

Proposed Mixed Use Subdivision at West Culburra (09-0088)

The proponent owns all of the land west of Culburra bounded on the north by Crookhaven River, on the west by Coonemia Road, on the south by Jervis Bay National Park on the east by Lake Wollumboola and the existing urban area of Culburra. The total area of this land holding is some 1000 ha. The proponent aims to undertake the progressive development of these holdings for urban purposes in an environmentally sensitive manner. The proponent has taken a long-term comprehensive review of how the land will be developed. This approach differs from the relatively short-term approach that is evident in some detailed aspects of the current zonings. Where such issues arise they are discussed under Section 5 Key Issues.

1. Description of the project.

The proposal comprises 5 land units as indicated on Plan 1. The intended development, staging and capacity of each land unit is as follows:

Land Unit	Area	Zoning	Proposed Use	Staging	Capacity
1	8 ha	3(f)	commercial/mixed use	as demand arises	up to 100,000m ² of mixed land use
2	5.5 ha (10 ha max)	2(c)	3 and 14 storey units; some single lot subdivisions	2011-16	500 unit 50 lots
3	29 ha	2(c)	single lot subdivision	2012-14	240 lots
4	11.5 ha	2(c)	single lot subdivision	2014-16	90 lots
5	43 ha	2(c)	single lot subdivision	2016-20	330 lots

A more detailed explanation follows.

Spatial Unit 1 is envisaged to perpetuate the same built-form that exists in the existing retail development. That is a service road with 90° parking on both sides lined by commercial or retail uses with units above. The height of development has yet to be determined. The development of the area in depth will be deferred until demand determines a need. Consideration could be given to hotel or motel uses being located in this spatial unit. The rate of development of this spatial unit is expected to be slow and lumpy. The proponent envisages preparing a master plan for this spatial unit.

Spatial Unit 2 is envisaged to be a combination of three-storey and fourteen-storey apartments. Depending on the resolution of the southern extent of this spatial unit (that is the extent, if any, of encroachment into the catchment of Lake Wollumboola). The southern section is anticipated to be single lot residential development adopting the water quality controls recommended in

the Robinson Water Quality report. Spatial Unit 2 is estimated to have a capacity of up to 400-500 apartments and up to 50 single dwelling lots (conditional on location of Southern Bomaderry).

Spatial Units 3, 4 and 5 are proposed as single dwelling lots with some variation in size. The north facing slope and attractive outlook are considered to confer on this area favourable attributes for residential development. It is estimated that the three spatial units together have a capacity for some 650 dwellings with lot sizes in the range 600-1000m². The area is expected to develop within 5-6 years from commencement.

The collector road, when completed, is envisaged as the route for the Culburra-Nowra bus service and for school bus services. Some 80% of the land in spatial units 3, 4 and 5 is within 400m walking distance of the collector road. The collector road is also considered to be the optimal alignment for a cycleway connecting to Culburra shops. The indicative urban form is shown on Plan 3.

2. Description of the site.

The various areas covered by the concept plan have different characteristics. Spatial Unit 1 is woodland. It is relatively flat; the land slopes to the NE at a gradient of about 2% with a maximum elevation of RL10 adjacent to Culburra Road adjoining the industrial zone. The northern part of this site may be subject to inundation.

Spatial Unit 2 is about 50% cleared and is used for grazing cattle. It sits astride the ridgeline at RL12 adjacent to the tip declining to RL9 adjacent to the retirement village. From the ridge the land slopes to the south to circa RL3 at the southern boundary of the retirement village. The southern boundary is mostly scrubland.

Spatial Units 3 and 4 are entirely woodland. The catchment divide is defined by a minor hill (RL26) approximately on the western boundary of the industrial zone; it then declines to a minor saddle at RL16 then rising again to RL28 at the kink in the western boundary of the zone. The slopes are moderate at about 7%; they are generally orthogonal to the edge of the Crookhaven River yielding an attractive NW-NE range of orientations.

Spatial Unit 5 is similar to Spatial Units 3 and 4 except that it is 50% cleared. The cleared area is pasture and is used for grazing cattle.

The ground is well drained, easily worked and ideal for residential development or pasture. There are no rock outcrops. No geo-technical issues are considered likely to arise. There is no known or recorded evidence of acid sulphate soils in the area proposed for development.

3. Relationship to existing planning instruments.

The South Coast Regional Strategy 2007 sets the overall policy framework for the South Coast. The Draft Strategy had identified land west of Culburra as

'sensitive urban lands'. These areas were reviewed by a panel. The Strategy, at Appendix A2, makes recommendations which are intended to guide future development applications. The recommendation is that 'land within the catchment of Lake Wollumboola is considered unsuitable for urban development....and the remaining land within the catchment of the Crookhaven River is considered suitable for limited urban development'.

The recommendation continued 'It would be appropriate for sufficient land within the Crookhaven River catchment, north of Culburra Road and west of the Culburra Village centre, to progress for urban development. The amount of land should meet estimated needs for the next 10-15 years.

The release area should achieve densities which are higher than traditionally achieved to reduce the land take and economise on the use of land resources. Site planning should allow for suitable bushfire set-backs, the protection of endangered ecological communities, and riparian set-backs exceeding current Department of Natural Resources requirements.'

It is considered that this proposal fits within the current planning regime as expressed in the South Coast Regional Strategy 2007, Shoalhaven LEP 1985 and pre-Draft Shoalhaven LEP 2009.

The other two relevant planning instruments are Shoalhaven LEP 1985 and Pre-Draft Shoalhaven LEP 2009 which is assumed to reflect the yet to be exhibited draft LEP. (see Plan 5 and Plan 6)

The concept plan is consistent with the zonings of Shoalhaven LEP1985. Spatial Unit 1 follows exactly the boundary of the 3(f) zone. Spatial Unit 2 is zoned 2(c). The western boundary has been adjusted to accord with the boundary of the proposed sports complex. This adjustment reflects correspondence between the proponent and Shoalhaven City Council with respect to the area required by Council and the foreshadowed dedication of land by the proponent to Council for recreation purposes. Spatial Units 3, 4 and 5 are in the 2(c) zone. The minor variations along the northern boundary with the 7(a) zone will need to be negotiated following detail survey of vegetation and soils and consideration of the engineering requirements for the design of the sewer main. A northern permitter road is proposed. The proposed collector road will define the southern boundary of these spatial units.

The concept plan is generally consistent with the assumed pre-draft Shoalhaven LEP 2009. Spatial Unit 1 follows exactly the boundary of the B2 zone which is identical to the 3(f) zone of SCCLEP1985. Spatial Unit 2 is significantly modified in that only a 1.5ha portion is zoned R1; the balance is zoned E2. Significantly the high school and proposed sports complex remain as zoned in SCCLEP1985 despite being located in the catchment of Lake Wollumboola. Spatial Units 3, 4 and 5 are part of an R1 zone. The comments relating to the northern interface with the E2 zone also apply with reference to the pre-draft SCC LEP 2009.

4. Studies undertaken by the proponent.

Realty Realizations Pty Ltd commissioned three studies prior to making any submission to the Department. These studies were lodged with the Department in September 2008. The studies are:

- Culburra West Urban Expansion Area
Ecological and Riparian Issues
Domenic Fanning
Whelans Insites, August 2008
- Water Quality Assessment
Lake Wollumboola and Crookhaven River
Bruce Simmons and Gavin Beveridge
School of Natural Sciences, UWS: July 2008
- Culburra Water Quality Report
Dr Geoffrey O'Loughlin and Dr David Robinson
Robinson Water Consultants; August 2008

The ecological study identified the following types of woodland in the area under consideration (see attached Plan 2):

- Type D3 – Blackbutt Open Forest (c36ha) – located with elevation 10 to 28m on generally north facing slopes south and west of the STP and towards the western part of the site.
- Type D4 – Bangalay – Wollybutt – Rough Barked Apple open forest (c 1ha) located adjacent to the western boundary of the site on north facing slopes.
- Type D6 – Hard-leaved Scribbly Gum Woodland (c 26ha) generally on E-NE slopes with an elevation of 8 to 22m.
- Type M1 – Swamp Oak-Eucalypt Open Forest (c22ha) – located along the fringe of the Crookhaven River.
- Type D1a – Grey Ironbark – Rough barked Apple open forest (c 5ha) located on the upper north facing slopes adjacent to the western boundary at elevation 25-28m.
- Type W1b – Sea Rush – Twig Rush Herbland (c 3ha) – located adjacent to the foreshore of Curleys Bay and around the backwater of Billys Island.
- Type W2 – Grey Mangrove Forest (c 9ha) located along the tidal foreshore of Crookhaven River and Curleys Bay.
- Type D2 – Bangalay Woodland – open forest (c4ha) located astride the dividing ridge.

Type W1b is listed as an endangered ecological community in the TSC Act. These lands, as noted at the outset, are protected by the current zoning.

Certain threatened fauna species use the area for foraging but no evidence of habitat was identified in the surveys undertaken. Foraging species include the powerful owl, glossy black cockatoo and several microchiropteran bats. The removal of woodland will diminish the area of habitat available to these species. This is not considered critical according to the Fanning assessment.

The Water Quality Assessment Report focussed primarily on Lake Wollumboola. It noted that the trophic behaviour of the Crookhaven estuary would be influenced by the catchment loading over many years. The Crookhaven has similar nutrient loadings to other coastal estuaries and lakes in NSW which are sufficient to trigger algal growth but which are meliorated by tidal flushing.

The Culburra Water Quality Report investigated the effect on surface water drainage quality of adopting best-practice water management technique. This report demonstrated that the adoption of best-practice water management techniques would bring about a reduction in nutrient flows into the Crookhaven which would lead to an overall improvement in water quality by reducing nutrient flows from the catchment into the river.

These studies demonstrated that the environmental impacts on the terrestrial ecology and the aquatic regime of the Crookhaven River and estuary can be managed satisfactorily. It is our intention to ensure that best-practice methods are adopted in the Concept Plan.

5. Preliminary Assessment of Key Issues.

Issue (a): consultation

The proponent has consulted with the Department of Planning and with Shoalhaven City Council with respect to identifying which areas may be developed. The proponent has also held informal discussions with various members of the Culburra community.

Issue (b): relevant planning controls

The proposed development is entirely consistent with the current zoning (Shoalhaven LEP 1985 as amended). Although not expressed on any current planning instrument the proponent has, on advice from DOP, adopted the catchment divide between Lake Wollumboola and the Crookhaven River as the boundary of urban development. Previous advice from Shoalhaven City Council (letter from the Strategic Planning Manager to John Toon Pty Ltd dated 3 April 2009) enclosing a map extract of Draft Shoalhaven LEP 2009 indicated a boundary of the R1 zone incorporating the high ridge which is located south of the catchment divide; this area can be drained to the Crookhaven catchment. If the latter boundary is adopted then an additional 32ha of residential land (including some probable open space) can be included in the concept plan. The southern boundary of the proposal is an issue for the proponent.

A further boundary issue of some significance is the southern boundary through parts Lot 1 DP88067 and Lot 3 DP825697. The ridgeline between the two catchments runs through this paddock which is used for grazing cattle and is zoned residential 2(c). The ridge is almost imperceptible; it lies about 125m south of Culburra Road. The lot on which is located the adjoining retirement village has a depth of circa 280m from Culburra Road. There is a proposal for a sports complex on the adjoining land to the west (part of which was formerly the Council tip); the site identified for this sports complex also has a depth of about 280m from Culburra Road. The existing zone boundary connects the southern boundary of the proposed sports complex and the retirement village. The southern section of the retirement village and a significant proportion of the proposed sports complex will be in the catchment of Lake Wollumboola. The location of the southern boundary of the developable area of this parcel is a key issue for the proponent.

The Industrial 4(a) zone includes land in the catchment of Lake Wollumboola. Residential uses are not permitted in the zone. The demand for land in this zone is very low (it may increase with the renewal of urban development for two reasons: one an increase in population and therefore demand for local services; and, two, an increase in construction industry activity which may lead to a requirement for new local premises). The zone is reasonably located for short-term needs, less so for the longer term. The writer considers the intersection of Coonemia and Culburra Roads to be a superior long term location for what will always be local service industry. The proponent seeks to maximise the frontage of the proposed collector road. In conceptual terms this is located on the ridge for several reasons. One is that the ridge location provides a better intersection (sight lines) with Culburra Road. However the ridge location implies some 300m of 'dead' frontage through the industrial zone (since demand is low) and it also presents a poor quality entrance to the new residential area. The plan submitted with this application relocates the intersection with Culburra Road to a position outside the boundary of the industrial zone. The proponent considers this a less satisfactory solution in technical terms (sight lines). It also marginally increases the encroachment on land in the Lake Wollumboola catchment.

The commercial zone 3(f) (B2 in the Draft) is classed as neighbourhood business. It has an area of about 8ha. The proponent considers it unlikely that a retail development of the size implied by the plan will be required. Shop-top housing is permitted in these zones but not single dwellings. The zoning creates a 950m long commercial strip when the proposed zone and the existing commercial development are combined. The proponent considers this excessive for retail or commercial uses over the whole zone. The proponent prefers an arrangement of land uses that extends the zoning proposed for the existing urban area east of Canal Street East. This may be an issue.

The waterfrontage to both Crookhaven River and Curleys Bay is zoned 7(a) (ecology) and E2 Environmental Conservation in the Draft LEP; most of the foreshore is also covered by SEPP 4 wetland (item number 350). The juxtaposition of this zone with residential development raises a number of management issues. It is certain that some residents will want to get access

to the waters of the Crookhaven and Curleys Bay as many do at present. Access may be required for a variety of purposes. How the foreshore environment conservation zone is to be managed will be an issue.

The proponent considers that a detailed ecological survey will be necessary to establish a suitable boundary between the 7(a) (ecology) zone and urban development. This survey will be carried out in conjunction with engineering studies design to locate the trunk sewer line; as noted earlier a perimeter road is envisaged along the northern edge of Spatial Units 3, 4 and 5. This road will function as an asset protection zone for bushfire purposes; it will also provide public access to selected foreshore areas of the Crookhaven River.

Issue (c): known community concerns

Informal discussions with community leaders in Culburra indicate strong support for further development as it will lead to an increase in the range and level of facilities and services available and increase local employment opportunities. At present there is a very high reliance on Nowra for all but the most basic local services. There is a small minority group who are concerned with the protection of Lake Wollumboola.

There is a significant aboriginal community living at Orient Point; some of this group are known to be seeking opportunities for aboriginal advancement in Culburra.

There are no known concerns about development outside the catchment of Lake Wollumboola. The protection society are strongly opposed to any development in the catchment of the lake.

Issue (d): potential environmental impacts

The proposal will involve the clearing of some 90ha of re-growth woodland. There is no proposal to retain any of this woodland since none has been identified as threatened or endangered. The flora and fauna survey indicated a low incidence of recordings of threatened species. The areas will be cleared progressively. The clearing of Spatial Unit 1 will be dependant on : the rate of demand for non-residential development. Spatial Unit 2 is only sparsely covered with vegetation; it is envisaged that this spatial unit will be developed in the first instance. Spatial Units 3, 4 and 5 will be developed progressively from east to west and will be cleared progressively. The areas allocated for major infrastructure serving Spatial Units 3, 4 and 5 will be cleared in the first instance. This includes the reservation for the new collector road, the easement for the sewer main and the spur rising main for water supply and a new reservoir if required.

There will be a potential for increased run-off from cleared areas into Curleys Bay and the Crookhaven River. The proponent envisages measures being taken to control the rate and direction of run-off to minimise any adverse effect on the waterways. The Robinson report is indicative of the detailed strategies to be adopted. Robinson Water Consultants are retained to advise on the detailed design of surface water management.

Issue (e) likely environmental risks

No significant risks have been identified. The greatest risk is considered to be to the waterways which accommodate a significant oyster industry. The proponent acknowledges this risk and will be guided by professional advice on the best methods of managing the risk. It is anticipated that the UWS team will be retained to liaise with Robinson Water Consultants on best practice surface water management.

Issue (f) constraints

There are no extraordinary constraints other than the limitation of any development to areas outside the Lake Wollumboola catchment. The consequence of this is that urban development is confined to a narrow strip of land that requires extended lines of infrastructure to service it. For the proponent the implications of this are a negative cash flow through the early years of the project.

The proponent anticipates retaining consultants to undertake a geo-technical survey to determine whether there are any geological abnormalities, acid sulphate soils or other conditions that will require detailed design consideration. Indigenous and European heritage studies will be undertaken to ascertain whether or not there are any items or locations of significance. Traffic consultants will be retained to advise on the design of the road network and to identify the location of intersections with Culburra Road. Bushfire consultants will be appointed to advise on the design and location of asset protection zones. Domenic Fanning will be retained to develop his report on Ecological and Riparian Issues in finer detail as part of the Environmental Assessment. The proponent considers such studies to be a normal part of the development process.

6. Scope of Environmental Assessment.

It is considered that the studies referred to above adequately deal with water quality in the Crookhaven River, Curleys Bay and Lake Wollumboola. The primary consideration will be the design of the surface water management system to ensure that there is no adverse impact on water quality in the Crookhaven River system.

Water supply and sewerage treatment are not considered to be issues because the existing infrastructure is designed to accommodate a population increase somewhat greater than is proposed. The only requirement is normal engineering design of services for the new urban areas (see Plan 4).

The design of the proposed collector road will need to be based on a traffic study. It is considered that this road will have to be designed assuming a more extensive urban development than this concept plan envisages.

To date no aboriginal heritage studies of the area have been undertaken. There is no known evidence of aboriginal habitat on the land.

In our opinion this is a straightforward urban development proposal. We do not consider there are any exceptional matters that require attention.

John Toon

29 April 2010.











