

Lake Wollumboola - conservation and ESD - are both possible?

Introduction.

The controversy surrounding conservation of Lake Wollumboola and its catchment is of epic proportions, extending over three decades.

One land use planning assessment after another has recognised the conservation value of the lake and its catchment, their high sensitivity to development pressures and recommended protection. Yet as recently as October 2014, Shoalhaven City Council (SCC) recommended consideration of yet another planning proposal for the lake's catchment.

Since 1993 members of Lake Wollumboola Protection Association Inc (LWPA) have advocated an approach to planning and development that considers the Lake Wollumboola and neighbouring Crookhaven River catchments holistically and applies the principles of ecologically sustainable development (ESD). Based on its numerous and well-documented values, protection of Lake Wollumboola is paramount.

Whilst recognising the challenges we did not anticipate the complexities of environment protection and planning law, delayed processes and increasing dichotomy between evidence-based and discretionary decision-making, between conflicting Government and Council policies and community views and the seeming dominance of private interest over long-term public interest.

Location

Lake Wollumboola is located between the Shoalhaven-Crookhaven River estuary to the north and Jervis Bay and the Beecroft peninsula to its south. The two magnificent surf beaches Culburra and Warrain Beach are adjacent to the lake. The lake bed and the south-western portion of the lake catchment are included in the Jervis Bay National Park (JBNP).

Culburra Beach-Orient Point, (Culburra) 21km south east of Nowra, is the only small town in the Lake and Crookhaven catchments. It has approximately 3,500 permanent residents, with as many part-time residents.

Mr Warren Halloran owns most of the private land surrounding Culburra approximately 1,000 ha across the Lake and Crookhaven River catchments.

Lake Wollumboola Protection Association

The LWPA is a community environment group. Over the last 21 years our members have played a significant role in initiatives to protect and conserve Lake Wollumboola and its catchment. The Association is a member group of the NSW Nature Conservation Council.

We rely on independent expert advice and local knowledge including the expert advice we received in 1996 through a NSW Legal Aid Commission grant, to assist our case to the Long Bow Point Commission of Inquiry (COI).

Our activities include:

- submissions to expert inquiries particularly on coastal land use planning.

- documenting and photographing the lake's character and ecology, including contributing to Birdlife Australia's database.
- volunteering with the NSW South Coast Shorebird Recovery Program to protect nesting migratory Little Terns, Pied Oyster catchers and other species.
- volunteering with SCC's Bushcare Program as members of the Lake Wollumboola Bushcare Group.
- promoting lake and catchment values and community understanding through a range of activities including a Lake Wollumboola Art Exhibition planned for November 2014.

Lake Wollumboola's unique character

Lake Wollumboola is a shallow, brackish intermittently closing and opening lake or lagoon (ICOLL). The lake is unique amongst a rare biotype of ICOLLS named "back dune" lagoons (OEH 2014). The Lake gradually fills from rainfall, runoff and ground water, evaporating during summer then gradually filling again.

Less frequently the sand bar is breached after heavy rainfall and the Lake becomes tidal for a short time. As much of the lake bed is above sea level up to 60% of it can become exposed, until waves deposit sand and close the entrance.

As the catchment is relatively small in relation to the lake area, closures may last up to eight years unless community members intervene and dig out the sand bar before the lake reaches its natural level of approximately 2.75 m AHD.

Maps and records from 1805 when the first Europeans came to the area, confirm that Lake Wollumboola was much the same then as it is today and that the Lake provided a rich environment for Aboriginal people.

Recognition of Lake and catchment conservation values

The lake and its catchment are recognised for a range of well-documented natural and cultural values. Here is a snapshot of these values and their recognition:

Natural Values

Catchment:

- High biodiversity, with over 300 flora species and over 300 fauna species.
- Threatened Species, at least 28 fauna species, birds, mammals and Green and Golden Bell Frog.
- Seven Endangered Ecological Communities, 90% of the catchment is relatively undisturbed Currumbene Lowland Forest, recognised in the Southern Rivers Catchment Management Authority Catchment Action Plan as a poorly conserved vegetation community.
- Wildlife habitat corridor along coast and west to the Great Dividing Range recognised in South Coast Regional Conservation Plan. 2010 (DECCW)
- Important for native migratory species, eg nectar feeding mammals and birds and the Green and Golden Bell Frog.

Lake:

- Lake bed, sand bar and southwest catchment are included in Jervis Bay National Park.
- listed as a Wetland of National Importance, with eight SEPP 14 wetlands.

- potentially meets five criteria for nomination as a Wetland of International Importance under the Ramsar Convention. The strength of the assessment lies in the Lake's unique dynamics and importance as habitat (NPWS 2011) for birds, with over 100 species.
- part of the East Asian-Australasian Flyway supporting 34 migratory wader, seabird, shorebird species listed in international migratory bird agreements.
- habitat for 17 NSW-listed threatened migratory and indigenous bird species.
- recognised by Birdlife International as a globally "Important Bird Area" for Black Swan and Chestnut Teal. Regularly supports more than 1% of the estimated world populations of these species with flocks of over 13,000 swans recorded.
- provides refuge during drought conditions for indigenous water birds with at least 20,000 water birds, shorebirds and waders recorded.
- supports plant and animal species at critical stages of their life cycles, with the NPWS South Coast Region's most significant breeding site for the migratory, endangered Little Tern and breeding habitat for the endangered Green and Golden Bell Frog.
- Coastal Salt Marsh Endangered Ecological Community and Endangered plant species *Wilsonia rotundifolia*.

Ornithologists and ecologists including Chris Chafer have monitored the lake's birdlife since the mid-1980s (Chafer 1996). LWPA member, Joy Pegler's monthly observations since 1993 have been invaluable in documenting the birdlife of the lake (see Keating and Pegler 2003).

The diversity of habitats for foraging, breeding, roosting and shelter is extraordinary. The greatest bird numbers and diversity occurs during summers when the Lake level is low, attracting both migratory waders, sea birds and water birds. Last summer over 50 species were observed.

Cultural Values

The Jerrinja people, many of whom live at the community at Orient Point, continue to maintain their spiritual and custodial relationship with the land and waters of the Jervis Bay Region, including ceremonial responsibilities, food gathering, passing on traditional stories and advocating for protection of significant sites and traditional lands.

Jervis Bay National Park, including Lake Wollumboola is identified under the National Parks and Wildlife Act for return of ownership to traditional owners with joint management with NPWS, should the traditional owners and Jerrinja Local Aboriginal Land Council agree to negotiate such arrangements.

Social and economic values

The lake has numerous social and economic values ranging from its aesthetic value derived from the natural vistas from ocean to escarpment to its importance for scientific study. Recreational uses include fishing, boating, kayaking, swimming, bird watching. Economic values include commercial fishing and nature tourism. Potential additional values include Aboriginal cultural tourism.

A brief history of conservation and strategic planning decisions

Controversy surrounding development of the Lake Wollumboola and Crookhaven River catchments began when SCC first resolved to prepare an LEP for Culburra Beach in 1982. The Culburra Urban Expansion Area (CUEA) was approved in 1992 but few

community members were aware that the lake and river catchments were rezoned for a 3,000 lot urban development.

Members of the now LWPA, interested in preparation of the Lake Wollumboola Estuary Management Plan, learned of the rezoning in 1993, when plans became public for a subdivision at Long Bow Point adjacent to the north-west Lake shore, the first of six stages of development. Thus began our advocacy to conserve the lake and to limit development expansion to areas where it would be ecologically sustainable.

The issues identified in the 1980's remain the same today. They are:

- conservation of the internationally significant environmental values of Lake Wollumboola and its catchment.
- whether urban expansion in the lake catchment and surrounds is ecologically sustainable, given Lake Wollumboola's recognised sensitivity.
- potential loss of regionally significant threatened species habitat in the lake catchment.
- whether urban development expansion in Culburra Beach is actually justified.

These issues have played out through complex strategic planning, development and environment conservation processes, resulting in for us, achievement of significant milestones, but leaving the fundamental question of conservation and/or development unresolved.

The following table provides a brief history:

Date	Process	Outcome
1992	CUEA	rezoning for 3000-lot subdivision.
1995-1998	Environment Minister commitment to purchase Long Bow Point, north- west Lake catchment-subject to Treasury approval.	Environment Minister withdraws offer on basis of NPWS report that values same as those protected in south-west catchment addition to JBNP.
1996-2000	Long Bow Point Commission of Inquiry (COI)	recommended against urban expansion in the lake catchment, commitment to review Culburra Urban Expansion Area. Minister for Urban Affairs and Planning refused application.
1998	JBNP	gazetted of the south-west catchment
2002	NSW Coastal Lakes Inquiry.	recommended against urban expansion in the lake catchment, supported national park type uses only.
2002	JBNP	lake bed and sandbar gazetted as part of JBNP.
2002	Ramsar Listing	commitment to advance the lake's listing as a Wetland of International Importance
2006	South Coast Sensitive Urban Lands Review	recommended against urban expansion in the lake catchment with E1 National Park zoning for the lake catchment, and limited development in the Crookhaven River catchment
2007	South Coast Regional Strategy	Review recommendations adopted as requirements for Shoalhaven LEP and DAs
2010	Part 3A Development Application	landowner lodged application for mixed-use subdivision, mainly in the Crookhaven catchment but also in the lake catchment. Unresolved
2011	Development Application	landowner lodged application for golf course at Long Bow Point. Unresolved
2008-2014	Shoalhaven LEP (SLEP)	draft SLEP proposing mainly environment and rural zoning in the lake catchment with urban zoning retained in the Crookhaven catchment

2013-2014	Landowner requested deferral of proposed rezonings from the SLEP for all the Halloran Lands at Culburra Beach and adjacent areas.	SCC recommended approval Ministerial agreement to deferral with conditions (see details below)
2014	Planning proposal (rezoning)	landowner lodged planning proposal to rezone landholdings in Culburra Beach, Callala Bay and Currarong. SCC recommends approval.

Whilst the Minister for Planning and Infrastructure Brad Hazzard agreed to the request to defer the proposed rezonings in the SLEP, he set conditions that it must:

- recognise environmental sensitivities of land in the Lake Wollumboola catchment consistent with endorsed strategic planning for the area. (ie South Coast Regional Strategy.)
- provide opportunities for sustainable growth of Culburra Beach, Currarong and Callala Bay.
- be submitted by 29th August 2014. Otherwise mechanisms to rezone the land based on the exhibited zones may be considered.

The planning proposal process has potential for significant outcomes, but unless the process accepts the evidence and expert advice in favour of conserving Lake Wollumboola and its catchment, all achievements so far towards conserving this precious area, could be undermined.

Differing visions

Lake Wollumboola Protection Association Inc.

All expert advice points to Long Bow Point and the north-west catchment as being critically important for maintaining the water quality and ecology of Lake Wollumboola. The area is a major source of both surface and ground water and is of high conservation value.

The LWPA supports:

- the Lake and its catchment being conserved by inclusion in Jervis Bay National Park.
- the lake listed as a Wetland of International Importance under the Ramsar Convention.
- Culburra Beach retains its character with development expansion small-scale and limited to the Crookhaven River catchment, where assessed as capable of supporting ecologically sustainable development.

Long Bow Point and the catchment south of Culburra Rd should be the highest priority for national park conservation with the remaining north-west catchment protected via by E2 Environment Conservation zoning in the Shoalhaven LEP.

Dedication of additional lands to JBNP adjacent to Culburra would give recognition to the Jerrinja community's traditional relationship to the land and waters consistent with traditional ownership provisions of the NSW National Parks and Wildlife Act, whilst creating opportunities for cultural management and environmental tourism and associated social and economic benefits to the Jerrinja community.

Our vision is for Culburra Beach to benefit socially and economically from a heightened focus on nature and cultural tourism and diversification of its economy while retaining its coastal village character and beach lifestyle.

Halloran Trust

The Halloran family's plans to develop the area date back as far as 1915, indeed Henry Halloran was responsible for significant development throughout the Shoalhaven. Now Mr Warren Halloran, Henry's son, via the Halloran Trust is proposing significant urban development whilst offering to dedicate some land as national park.

The current planning proposal seeks to establish Culburra Beach as a "significant town" and "to facilitate long-term security of tenure for environmentally sensitive lands for environment protection purposes."

The Culburra part of the planning proposal **Figure 1**, includes existing development applications and new proposals including:

- the West Culburra 600 plus residential lots and mixed-use urban development mainly in the Crookhaven catchment but also in the lake catchment.
- a golf course at Long Bow Point
- urban expansion and tourism facilities in the Crookhaven River catchment
- urban development investigation area within the Lake Wollumboola catchment north of Culburra Rd, for residential and industrial development.
- offer to dedicate land in the Lake Wollumboola catchment and at nearby Kinghorn Point for addition to JBNP.
- biodiversity offset proposals mainly in an area south west of St. Georges Basin.

Culburra's population would more than double by approximately 2,400 additional housing lots as a result of these proposals.

Community visions

The Culburra community is divided regarding conservation and development plans. Many residents live in Culburra and commute to Nowra for employment. They value the natural environment and coastal village character, recognizing that features attractive to them as residents as well as to tourists, could be jeopardized by the extent and density of proposed development and its potential impacts on the environment. However, those who publicly express such views face ostracism from pro-development supporters.

Other residents see expansion as providing additional services and increased employment opportunities, particularly to benefit young people and existing retail enterprises. Unfortunately many rely on misinformation that Lake Wollumboola is 'dead' and want it dredged. Some believe also that Culburra is 'dying' because the Lake is stopping development. Both the Chamber of Commerce and the Progress Association support all aspects of the Halloran development proposals, except national park dedication.

Shoalhaven City Council

The majority of Councillors support development expansion in the Shoalhaven including at Culburra. They sought to allow zoning for a golf course at Long Bow Point as part of the SLEP, with the former Council opposed to Ramsar listing for the Lake, because it is perceived as stopping development.

At the Development Committee meeting on 7th October 2014 Council voted to progress the Halloran Trust Planning proposal, despite staff advice that it is inconsistent with

increasingly certain scientific advice that the Lake Wollumboola catchment should be protected consistent with the South Coast Regional Strategy 2007. (Strategy)

Acceptance or otherwise of evidence and expert advice regarding lake sensitivity

The Strategy incorporated the COI and Coastal Lakes Inquiry findings and specifically adopted the Sensitive Urban Lands Review recommendations as the basis for strategic planning including landuse in the Shoalhaven LEP zones and developments for the Lake Wollumboola-Culburra area. The key parts are:

- lake catchment unsuitable for urban development
- most appropriate zone is E1 National Parks with negotiations with the landowner towards dedication of most sensitive Lake catchment lands for JBNP.
- “limited” development expansion in the Crookhaven catchment with investigation of potential of rural-zoned lands.

However since 2007, these Strategy requirements have been watered down. The Draft Shoalhaven LEP exhibited in 2011 included E 2 Environment Conservation and E 3 zoning and RU2 zones for the Lake catchment, as recommended by staff with support from the Department of Planning and Infrastructure. This change apparently occurred because of failure of negotiations with the landowner and support for development in the catchment on the part of Councillors. All these zones include levels of use inconsistent with expert advice that the Lake catchment is unsuitable for urban development and should be zoned for national park.

In 2013 the Draft SLEP was again exhibited. Councillors recommended zoning of Long Bow Point to allow a golf course. However the Minister for Planning and Infrastructure requested that the Draft SLEP exhibited in 2013 also include the E 2, E 3 and RU 2 zonings for the lake catchment.

Meanwhile and despite long-term consistent expert advice, the Landowner’s representatives mounted a publicity campaign claiming that “Environment Conservation” zoning “is contrary to the scientific advise (sic) which is that properly specified development can lead to an improvement in the water quality of the Lake itself. Such an improvement can only be to the benefit of local fauna and flora that utilise the Lake.” (www.culburrafuture.com)

Whilst Council staff once again supported the exhibited zonings, Councillors agreed instead to recommend deferral of the zonings to enable the landowner to bring forward a planning proposal for his lands.

Attempting to clarify these issues, the then Department of Planning and Infrastructure requested expert advice from the NSW Office of Environment and Heritage (OEH). The OEH Report (Scanes et al 2013) provided additional and up-to-date expert advice, which reinforces and provides fresh insights into the complexity of Lake Wollumboola’s water quality and ecology and sensitivity to development impacts.

The report assessed claims by the developer’s consultants that development would improve the lake’s water quality and rejected them as invalid.

Scanes et al (2013) emphasises the lake’s likely dependence on ground water, with the currently widespread aquatic algae *Lamprothamnium sp.* contributing to high primary productivity and overall biological diversity of the lake. *Lamprothamnium sp.* is dependent on low phosphorus fresh water and sensitive to nutrient pollution from development, saying:

“Given the strong control that charophytes exert on lake ecology and water quality, **we consider that the lake is vulnerable to a catastrophic state change** if key processes are disrupted by nutrient enrichment and there is significant loss of charophytes and macrophytes.” and that

“The **Lake would never recover** from the loss of charophytes and macrophytes and the ecosystem services they provide....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 state change justify the current limitations to development in the catchment.” Scanes et al (2013)

The OEH analysis regarding ground water coincides with observations by LWPA members of the significance of ground water seepage to Lake Wollumboola’s ecology as reported in Keating and Pegler (2003).

Swans are regularly observed utilising ground water entering the lake to flush out hyper-saline waters, as they do not possess salt glands. Chafer (1996) described fresh water flooding from the catchment prior to Lake openings, stimulating rapid growth of *Lamprothamnium*, accompanied by die-off of the seagrass *Ruppia* that grows around the lake fringes as it becomes exposed after openings. The abundant growth attracts thousands of Swans and other water birds, which feed off the *Lamprothamnium*, ingesting the oospores, fertilising and propagating them and promoting further growth. During 1994 over 1,000 shorebirds (15 species) were recorded feasting on invertebrate larvae on the exposed macrophyte beds. Similar numbers were observed during summer of 2013-14.

Increased nutrients from development would cause cascading collapse of the lake system by stimulating microscopic filamentous algae blooms that would float throughout the water column robbing *Lamprothamnium* and *Ruppia* of sunlight, smothering these plants, causing their death and permanent loss from the system.

Evidence from nearby areas reinforces the uncertainty associated with water quality control structures used to justify development. At St Georges Basin on four occasions in the past 20 years storm water management ponds have failed during heavy rain causing extensive sediment plumes in the Basin. Such measures are also ineffective in preventing ground water pollution. Scanes et al (2013) demonstrate that once pollutants enter ground water aquifers, they cannot be removed as has occurred at Tuggerah Lakes.

Does the proposal meet Strategic requirements?

Despite this latest evidence and expert advice reaffirming previous expert inquiries and warning of the high risk to Lake Wollumboola, together with the requirement that the planning proposal be consistent with the Strategy, the current planning proposal clearly conflicts with the specific and general requirements of the Strategy.

The starting point for a planning proposal should be identifying constraints, such as lands of significant conservation value and sensitivity, considering alternatives prior to deciding on the most appropriate zonings for conservation and development. However in this case, existing and proposed development applications are the starting points.

Inconsistencies with the Strategy’s specific requirements include:

- recreational zoning for a golf course at Long Bow Point and investigation of residential development in the surrounding lake catchment.
- the proposed dedication of land for Jervis Bay National Park whilst welcome would not compensate for the likely impacts on the lake caused by this proposed development and its strategic location. The proposed dedication, in failing to include Long Bow Point, ignores the intent of the Strategy and biodiversity offset policy and offers less land than would be required for the scale of development proposed.
- such development is likely also to cause loss of threatened species and wildlife habitat recognised via the Strategy as regionally significant.
- large-scale not “limited” urban development is proposed for the Crookhaven River catchment, likely to result in loss of threatened species habitat and potential degradation of this Wetland of National Importance as well as the local Greenwell Point oyster industry.
- Culburra is not identified for urban growth as a significant town in the Regional Strategy or the Shoalhaven Growth Strategy, and the proposal does not provide justification to demonstrate a special case for an estimated 2,400 additional housing lots and other urban uses, which would more than double the existing population. This would potentially create an over-supply given Council’s projections of an additional 460 houses between 2011 and 2036 and population projection of 4,177 by 2036 for Culburra Beach-Orient Point (SCC Population summary).

Also the Commonwealth Environment Protection and Biodiversity Conservation Act applies to impacts with regard to internationally listed migratory birds and Coastal Salt Marsh and to Green and Golden Bell Frog habitat. If the Lake were listed as a Ramsar wetland, the Act would have a more decisive role. However it seems that the current NSW Government has deferred further consideration of Ramsar listing.

Whilst the South Coast Regional Strategy is therefore the key strategic document for decisions as confirmed by the Minister’s conditions for the Halloran planning proposal, there is no clear decision-making pathway, due to processes associated with the two undecided development applications.

The West Culburra Part 3A will be decided by the Planning Assessment Commission, with the golf course DA decided either by Council or the Joint Regional Planning Panel, under existing zonings, with initiatives apparently under way to amend the DA to ensure that SCC is the decision-maker.

Furthermore another strategic planning document just released, the Draft Illawarra Regional Growth and Infrastructure Plan (October 2014) confuses decision-making processes by further diluting the Strategy requirements.

Despite the Strategy adopting E1 National Park zoning for the Lake catchment this document refers to the Sensitive Urban Lands Review and the OEH Report guiding “future development proposals within the Lake Wollumboola catchment.”

This terminology opens up potential for further development by assuming incorrectly, that the Review and Strategy considered that non-urban development was acceptable. In addition the Draft Growth Plan assumes that the West Culburra development will proceed. However it is for the PAC not the Department to decide this application.

Is the proposal consistent with ESD principles?

The principles of Ecologically Sustainable Development provide the framework for weighing up and integrating environment protection with social and economic considerations and reaching decisions based on independent expert advice regarding

the sensitivity of these environments to impacts of development, as well as the social and economic needs of present and future communities.

Rather than promoting ESD the planning proposal is in direct conflict through the emphasis on the economic gains to be made by the developer.

In addition to the recognised and well-documented environmental impacts, the proposal fails to adopt a precautionary approach by considering available alternatives such as locating the golf course in the Crookhaven River catchment currently zoned rural, where the proposal includes tourist and residential development.

Furthermore it cannot be assumed that increased suburban development and population increase necessarily creates a more diverse economy or more employment opportunities and social services. Residential development expansion in other coastal areas of the Shoalhaven such as Sanctuary Point has not led to greater prosperity, improved employment opportunities or social services.

It is hard to accept also that a private golf course would boost Culburra's economy given golf courses in the Jervis Bay-Nowra area are dependent on poker machine income and even then long-term viability is doubtful.

The emphasis on urban development as the panacea for Culburra's social and economic problems deflects attention from diversifying the local economy through other means, such as internet-based businesses, fostering the arts and music and encouraging nature and Aboriginal cultural heritage tourism and conserving our main assets, the unique coastal village character of our community and our unspoiled environment.

The overall proposal conflicts with the precautionary principle as well as the principles of conservation of biodiversity and ecosystem function, together with intergenerational equity and appropriate valuation and pricing of environmental resources. The proposal continues to propose recreational and urban uses in the Lake catchment that risk catastrophic consequences for Lake Wollumboola, when alternative sites exist. It also proposes substantial unjustified urban expansion in the Crookhaven catchment.

It therefore fails to integrate environmental, economic and social considerations and would not be ecologically sustainable in the longterm.

So what might be the answer to providing both conservation and ESD?

Alternative options based on conserving the most sensitive areas, and providing ecologically sustainable development in cleared and less environmentally sensitive parts of the landholding, include:

- dedication of all Lake catchment lands south of Culburra Rd to Jervis Bay National Park, thus protecting the Lake and high conservation values of the catchment whilst promoting nature and cultural tourism, with access from Culburra Beach, including an entrance, interpretive facilities and amenities.
- possible relocation of the golf course to alternative sites in the Crookhaven catchment including cleared land identified for tourist and residential development, or to a site at the Culburra-Coonemia Road corner site, diagonally opposite the Scots College site. **See Figure 2.**
- Environment Conservation E2 zoning north of Culburra Rd in the Lake catchment.
- redesigning proposed development expansion in the Crookhaven River catchment with higher density adjacent to the town centre and E4 zoning for areas adjacent to the River. These measures would maintain Culburra's coastal village style, with small-scale, village clusters limited to areas assessed as capable of supporting

ecologically sustainable development and separated by wildlife corridors, consistent with NSW Coastal Design guidelines.

In conclusion, the local Culburra community, the Shoalhaven and wider public, particularly those concerned with the future well-being of Lake Wollumboola's internationally significant wetland habitat for birds and the nationally significant values of the Crookhaven River, are entitled to expect that decisions regarding the Planning Proposal and associated developments are made on merit, consistent with expert advice in the public interest, following community consultation, engagement and scrutiny, well in excess of formal four-week public comment.

Independent expert assessment as demonstrated by the Planning Assessment Commission Shaolin Temple decision for the neighbouring Jervis Bay catchment shows the way for assessment of the Halloran Planning Proposal. The PAC, whilst supporting the temple and tourist concept, rejected associated residential development and a golf course in this sensitive catchment. Surely rejection of these parts of the development proposal set precedents for the even more sensitive lake catchment.

Evidence and expert advice regarding the Lake's conservation significance, its sensitivity to development impacts and the high risk of catastrophic loss as well as its incomparable value as a cultural, social and economic asset, must be recognized with decisions to protect and conserve the catchment, whilst allowing complementary, small-scale, ecologically sustainable development in the Crookhaven catchment.

Figure 1. Planning Proposal-Master Plan Culburra Beach for the Halloran Trust.

Figure 2. Aerial photo-Lake Wollumboola Protection Association Inc alternative to Halloran Trust Proposal.

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