LWPA presentation to the Independent Planning Commission public meeting 24th July 2018 concerning the Long Bow Point Golf Course State Significant Development.

I am Frances Bray President of the Lake Wollumboola Protection Association Inc

I acknowledge that we meet on the lands of the Jerrinja people, who maintain their spiritual and custodial connection with Lake Wollumboola and surrounding lands and offer my respects to elders past and present and Aboriginal people present today.

Thank you for the opportunity to address the Commission Panel on behalf of the Lake Wollumboola Protection Association Inc. I will focus on our key concerns regarding the Long Bow Point Golf course application and provide a written submission detailing our advocacy and conservation activities at Lake Wollumboola and relevant qualifications.

We strongly support the NSW Department of Planning and Environment's conclusions in its Assessment Report "State Significant Development Assessment: Long Bow Point Golf Course SSD 8406" July 2018 and its recommendation to the Commission to refuse the application.

Construction of a golf course, that is urban development, on Long Bow Point would threaten the ecological integrity of Lake Wollumboola and its catchment.

The Lake Wollumboola Protection Association Inc Is a community environment group at Culburra Beach. We have been active since 1993 in initiatives to protect the high natural and Aboriginal cultural heritage values of Lake Wollumboola and the Crookhaven River and their catchments from potential impacts of ecologically unsustainable development. We are a member group of the NSW Nature Conservation Council.

We value the Lake's unique, complex character and ecology, which provide diverse habitats attracting at least 106 bird species, with near to 20,000 birds counted on one occasion. The Lake's exceptional birdlife habitat is recognised as nationally and internationally significant, as part of the East Asian Australasian Flyway under migratory bird agreements with China, Japan and South Korea. The International Union for the Conservation of Nature (IUCN) also recognises the lake as a Key Biodiversity Area (formerly an IBA) under its Global Standard for identification of KBAs, particularly for supporting large Black Swan and Chestnut Teal populations.

Our vision is for Lake Wollumboola and all undeveloped parts of its catchment to be protected as part of Jervis Bay National Park, with the Lake listed as an internationally important Ramsar wetland. This vision has been partly achieved with the lake bed and south west catchment are already included in Jervis Bay National Park.

And now to our key issues.

Issue 1. Proposals to locate a golf course at Long Bow Point conflict with expert advice and recommendations regarding protection of Lake Wollumboola and its catchment from three independent Enquiries to the former NSW Government as well as current NSW Government Planning and Environment policy and strategic plans.

The proposed Long Bow Point Golf course is located around the sloping flanks of the Long Bow Point peninsula, part of the north west catchment of the lake. Fairways and several water pollution control ponds are located close to the lake shore and SEPP 14 Wetlands. Recommendations of the Long Bow

Point Commission of Inquiry, the NSW Coastal Lakes Inquiry were incorporated into the recommendations of the South Coast Sensitive Urban Lands Review 2006, which state that:

- "Land within the catchment of Lake Wollumboola is considered unsuitable for urban development, principally on the grounds of the potential negative impacts of the Lake which is a sensitive ICOLL."
- "The land in the Lake Wollumboola catchment should be zoned for conservation purposes (the most appropriate zone, E 1 National Parks and Nature Reserves.) "
- Negotiations should be commenced with the landowner to determine their interest in dedicating the land in the Lake Wollumboola catchment for Jervis Bay National Park as a potential biobanking site."

The previous Government's South Coast Regional Strategy 2007, adopted these recommendations as the basis for rezoning parts of the Culburra Urban Expansion Area in the draft Shoalhaven LEP.

The 2018 Report to the Commission by the Department of Planning and Environment and current Government policy statements do not mention the latter two recommendations, although in our view they are critical for the future protection of the lake via conservation of its catchment. They are not mentioned in the application documents either.

Nevertheless, we welcome the current NSW Government's strategic planning policy for the Lake Wollumboola catchment as stated in the 2015 Illawarra-Shoalhaven Regional Plan and the Halloran Planning Proposal Determination as important steps forward in this saga. The policy acknowledges that the lake catchment is unsuitable for development because of potential impacts the lake and requires Council to zone Long Bow Point for environment protection, dependent on the outcomes of a biodiversity offset strategy.

Issue 2. Claims of Neutral or Beneficial Effects from the golf course on surface water quality and ecology of Lake Wollumboola and its SEPP 14 Wetlands have not been substantiated, so do not meet requirements for this application.

The 2017 Martens Consulting Report claims on behalf of the applicant, that the proposal achieves Neutral or Beneficial Effects (NorBE) on catchment surface water runoff, are inconsistent with longstanding expert advice that water pollution controls do not achieve reductions in total suspended solids and nutrients compared to natural runoff from natural forested environments such as at Long Bow Point.

No assessment was provided of impacts from major storm events during the construction phase of the proposed golf course and constructed wetlands. Yet prolonged storms are characteristic of Culburra Beach's weather.

Expert advice is that constructed wetlands are not capable of reducing nutrients in sediment-polluted runoff to natural levels even when the planted macrophytes reach maturity.

Lake Wollumboola experiences long periods of closure, (8 years from August 1998 to September 2006, the longest recorded) rendering the lake highly vulnerable to increased nutrient enrichment from the catchment, particularly during any clearing and construction phase.

The big unknown is the extent to which the lake can withstand further nutrient enrichment in addition to existing nutrient enriched runoff from urban development, without the natural system collapsing, as has occurred with other NSW Coastal lakes impacted by urban development runoff. (I reference the NSW Coastal Lakes Inquiry.2002)

This is why cumulative impact assessment is critical but has not occurred in this case. I will address these issues later.

Issue 3. Ground water. Claims of NorBE based on modelling of ground water impacts on Lake water quality have not been substantiated, so relevant requirements have not been met.

We recommend that the Commission considers the 2016 Submission by Dr John Anderson which concluded that, "there would be major increases for both Phosphorus and Nitrogen in the ground water from downward pressure exerted on the existing ground water sources causing increased and ongoing discharge of stored nutrient-enriched ground water to Lake Wollumboola, not a reduction as claimed."

Increases in Phosphorus loads in ground water, which could occur as a result of fertiliser use on a golf course, are particularly significant in light of the expert advice in the NSW Joint Agency Study, Scanes P, Ferguson A, Potts J, "Environmental sensitivity of Lake Wollumboola: input to Considerations of Development Applications for Long Bow Point, Culburra," 2013.

The NSW Office of Environment and Heritage follow up report 2016 identified evidence of ground water in Lake Wollumboola particularly adjacent to Long Bow Point.

This evidence coincides with our observations of freshwater seepage, possibly ground water, at sites around Long Bow Point and the northern lake shore. We have observed potential indicators of ground water such as stands of Phragmites, tannin-coloured waters after prolonged heavy rain and large gatherings of Black Swans drinking at wetland fresh water soaks around the shore to flush salt out of their system.

Issue 4. It is a major concern that the Reports on behalf of the proponent do not provide assessment of potential golf course impacts on Lake water quality and ecology including the lake's international significance as habitat for Threatened Species and Migratory bird species, although the impacts are likely to be significant.

The Cumberland Ecology SIS Addendum Report fails to address critical OEH DGRs including, assessment of potential impacts of the golf course development on Lake Wollumboola ecology, its creeks and SEPP 14 Wetlands and Threatened Species and Migratory Species. The application has not been referred for assessment under the Australian Government Environment Protection and Biodiversity Conservation Act 1999 regarding possible impacts on Threatened Species including 34 Migratory bird species, the Green and Golden Bell Frog and Coastal Salt Marsh.

Lake Wollumboola together with the Shoalhaven River Estuary is recognised also in the EPBC Act as internationally significant habitat as part of the East Asian Australasian Flyway, where migratory birds fatten up in preparation for their epic flights each year to Siberia and Alaska, as well as over-wintering here, with over 60 Bar-tailed Godwits currently present at Lake Wollumboola.

The SIS has also failed to assess impacts on the 23 bird species at Lake Wollumboola listed as Threatened Species under either NSW Threatened Species Conservation Act or the EPBC Act.

Two NSW-listed Threatened shorebird species breed at the Lake Wollumboola sand bar, the migratory Little Tern and local Pied Oyster Catcher. These nesting birds are particularly vulnerable to disturbance in lake conditions and water quality during their breeding season.

No assessments were conducted of potential impacts on aquatic vegetation including the key lake species, Ruppia and Lamprothamnium or on SEPP 14 Coastal Wetland vegetation and fauna species such as the Green and Golden Bell Frog, which we have observed breeding along the north and north west lake shores. - again, no referrals under the EPBC Act.

Issue 5. Impact Assessments have not been satisfactorily completed despite OEH requiring assessments for Threated flora and fauna in the Lake catchment and SEPP 14 Wetlands.

In 2016, Shoalhaven City Council's Threatened Species Officer assessed the previous studies as not complying in major ways with the Office of Environment and Heritage's Director General's SIS Requirements.

The additional Cumberland Ecology studies are also lacking in our view. They were mainly conducted in Spring 2017 during drought conditions, with the result that species dependent on Autumn/Winter flowering eucalypts and species that breed at different times of the year have not been assessed.

So, we do not consider that conclusions of "no impact on catchment threatened species as a result of a golf course "can be made based on this data.

Issue 6. Biodiversity Offset. We do not consider the proposed offset to be effective or acceptable "compensation" for loss of significant environmental values at Long Bow Point and potential degradation of Lake Wollumboola.

The proposal is not consistent with the South Coast Sensitive Urban Lands Review recommendations for E 1 National Park zoning and inclusion of sensitive parts of the Lake Wollumboola catchment in Jervis Bay National Park, negotiated as part of biodiversity offset arrangements.

According to the Department's Report the Proponent provided an amended golf course Biodiversity Offset proposal involving 167.36 ha of native vegetation and replanting of the cleared area at Long Bow Point surrounding the golf course, as well as "purchasing" other credits. The proposal refers to a "private conservation reserve" with vague references to future management of the land for public access and lacks detail necessary for assessment.

Whilst the proponent's offer of a 100 m retained vegetation buffer to the Long Bow Point lake shore, recognises the need to protect the lake, the offset proposal appears to give with one hand and take away with the other.

The 100 m buffer is located in close proximity to most of the constructed water pollution control wetlands.

The high environmental values of the mature forest and wetland vegetation close to the lake shore and Downs Creek would be significantly degraded by construction of the water pollution control measures in addition to the course construction, negating any biodiversity offset benefit. Clearing of these areas for the constructed wetlands does not seem to be included in calculations of cleared areas and impacts on lake and wetland water quality.

Heavy rainfall is likely during the long construction phase and would cause erosion of fragile soils and polluted drainage to the lake and SEPP 14 wetland.

Furthermore, parts of the area offered as a biodiversity offset are already protected from urban development under SEPP 14 Coastal Wetlands and SEPP 71 Coastal Protection, so no additional benefit has been demonstrated.

The offer to revegetate the cleared area as part of the offset appears disingenuous as it would take at least 30 years for planted trees to reach maturity and provide habitat for Threatened Species.

Issue 7. Cumulative impacts of the Long Bow Point golf course DA on Lake Wollumboola and other pressures on the lake have not been considered by the application or by the Department's assessment, despite assurances to us by the former Minister for Planning that such assessments would occur.

Cumulative impact assessment is critical for Lake Wollumboola and catchment as the Scanes Lake Wollumboola environmental sensitivity report points out because of limited scientific understanding of the lake's complex hydrology and ecology.

Scientists are not yet in a position to pinpoint when excessive nutrients and other pollutants would cause irreversible change to the lake hydrology and ecology. Hence the need for caution.

We received Government assurances in 2011 that cumulative impact assessment for Lake Wollumboola and its catchment would take place in relation to the golf course application and other proposed developments in the lake catchment such as the West Culburra application, but this has not occurred. (2011 Government assurances to us that with regard to the golf course application, 2011 letter on behalf of then Minister Hazzard from Craig Baumann former Parliamentary Secretary for Planning.)

Urban runoff from the existing residential areas in the Lake catchment already contributes pollutants to Lake Wollumboola. To our knowledge, no assessment of these impacts has occurred, so no information is available regarding the existing impacts on lake water quality and ecology.

Other potential sources of cumulative impacts will be identified in our written submission.

In addition, the impacts of Climate Change have not been recognised as potentially causing increased pressures on the lake environment. Climate Change scientists recognised the impacts of the 2016 east coast low as due to a combination of increased storm intensity, ocean warming, sea level rise, high tides and storm waves.

The storm impacts on Lake Wollumboola were significant. The lake opened from ocean to lake, the reverse of all previous documented openings. Large volumes of sand washed into the Lake, which remained open for 10 months, the longest recorded opening.

The predominant fresh/brackish lake ecosystem is slowly recovering with Black Swans gradually returning, indicating gradual regrowth of Ruppia and Lamprothamnium, both critical to the lake ecosystem.

Conclusion

There is no pressing need for a golf course at Long Bow Point, especially when 3 other golf courses are located within 20 kilometres and potential alternative sites are available in the same ownership. Moreover, the Halloran Planning Proposal provides for assessment of alternative sites.

The social and economic benefits of maintaining the integrity of Lake Wollumboola as part of Jervis Bay National Park and promoting nature and Aboriginal cultural tourism in Culburra Beach would far outweigh the limited benefits of a golf course.

We consider that the application should be refused as it is not consistent with the principles of Ecologically Sustainable Development particularly the precautionary principle.

It is not consistent with the public interest either.

Frances Bray PSM BA B Ed Dip Ed

President Lake Wollumboola Protection Association Inc

Member of the NPWS South Coast Region Advisory Committee.

KBA Guardian.

Recipient of:

- the Australian Conservation Council Peter Rawlinson Award 2000
- Nature Conservation Council Dunphy Award 2007
- Annual NSW Coastal Management Awards Ruth Readford Award for Lifetime achievement 2014 Nature Conservation Council Alan Strom Award for Lifetime Achievement 2017.