the proposed mitigation strategy for existing houses. It is also likely to have adverse implications for the endangered Green and Golden Bell Frog (*Litoria aurea*) which is known to occur at Lake Wollumboola. Therefore, NPWS firmly resists opening the Lake to mitigate flooding of inappropriate development on Lot 1."

NPWS strongly recommends that SCC argue against any form of development on Lot 1 that could compromise the natural opening level of the Lake, or have any adverse impact on native flora or fauna or water quality in the area." M. Hood Southern Directorate NPWS."

#### **Impacts of lowered flood levels and other modifications on water pollution control measures risks increased pollution of Lake Wollumboola.**

We object to any changes to **Conditions 64 and 71** which would permit stormwater runoff direct to Lake Wollumboola and to land north south or west of the development.

Shoalhaven City Council water quality testing for the northern shore of Lake Wollumboola adjacent to the existing residential area and Sheepwash Creek demonstrates increased levels of nutrients and sediments in the adjacent waters of Lake Wollumboola. Lowering flood levels for Lot 1 as proposed to accommodate residential development, would increase the potential for flooding of parts of the developed site and for increased nutrient and sediment pollution of the wetlands, Sheepwash Creek and lake waters.

Longstanding expert advice confirms that water pollution controls are not able to achieve reductions in total suspended solids and nutrients compared to natural runoff from natural forested environments as is proposed at Lot 1.

Also, Lake Wollumboola's capacity to withstand nutrient enrichment in addition to existing nutrient-enriched runoff from urban development, without the natural system collapsing is unknown. However, the NSW Coastal Lakes Inquiry 2002 demonstrated that the ecology of other NSW Coastal lakes such as Tuggerah Lakes has been degraded by urban development runoff despite control measures. As previously discussed OEH and other NSW Government agencies warned about the likely damage to the Lake Wollumboola ecology of nutrient enrichment of surface and ground water runoff to Lake Wollumboola.

#### **Impacts of flooding on water pollution controls**

The conditions of consent include both temporary and permanent stormwater quality "improvement" devices, **Condition 80**, as well as an Erosion and Sediment Control Plan **Condition 59**. These include construction of storm water management measures for lots on sandy, flood prone soils to reduce polluted urban runoff.

Development of the subdivision could take years, thus increasing the chances of flooding and stormwater pollution during site clearing, exposure of contaminated parts of the site (old car bodies) and during construction of temporary and permanent water pollution control measures.

The permanent water pollution control measures for lots on sandy soils are a major cause for concern according to advice we received from Mr Ian Lawrence June 2011 then Adjunct Professor Sustainable Design, University of Canberra Senior Research Fellow CRCe Water.

He advised that "they involve infiltration of pervious area rainfall and watering through the underlying soil to the ground water as well as infiltration trenches to filter and divert surface water runoff from impervious areas to the ground water." In the sandy lots of the development, "the absence of clay from the sand areas



results in pollutants being primarily in colloidal or dissolved form. Hence the application of infiltration techniques to fine to coarse sand soils in this case is invalid, as pollutants will simply pass through the relatively large voids to the ground water and lake."

Flooding of parts of the site would result in the infiltration trenches flooding thus increasing an already high risk of nutrients and sediments contaminating ground water flowing to Lake Wollumboola.

The modifications also include transferring responsibility for construction of these mechanisms from the proponent to the potential new landowners. This creates opportunity for ad hoc water pollution control measures approved by individual certifiers instead of approval of the entire subdivision system by Council.

#### **Proposal to delete site filling.**

We oppose the proposed modification to delete **Condition 74. Site Filling**. The proponents claim that filling of low-lying parts of the site is no longer required due to "the updated flood level information." However, this claim is based on misinterpretation of the Flood Certificate for the site as previously discussed. The existing flood projections specified in the Conditions of Consent and in the Lake Wollumboola Flood study justify filling of parts of lots 13 and 14.

Removing the 2012 requirement to fill part of the site would result in locating housing and other development proposed in the future for lot 14 (a caravan park?) at lower flood levels than applies in the Flood Certificate for the site. This would increase potential for flooding of any development including water pollution control infrastructure, thus increasing polluted runoff to Lake Wollumboola.

## **2. Vegetation Removal within the site Conditions 43 to 57**

We disagree with the Land and Environment Court decision to allow the destruction of much of the Bangalay Sand Forest and Swamp Oak Floodplain Forest on Lot 1. If the sub-division were to proceed the integrity of this forest ecosystem would be threatened by the loss of a further 5 Bangalay trees, plus the trees already proposed for removal, plus loss due to the impact of residences backing on to the area identified for a Public Reserve.

The loss of BSF on Lot 1 extends further than claimed and would cause cumulative loss to the local environment, much greater than is acknowledged in the "Ecological Issues & Assessment Report," F Dominic Fanning February 2019.

We do however support the proposed modification to Conditions 11 and 13 to allow "H" to be part of the public reserve, allowing for 3 significant old Bangalay Sand Forest trees to be protected.

The conditions of consent would allow each of the proposed dwellings to have a back gate giving access to the reserve. We support dedication of the reserve to Council. However encouraging access from neighbouring houses would result in degradation of the reserve as well as adjacent lake wetlands and shore due to formation of tracks, mowing, dumping waste, weeds spreading, illegal poisoning/removal of reserve trees for views. Such damage occurs in many parts of the Shoalhaven including Culburra Beach where private properties back on to fragile coastal reserves.

The Bangalay Sand Forest on Lot 1 together with the adjoining Bangalay Sand Forest across Sheepwash Creek is the only substantial area of this Endangered Ecological Community in Culburra Beach. Together they provide important habitat for many native flora and fauna species, extending along the lake shore east as far as the lake sand bar and west to Long Bow Point. These species include micro bats, flying foxes, Kangaroos, Red-necked Wallabies and many species of native birds and in the wetlands, Green and Golden Bell Frogs.



We object also to the use of introduced species for revegetation. Native grasses and low shrub species have been utilised for other coastal developments, such as Benton Sands at Callala Beach so why not at Culburra Beach?

### **3. Comments regarding Appendix B. Matters in SEPP (Coastal Management) 2018.**

The 30<sup>th</sup> November 2018 APS Application to modify the 2012 consent to development of Lot 1 East Crescent includes in Appendix B comments relating to **Division 3 Coastal Environment Area and Division 4 Coastal Use Area**.

However, it fails to address issues relevant to the application in **Division 1 Coastal Wetlands and Littoral Rainforests area and Division 2 Coastal Vulnerability**. (no map is available for this area).

In relation to **Division 1 Coastal Wetlands and Littoral Rainforests Area** parts of Lot 1 East Crescent are mapped in the Coastal Management SEPP 2018 as "Coastal Wetlands" and "Proximity Area for Coastal Wetlands." **Attachment 7.**

The map "**Coastal Wetlands area**" applying to Lake Wollumboola and Lot 1 includes the area designated for inclusion in the proposed public reserve as well as part of Lot 14.

Any development covered by clause 10. "Development on certain lands within "Coastal Wetlands" would require development consent under provisions 1)-6). In particular clause 4) states that "A consent authority must not grant consent for development referred to in subclause 1) unless the consent authority is satisfied that sufficient measures have been, or will be, taken to protect, and where possible enhance, the biophysical, hydrological and ecological integrity of the coastal wetland..."

This clause would apply to proposed development on the site including that which may occur should the proposal to lower flood levels be accepted by Council.

In relation to "11. Development on land in proximity to coastal wetlands" parts of lots 9 to 14 are included in the "proximity to coastal wetlands" mapping.

In relation to clause 11. It states, "Development on land in proximity to coastal wetlands.." 11.1 states that "Development Consent must not be granted to development on land identified as "proximity area for coastal wetlands ... on the Coastal Wetlands and Littoral Rainforests Map unless the consent authority is satisfied that the proposed development will not significantly impact on:

- a) The biophysical, hydrological, or ecological integrity of the adjacent coastal wetland."
- b) "the quantity and quality of surface and ground water flows to and from the adjacent coastal wetland..."

As indicated in our comments we consider that the recognised high sensitivity of Lake Wollumboola and its north shore wetlands hydrology and ecology to degradation of surface and ground water due to development, as established by the Joint Agency Report and the ground water studies by the Office of Environment and Heritage Estuary and Catchments Science Team, would justify expert scrutiny by Shoalhaven City Council of the proposed modifications to the Lot 1 East Crescent consent and of any further development applications for the site as identified as "Coastal Wetlands" or "Land in proximity to coastal wetlands" identified in the Coastal Management SEPP mapping.

Assessment of water quality issues such as impacts of polluted flood waters and of ecological impacts including known habitat for the Green and Golden Bell Frog, listed as Vulnerable under the Environment Protection and Biodiversity Conservation Act, would be necessary under both the State and Australian Government Act.

**Division 2 Coastal Vulnerability.** (No map available so no assessment possible.)

**Division 3 Coastal Environment Area.**

Mapping of the Coastal Environment Area includes the Lake Wollumboola catchment. Lake Wollumboola itself is included in Schedule 1 Coastal Lakes as a "Sensitive coastal lake."

Clause 1) states that Development consent must not be granted to development on land that is within the coastal environment area unless the consent authority has considered whether the proposed development is likely to cause an adverse impact on a series of issues a) to f) which would apply to Lake Wollumboola. Clause 2) addresses processes for assessing development to avoid, minimise or mitigate impacts.

The APS assessment does not acknowledge that Lake Wollumboola is immediately adjacent to Lot 1 and assessed impacts as "negligible" or "no impact" for the following criteria:

- a. integrity and resilience of the biophysical, hydrological (surface and ground water) and ecological environment. **Negligible.**
- b. Coastal environmental values and natural coastal processes. **Negligible.**
- c. Water quality of the marine estate. **Negligible.**
- d. Marine vegetation, native vegetation and fauna and their habitats. **No impact.**
- e. Open space, safe public access. **No impact.**
- f. Aboriginal cultural heritage, practices and places. **No impact.**

We disagree with the APS assessment particularly in relation to the proposal to lower the Flood planning levels and to remove the condition that flood prone parts be filled. This would also increase the potential for flooding of homes and infrastructure causing pollution of the wetlands and lake waters.

As previously discussed, the area of Lot 1 prone to flooding and the likely consequences of increased flooding of houses and infrastructure of the site and the potential for polluted flood waters to contribute cumulative damage to the biophysical, hydrological and ecological environment of Lake Wollumboola, have been either under-estimated or ignored.

APS has also ignored the expert advice of the Office of Environment and Heritage regarding the high sensitivity of the Lake Wollumboola ecosystem to degradation of surface and ground water as well as the expert advice in the "Lake Wollumboola Flood Study that, "A significant flood risk to existing development is posed by potential sea level rise. Any sea level rise will result in an equivalent raising of the entire Lake Wollumboola system by a similar amount."

**Division 4 Coastal Use Area.**

No commitment has been made to finalise the transfer of the Lot closest to Lake Wollumboola to Shoalhaven City Council for a public reserve, so public access is not assured. In any case the experience of a relatively undisturbed natural environment along the northern lake shore would be lost by the close proximity of housing and other undisclosed uses.

**Lake Wollumboola Protection Association Inc April 2019.**