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**The Director Environment and Building Policy
NSW Department of Planning and Environment
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Dear Sir/Madam,

20th January 2017

Submission regarding the draft Coastal Management SEPP and draft Maps of the Coastal Management Area.

The Lake Wollumboola Protection Association Inc is a community environment group involved in advocacy, community education, bushcare and wildlife protection, promotion of nature tourism and historical research. The Association's main objective is to achieve protection of the natural and cultural environment of Lake Wollumboola and its catchment. Since 1993 we played a major role in initiatives to protect and conserve Lake Wollumboola and its catchment as part of Jervis Bay National Park. Whilst our main focus is Lake Wollumboola, we are also concerned with conservation and protection of coastal environments in the Shoalhaven and more generally, for the entire NSW coast.

As part of our detailed submission in relation to the Coastal Management Bill consultation process we gave in principle support to the government's commitment to develop new coastal protection laws for strategic planning and management of the coast in accordance with the principles of Ecologically Sustainable Development in the long-term public interest.

Whilst we strongly supported features of the new Act, some aspects continue to cause concern, including the third priority status accorded to the Coastal Environment Area in the Coastal Management Areas hierarchy and limited emphasis regarding the impacts of climate change, ocean warming, increased storminess and sea level rise. We considered the draft Coastal Management SEPP in depth and find much to support but also issues of concern. Therefore where we have made recommendations for changes.

We are pleased to see enhanced protections for coastal wetlands, littoral rainforests and the Schedule 1 high conservation value, sensitive coastal lakes environments, and for Schedule 2 coastal lakes. However we have major concerns with the limited protection offered to open beach, dune, rocky reef, headland and estuary environments.

Accordingly we remain concerned that natural coastal environments such as at Culburra Beach and more widely in the Shoalhaven will continue to be degraded by increased population and associated development impacts. Impacts of coastal erosion and inundation due to ocean warming, increased storminess and sea level rise, are evident with extreme South Coast Lows occurring in 2015 and 2016.

We urge the NSW Government to ensure that Councils move quickly to comply with the new Act and SEPP. In that regard we are concerned that Councils have until 2021 to complete Coastal Management Programs.

Yours sincerely,

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Lake Wollumboola Protection Association Inc.
Winner of the NSW Coastal Management Award 2014.

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Recommendations

Rec 1. Both electronic and print forms of the mapping applying to the four Coastal Management Areas, both individually and combined, be made publicly available.

Rec 2. a) The concurrence of the Secretary of Planning and Environment or the Minister should be required for all development proposal within the Coastal Wetland and Littoral Rainforest Area including the proposed proximity areas.

Rec 2. b) Such concurrence requirements should also be extended to the Coastal Environment Area for the first 100 m landward of Schedule 1 Coastal Lakes consistent with the “sensitive coastal location” provisions for coastal development in SEPP 71, that is if our recommendation that there be no development in the first 100m landward for these locations is not accepted.

Rec 3.a. New Residential Development in Coastal Wetlands and Littoral Rainforests is prohibited.

Rec 3.b. The words “by ensuring there will be no adverse impacts” are added to the conditions of consent to strengthen identification and assessment of potential impacts.

Rec 4. a. A development proposed in perimeter areas for Littoral Rain Forests and Coastal Wetlands should be Designated Development.

4. b. A 100 m perimeter area applies to all land use zonings in Littoral Rain Forests and Coastal Wetlands.

Rec 5. Consideration is given to recognition of sites 1-3 in the Lake Wollumboola catchment and the Kinghorn Point wetlands as Coastal Wetlands in the Coastal Management SEPP.

Rec. 6. A new development in coastal vulnerability areas be discouraged not be encouraged with the SEPP providing for planned retreat.

Rec 6. b. The development controls include the following: “as the first priority, development consent should not be granted unless the consent authority is satisfied that the proposed development “will ensure that natural defences including coastal dunes, vegetation and wetlands are enhanced or restored.”

Rec 6. c. The draft development conditions for consent as stated at 2.13 2, which require that the consent authority is satisfied that the proposed development would meet the specified conditions.

Rec 7. a. The 100 m distance landward from the Local Government Administrative Boundary be expanded to 500 metres to ensure that the CEA protects the coastal environment values of both coastal waters, open beaches and foreshores etc and that this distance is assessed via on ground assessment and adjustment of the digital mapping.

Rec 7.b. The natural variability of the open coast and environments and the impact of ocean warming, increased storminess and sea level rise be taken into account in determining the extent landward of the CEA to ensure protection of beach and foreshore environmental values into the future.

Rec 8. a. It is critical to the survival of native and migratory waders and shorebird species that the 100 m CEA for beaches, dunes and estuaries is expanded to protect their habitats and to reduce disturbance from adjacent development.

Rec 8. b. The East Asian Australasian Flyway should be formally recognized in the Coastal Management SEPP as a habitat corridor.

Rec 9. Coastal Parks are not included in the Coastal Use Area and that further consideration be given to their inclusion in the Coastal Environment Area and Coastal Vulnerability Areas.

Rec 10. The draft list of Schedule 1 Coastal Lakes is accepted in the final SEPP together with inclusion of the lake waters and catchments in the Coastal Environment Area.

Rec 11. The coastal lakes and catchments listed in Schedule 2 are adopted in the final SEPP, subject to further review of evidence justifying reclassification.

Rec 12. The reduction in the extent of the Coastal Zone from 1 km to 500 m in the case of St Georges Basin and other lakes included in Schedule 2 should be reconsidered, indicating that protection of sensitive waters and land areas such as the western catchment of St Georges Basin at Tallawalla Lagoon should be expanded to include the adjacent catchment.

Rec 13. The words: “ will not adversely impact,” should replace the words, “is not likely to cause adverse (or significant) impacts” in the Coastal Environment Area Development controls.

Rec 14. Development controls should exclude new development for the first 100m landward from high water mark of open beaches dune systems, estuaries, reefs and headlands.

Rec 15. Further consideration and public consultation should apply to decisions regarding whether or not coastal National Parks should be included in Coastal Management Areas.

Rec 16 a. New development is excluded within 100 m perimeter landward of the high water level of Schedule 1 Coastal lakes or alternatively, 100 m landward of the high water level is protected by regarding any proposed development in that area as Designated Development.

Rec 17. Development controls for the Schedule 2 coastal lakes as proposed for 500 m should be extended to parts of the catchment where there is substantial evidence of high conservation value and sensitivity.

Draft Coastal Management SEPP-Detailed comments and recommendations.

Part 1 Preliminary.

3. Aim of Policy.

The stated aim of the policy is “to promote an integrated co-ordinated approach to land use planning in the coastal zone in a manner consistent with the objects of the Coastal Management Act 2016 etc

Accordingly it is recommended that:

- **the aim be re-worded to, “to lead, implement and maintain an integrated, co-ordinated approach....”**

This change would place appropriate emphasis on the over-arching leadership role of the Government through the Act and SEPP in implementing and achieving the integrated approach and at the end of the five year review period, demonstrating achievement of its aims in reviews by the Minister, rather than simply “promoting” the approach. See 1.10 Review of Policy.

4. Definitions.

No definition of the “coastal zone” is provided. The draft SEPP should define “coastal zone” in clause 4 of the SEPP, whilst also referring to section 5 of the Coastal Management Act 2016, instead of simply referring to the definition in the note at the beginning of Clause 6.

6. Identification of coastal management areas.

It is noted that the four Coastal Management Areas are made up of land identified in area-specific digital maps for four areas:

- a) Coastal wetlands and littoral rainforest area
- b) Coastal vulnerability area
- c) Coastal environment area
- d) Coastal use area.

8. Maps. This section specifies that the Minister must approve a named map when adopted, or amended or replaced.” etc

We agree that the Minister should approve the maps.

It is also noted that any two or more named maps may be combined into a single map, with references to the relevant parts etc and that these maps are to be kept and made available for public access in accordance with arrangements approved by the Minister including in electronic or print form or both.

It is essential that the maps are available via print as well as digital form because of difficulties with the digital maps identifying how they and therefore the development controls, would apply to specific sites.

Moreover, print maps should be available for those members of the public who do not have access to on-line maps.

Other difficulties with the current digital maps are detailed later in this submission.

It is important that there will be provision to combine, presumably via overlaying the four Management Area maps to establish how the different areas impact particular sites. Such provision would assist public access and understanding of how the four “Areas” relate to each other.

However the current mapping of individual areas is opaque and therefore of limited value in establishing exactly how one area, let alone four, applies to particular sites.

We recommend that:

Rec 1. Both electronic and print forms of the mapping applying to the four Coastal Management Areas, both individually and combined, be made publicly available.

1.10 Review of Policy.

The proposals for Ministerial Review and the proposed review timeframe are supported.

Part 2. Development controls for coastal management areas.

We note that the former Coastal Policy, SEPP 71 and Clause 5.5 of the Standard LEP applied to the entire existing coastal zone ie 1 kilometre from the coast.

The draft SEPP proposes a more limited area for the Coastal Zone, particularly in relation to the distance landward from open coastal beaches, dunes, rocky reefs, headlands and estuaries etc. Accordingly the areas where coastal development controls designed to protect the environment apply, would be substantially reduced. In addition no development controls applying to environment protection are proposed for the Coastal Use Area, even though there would be environmental impacts from development eg on coastal vegetation and on coastal water quality.

Removal of concurrence requirements.

We note with considerable concern that concurrence provisions currently in SEPP 14 and SEPP 26 have been removed. The removal of important concurrence will remove important expert oversight and lead to poorer outcomes for the environment. Many Councils may not have the necessary levels of expertise to evaluate such applications. It should not be left to members of the public to take action to appeal against such proposals.

Whilst the proposed Coastal Areas are claimed to be based on high level expert assessment regarding the nature and sensitivity of the coastal environment and receiving waters to expansion of development and use, we consider further oversight of development controls for the most sensitive environments is critical in ensuring that existing protection are not diminished.

We recommend that:

Rec 2. a) The concurrence of the Secretary of Planning and Environment or the Minister should be required for all development proposal within the Coastal Wetland and Littoral Rainforest Area including the proposed proximity areas.

Rec 2. b) Such concurrence requirements should also be extended to the Coastal Environment Area for the first 100 m landward of Schedule 1 Coastal Lakes consistent with the “sensitive coastal location” provisions for coastal development in SEPP 71, that is if our recommendation that there be no development in the first 100m landward for these locations is not accepted.

Division 1. 11 Coastal Wetlands and Littoral Rainforest Areas.

Coastal Wetlands and Littoral Rainforest are unique environments particularly sensitive to development impacts. This section acknowledges these values by aiming, “to maintain existing levels of protection of terrestrial native vegetation in coastal wetlands and littoral rainforests” and proposes to expand protections for Coastal Wetlands via a new 100-perimeter area around existing and new mapped coastal wetlands, consistent with existing provisions for Littoral Rain Forests.

Whilst these protections are welcome, provisions allowing development in addition to environment protection works would undermine them. Allowing such new development, including residential development within Coastal Wetlands and Littoral Rainforests, is not ecologically sustainable in these fragile environments and therefore inconsistent with the principles of Ecologically Sustainable Development, which frame the Coastal Management Act 2016.

If new development is to continue to be permitted we support the proposal that any development within recognised Coastal Wetlands or Littoral Rainforests other than for the purpose of environment protection works would require consent as **Designated Development**. Nevertheless we consider that development in these environments should not be permitted apart from environment protection works on behalf of a public authority without consent where the development is identified in the relevant coastal management program.

The conditions for consent specify that the consent authority “must not grant consent unless “the consent authority is satisfied that sufficient measures established through an Environmental Impact Statement have been or will be made to protect the biophysical, hydrological and ecological integrity of the coastal wetland or littoral rainforest.”

We recommend that:

Rec 3.a. New Residential Development in Coastal Wetlands and Littoral Rainforests is prohibited.

Rec 3.b. The words “by ensuring there will be no adverse impacts” are added to the conditions of consent to strengthen identification and assessment of potential impacts.

Clause 11. Development of Coastal Wetland includes a note under clause 11.1a, which indicates that “the conservation of the terrestrial native vegetation (including the coastal wetlands and littoral rainforest areas may be dealt with under the proposed Biodiversity Conservation Act 2016 and associated legislation.

This measure would be very concerning if it undermined the aim of the **Coastal Wetlands and Littoral Rainforests** Area, to “maintain existing levels of protection of terrestrial native vegetation in coastal wetlands and littoral rainforests and to extend provisions for Coastal Wetlands....”

The Biodiversity Conservation Act 2016 does not contain provisions to generally protect environmentally sensitive areas nor does it specifically protect Coastal Wetlands and Littoral Rainforest area. However there is scope for the Regulations and Codes to include detailed provisions that would extend protections to these environments. Accordingly the impacts of code based land clearing on these environments should be recognized as “serious and irreversible” for the purposes of that Act.

Also any such protection under the Biodiversity Conservation Act 2016 should also apply to the entire Coastal Zone, not only to Coastal wetlands and Littoral Rainforest.

1.12 Development on land in proximity to Coastal Wetlands or Littoral Rainforests.

We object in principle to **Development on land in proximity to Coastal Wetlands or Littoral Rainforests** being permitted because the damaging impacts for wetlands and littoral rainforests of development in their immediate catchment is well known. Development construction is currently damaging the immediate

catchment environment of Lake Wollumboola adjacent to Sheepwash Creek, where the draft SEPP mapping includes additional lands for inclusion in the coastal wetland perimeter area.

Nevertheless we support application of development controls, if development in a 100 m perimeter area is to continue to apply to Littoral Rainforests and is to be extended to mapped SEPP 14 Coastal Wetlands.

It is concerning however that the effectiveness of a perimeter area would be further compromised by the Draft SEPP.

If development is to occur in the perimeter area it should be assessed as Designated Development.

The intention to maintain protections for Littoral Rainforests and extend protections for Coastal Wetlands by the small gains proposed, is further undermined by the draft SEPP proposal to exclude land that is zoned for Residential Development or equivalent zones that is R 1, R 2, R3, R4, RE and RU5.

We see no reason for such exclusion when the impacts of residential development on such sensitive environments are well known.

Nevertheless if such development is to be allowed within 100 m of these environments, we support the proposed conditions of consent.

We recommend that:

Rec 4. a. A development proposed in perimeter areas for Littoral Rain Forests and Coastal Wetlands should be Designated Development.

4. b. A 100 m perimeter area applies to all land use zonings in Littoral Rain Forests and Coastal Wetlands.

In community consultations, regarding the draft Coastal Management Bill and Explanation of Intended Effect OEH representatives encouraged community members to identify coastal wetlands not currently identified in SEPP 14 and to propose them for inclusion as wetlands or perimeters. However it seems that the draft Coastal Wetland Mapping, conflicts with this intention as potential sites may have been excluded already, because they are zoned for Residential development or equivalent.

We welcome the proposed extension of Coastal Wetlands and perimeter along the northern shore on Lake Wollumboola near Sheepwash Creek as identified in the digital mapping.

We also propose further extension of Coastal Wetlands and perimeter areas at Lake Wollumboola additional to existing SEPP 14 Wetlands. Coastal Salt Marsh is abundant at all these sites when Lake levels are low.

See Attachment 1, copy of Lake Wollumboola and surrounds showing current SEPP 14 Wetlands and proposals for expansion.

Three sites are proposed at Lake Wollumboola as follows:

1. Coastal Salt Marsh vegetation including *Sarcocornia quinqueflora* and the Endangered *Wilsonia Rotundifolia* around the North East and South shore of Long Bow Point. This is on private property and the bed of Lake Wollumboola in Jervis Bay National Park.
2. Coastal Salt Marsh vegetation with the same species along the southern shore from the Coonemia Creek estuary to the beginning of the Arrow Point Promontory, continuing after Arrow Point, around Boalla Bay. This area is Lake bed and therefore part of Jervis Bay National Park with a small area of private land.
3. Coastal Salt Marsh along the northern shore of Lake Wollumboola east of the current SEPP 14 Wetland No 365. This is Crown Land as well as National Park.

There is a further area of Coastal wet heathland east of Sheepwash Creek, and part of the northern catchment of Lake Wollumboola. This remnant vegetation should have been designated as SEPP 14 Wetland as it is likely to be the last of this vegetation community left, in and around Culburra Beach. It is also Green and Golden Bell Frog habitat. However it is inappropriately zoned for medium density housing with approved development already degrading it. This case demonstrates why wetlands in land zoned for Residential and equivalent development, should not be excluded from the Coastal Wetlands and Littoral Rainforest Area.

In addition there are two small wetlands south of Kinghorn Point south east of Lake Wollumboola, which are evident in the digital aerial photos, which should also be recognised as Coastal Wetland. The land tenure is uncertain-possibly the northern wetland is on Crown Land and the more southern one is on private land. The northern most wetland is informally known as Duck Swamp and is adjacent to an Aboriginal camp site.

We recommend that:

Rec 5. Consideration is given to recognition of sites 1-3 in the Lake Wollumboola catchment and the Kinghorn Point wetlands as Coastal Wetlands in the Coastal Management SEPP.

We can provide further information and photographs of the Lake Wollumboola wetlands should this be needed.

Division 2 Coastal Vulnerability Area.

The objectives for the Coastal Vulnerability Area cover a range of issues, including public safety, mitigating current and future risks including from climate change, maintaining beaches and foreshores, public access and amenity, land uses that reduce exposure to risks from coastal hazards including coastal management strategies that reflect management objective 2 e) for the Coastal Vulnerability Area relating to maintaining natural defences, **including coastal dunes, vegetation and wetlands:**

“i) in the first instance and wherever possible, by restoring or enhancing natural defences including coastal dunes, vegetation and wetlands, etc” by specifying that development consent is required for any damage or removal of coastal dunes, foreshores, vegetation and wetlands that such consent must also require that any damage be rehabilitated and restored;”

Development controls.

The proposed controls 2) a-e are generally appropriate, but need strengthening.

We recommend that:

Rec. 6.a new development in coastal vulnerability areas be discouraged not be encouraged with the SEPP providing for planned retreat.

In addition the Coastal Vulnerability Area objective 2) e i. has not been followed through in the development controls **despite the objectives identifying restoring and enhancing the natural defences including coastal dunes, vegetation and wetlands as the first priority for coastal hazard management strategies.**

Objective 2) e i. states that, “development consent is required for any damage or removal of coastal dunes, foreshores, vegetation and wetlands that such consent must also require that any damage be rehabilitated and restored;”

Accordingly we recommend that:

Rec 6. b. The development controls include the following: “as the first priority, development consent should not be granted unless the consent authority is satisfied that the proposed development “will ensure that natural defences including coastal dunes, vegetation and wetlands are enhanced or restored.”

Rec 6. c. The draft development conditions for consent as stated at 2.13 2, which require that the consent authority is satisfied that the proposed development would meet the specified conditions.

2.13 3 also states that consent must not be granted to development on land to which this clause applies unless the consent authority has considered, given anticipated impacts of coastal processes and coastal hazards, whether any proposed buildings or works should be temporary and whether the use should also temporary.

We support the intent here but **recommend that:**

Rec 6. d. The wording be changed to “unless the consent authority is satisfied....” instead of “has considered..”

It is concerning that the new Act and Draft SEPP do not address planned retreat. The impacts of the August 2015 and June 2016 East Coast low in the Shoalhaven with coastal inundation and flooding of existing homes then severe erosion causing environmental and infrastructure damage, demonstrate the urgent need for planned retreat to address the increasing threats of climate change, particularly ocean warming, increased storminess and sea level rise and on the NSW Coastal Zone.

Division 3 Coastal Environment Area.

The Coastal Environment Area is intended to address protection of coastal land and waters of the State, including estuaries, coastal lakes, coastal lagoons, and land adjoining these feature including headlands and rock platforms and including natural character, scenic value and biological diversity and ecosystem function.

However as digitally mapped, the Coastal Environment Area as it applies to open beaches, dune systems, estuaries, reefs and head lands and estuaries has been significantly reduced from 1 km landward from coastal waters to 100 m. This limited Area excludes significant parts of many beaches and most dune systems and would be completely inadequate in protecting these sensitive coastal environments

Together with other coastal volunteers we have undertaken on-ground estimates of the width of 18 open beaches in the Shoalhaven. We compared these estimates with the digital mapping for the CEA and found that the 100 m width would exclude significant parts many beaches and most dune systems and would not protect these sensitive coastal environments. See **Attachment 2** and discussion below.

We have not undertaken similar assessments for reefs, headlands, small creeks and drainage lines as well as estuary foreshores but consider that it is likely that the 100 m limit is totally inadequate in protecting these valuable environments too.

Whilst the draft SEPP defines the Coastal Use Area as being 1 km landward of coastal waters, estuaries and coastal lakes, the extent of the Coastal Environment Area is much less, except in the case of coastal lakes and lagoons. For lakes and lagoons, the explanatory notes refer to 500 m landward area, plus any additional catchment area for sensitive coastal lakes identified in Schedule 1.

It is particularly concerning that whilst the 1 km Coastal Zone for the Coastal Use Area has been maintained, this area does not include objectives or development controls to maintain existing coastal environment features that would currently be protected under Section 5.5 of the Standard LEP, based on the former Coastal Policy.

Main conclusion.

Accordingly a significant loss to the coastal environment will occur due to the combined effect of the differing extent of the Coastal Zone in the Use and Environment Areas and the lack of development controls to protect the environment in the Coastal Use Area.

This loss will be immediate, should this part of the SEPP be retained. Moreover this loss will be compounded by the impacts of ocean warming, increased storminess and sea level rise. In is essential therefore, that coastal dune vegetation identified in the Coastal Vulnerability Area as the first defence against coastal hazards, is protected and maintained with provision for landward migration.

In addition coastal foreshore, heath and grassland vegetation, protect the water quality of the receiving coastal waters, creeks and drainage lines and limit erosion due to storm water impacts.

If the extent of vegetation is reduced, beaches and estuary foreshores would be lost and coastal waters increasingly degraded by creeks and storm water drainage channels in urban areas.

In addition habitat for coastal fauna, including Threatened species would be degraded resulting is loss of species diversity.

Therefore we recommend expansion of the Coastal Environment Area as discussed in detail below.

A. Coastal Environment Area (CEA) 100 m as it applies to open beaches, dune systems, estuaries, reefs and headlands.

We are very concerned with the proposed 100 m CEA landward boundary from the Local Government Administrative Boundary will not protect environmentally sensitive natural open coastal beaches, dunes, reefs, headlands and estuaries now and into the future. This limited width landward represents a reduction of 900 m compared with the existing 1 km definition of the NSW Coastal Zone as it applies to these coastal environments.

The limited width of the CEA applying to open beaches, dune systems, estuaries, reefs and head lands is unacceptable and must be substantially expanded to protect these sensitive and irreplaceable environments.

It is inconsistent with the Objects of the Coastal Management Act, with the CEA Objectives and the scope of the coastal environment zone specified in the Marine Estate Act and will not maintain the physical, hydrological and ecological character and values of beaches, landforms, dunes, coastal vegetation, coastal fauna and their habitats into the future.

In addition, the Digital Maps as applied to these foreshore environments fail to provide sufficient detail and clarity to establish the exact coverage of the CEA on the ground. This lack of clarity will present difficulties in applying conditions of consent to particular development applications.

100 m is an arbitrary distance bearing limited relationship to actual environments. No justification has been provided for the reduction in the extent of coastal environment protection compared to the existing Coastal Zone.

Acceptance of our recommendations would ensure that the CEA encompassed the full extent of coastal physical and climatic influences applying to particular beaches, dunes, lake and estuary vegetation, native species habitat and small creeks and drainage lines, as the basis for establishing that the final CEA would protect these environments into the future.

The proposed drastic reduction comes when these environments continue to experience degradation from population increase and development pressures. It also comes at a time when increased coastal erosion and inundation is occurring, likely to be linked to ocean warming, increased storminess and sea level rise. All these factors threaten beaches, estuaries, vegetation communities and the coastal fauna species they support.

Maintenance of coastal vegetation on dunes and headlands is vital in limiting the impacts of erosion whilst foreshore vegetation around estuaries, coastal creeks, drainage lines, lakes and bays is vital in protecting coastal water quality and in providing habitat for native fauna species. As previously mentioned the significance of coastal vegetation in limiting coastal hazards is acknowledged in the Coastal Vulnerability Objectives.

Accordingly we are concerned that the 100 m limit applying to the CEA for beaches, dunes, foreshores etc will not protect them.

It is critical also that the CEA protects the beach, foreshore and rocky reef habitats of both native and migratory shorebirds. The limited width of the CEA puts protection of these habitats in doubt. Shorebird species including the Endangered Little Terns, Hooded Plovers, Pied Oyster Catchers and Sooty Oyster Catchers, as well as Red Capped Plovers nest, roost and feed on many beaches and foreshores, reefs and adjacent waters. Over 30 migratory wading species, listed as Threatened under both the NSW and Commonwealth legislation also depend on the sands, waters and vegetation both terrestrial and aquatic of our South Coast beaches.

Whilst internationally significant bird habitat at Lake Wollumboola appears to be included in the CEA because of the lake's status as a Schedule 1 coastal lake, this does not appear to be the case with the Shoalhaven River estuary because of the limited width of the CEA applying to the ocean coast there.

Survival of these species depends on maintaining connectivity of the north-south coastal habitat corridor on which these migratory birds depend. The limited application of the CEA appears to compromise habitat connectivity despite recognition in international migratory bird agreements as part of the East Asian Australasian Flyway.

We recommend for open beaches, dune systems, estuaries, reefs and headlands that:

Rec 7. a. The 100 m distance landward from the Local Government Administrative Boundary be expanded to 500 metres to ensure that the CEA protects the coastal environment values of both coastal waters, open beaches and foreshores etc and that this distance is assessed via on ground assessment and adjustment of the digital mapping.

Rec 7.b The natural variability of the open coast and environments and the impact of ocean warming, increased storminess and sea level rise be taken into account in determining the extent landward of the CEA to ensure protection of beach and foreshore environmental values into the future.

Detailed discussion of these issues follows.

1. Reduction in Area protected.

The 100 m landward from the **Local Government Administrative boundary** represents a significant reduction of 900 m in the area of the coastal environment that would be protected, by comparison with the existing 1 km extent of the Coastal Zone as defined in SEPP 71 and the former NSW Coastal Policy.

Therefore the draft 100 m CEA as does not include the full width of a considerable number of South Coast Beaches with most dune systems excluded and would not protect these environments.

The reduction, with no evidence provided to justify it, such as environmental impact assessments, would result in substantial loss of the coastal environment. This is especially the case when combined with the failure to include environment protection objectives and environmental impact assessment criteria for development in the Coastal Use Area.

The draft SEPP guidance material for the Coastal Use Area advises that the seaward local government boundary is typically the low water mark and in the case of estuaries extends to their limit.

However when the digital mapping for the Coastal Environment Area is compared with estimated widths of actual beaches and dune systems it seems that the seaward boundary extends well beyond the low water mark. As a result the 100 m CEA does not cover the full extent of beaches. Some beaches in close proximity to rocky reefs, appear to miss out altogether.

Natural dune systems are partially or completely excluded, because much of the 100 m area is under water.

2. Digital mapping is inadequate particularly in relation to beaches, dunes and foreshores.

We have estimated the widths and dune systems of our local beaches and compared them to the coverage of the digital mapping. We sought similar advice from other Shorebird Volunteers.

All volunteers spend many hours each year on local beaches monitoring shorebirds and their habitat. We are therefore very knowledgeable about the character of each beach, dune, lake and estuary system and their variability.

Attachment 2 provides a summary of these well-informed estimates rather than precise surveys of beach and dune systems in the Shoalhaven compared to their coverage in the digital maps.

These estimates and comparative assessment demonstrate that the 100 m wide Coastal Environment Area as digitally mapped, would exclude significant parts many beaches and most dune systems and would be

completely inadequate in protecting these sensitive coastal environments. This is because the 100 m landward appears to cover part only of individual beaches and limited parts of dunes.

Whilst these estimates address beaches and dunes and the ecosystems they support, it is likely that the concerns they raise about relying on a 100 m CEA established via digital mapping to protect sensitive coastal environments would apply also to estuaries, reefs and head lands. Accordingly sensitive coastal environments such as Jervis Bay and the Shoalhaven River estuary would not be adequately protected by the 100 m wide CEA.

The digital mapping fails to provide sufficient detail and clarity.

We query the value of using these digital maps as the basis for determining areas covered by development controls for the Coastal Environment area in particular. The absence of surveyed boundaries for particular beaches etc makes it very difficult to establish the exact extent of the CEA on open beaches and therefore the extent of application of the proposed development controls.

These maps are likely to result in a legal minefield for Councils with landowners disputing the development controls applying to their land.

Moreover the opaque blue shading for the CEA makes it difficult to identify the extent of beaches and dunes included in the proposed 100 m.

The digital aerial mapping example for Culburra Beach used in the Fact Sheet provides greater clarity as to how the maps apply on the ground than the actual aerial mapping. It is more transparent than the opaque digital map, which is difficult to adjust. Nevertheless such maps are not adequate as the basis for decision-making.

2. The fixed 100 m limit ignores the dynamic and variable character of the coastal environment now and in the future and would not provide lasting protection.

The Local Government Administrative boundary combined with the 100 m width of the CEA takes no account of the dynamic and variable character of coastal environments. The 100 m width applied exclusively via digital mapping is arbitrary, with limited relationship to the general and unique features of coastal beaches and dune systems.

Individual beaches vary in width and character along their full length as well as by comparison with other beaches. Likewise the dune systems also vary in relation to height and width, with some advancing whilst others retreating in response to ocean, weather and climatic conditions.

Some South Coast dune systems are massive in height and extend as much as 400 m landward. Yet most of these unique dunes would not be protected within the 100 CEA width.

The proposed zone width takes no account of the impact on the physical variability of beaches and dunes and due to changing seasons, tides and exposure to weather and climate conditions such as East Coast lows and El Nino-La Nina events.

For example many South Coast beaches and dunes suffered significant erosion during the June 2016 East Coast Low, resulting in narrower beaches and erosion of the dune face in many instances.

Furthermore the 100 m width fails to take account of expert advice that sea level rise as a result of human-induced climate change has already caused ocean warming and sea level rise along the NSW Coast as well as more extreme storms including East Coast lows. **Reference CSIRO- Bureau of Meteorology “State of the Climate Report 2016.”**

Therefore the 100 m CEA extent for coastal beaches and dunes will not ensure that coastal environments are protected as they retreat landward in the face of sea level rise and increased storm velocity, erosion and inundation.

3. The 100 m width for the open coast, foreshores, estuaries etc is inconsistent with the CEA objectives regarding ecosystem integrity and biological diversity including as defined in the Marine Estate Management Act.

In relation to the ecological values of open beaches and dunes, we draw attention to the Marine Estate Management Act, which is referred to in the **CEA development conditions**. This Act applies to “Lands immediately adjacent to coastal waters and subject to oceanic processes (including beaches, dunes, head lands and rock platforms, as well as coastal waters, estuaries, lakes and lagoons and coastal wetlands.)

The full scope of the coastal environment including beaches, dunes and foreshore vegetation as covered in the Marine Estate Management Act, should also apply to the CEA.

Oceanic and climatic processes not only influence the physical character of beach and dune environments. They also influence the distribution of coastal vegetation and fauna species. The distribution and character of coastal vegetation and fauna species are influenced by coastal sandy or rocky soils, coastal winds and spray and the presence of variable small creeks and natural drainage lines both surface and ground water. Many coastal vegetation communities are Endangered Ecological Communities and fauna species are Threatened.

In areas where natural coastal vegetation survives, the coverage is a much greater distance landward from the estimated boundary than the proposed 100 m. Much of this coast-specific vegetation is remnant vegetation due to the impacts of existing development and must be protected as part of the CEA.

Accordingly it is critical that the CEA reflects the full extent of coastal vegetation, so it encompasses the full extent of coastal beaches, dune systems, sandy and rocky soil environments as well as coastal vegetation and the fauna species dependent on them.

Furthermore, coastal vegetation communities protect the water quality of the receiving coastal waters and assist in limiting beach erosion capturing wind blown land and reducing due storm water contamination. If the extent of vegetation is reduced, beaches, estuary foreshores and natural creeks and drainage lines would be lost, with coastal waters increasingly degraded by storm water from urban areas.

The CEA development controls seek to protect coastal fauna including their habitats. These habitats include the north-south coastal wildlife corridor essential now and in the future to annual migration of native beach and reef nesting bird species in particular as well as international migratory species as coastal and ocean temperatures rise with global warming.

Connectivity of the north-south coastal habitat corridor on which these species depend, is increasingly compromised within NSW, although its significance is recognized in international migratory bird agreements as part of the East Asian Australasian Flyway. Wildlife corridors exist for east-west fauna movement and north-south in the Great Eastern Ranges, but not north-south along the coast.

The East Asian Australasian Flyway along our beaches and dunes should be formally recognized and protected in the Coastal Management SEPP, given that the majority of species are now listed in Commonwealth and State legislation as Endangered.

For example Lake Wollumboola together with the Shoalhaven River estuary and beach provide habitat for at least 23 listed Threatened bird species both native and migratory including four Endangered beach nesting species. Habitat for these species is already very limited as a result of existing development and population pressures. Their survival would be jeopardised due to further loss of habitat from inadequate protections.

We therefore recommend that:

Rec 8. a It is critical to the survival of native and migratory waders and shorebird species that the 100 m CEA for beaches, dunes and estuaries is expanded to protect their habitats and to reduce disturbance from adjacent development.

Rec 8. b The East Asian Australasian Flyway should be formally recognized in the Coastal Management SEPP as a habitat corridor.

Development controls for **Coastal Environment Area (CEA) 100 m** as it applies to open beaches, dune systems, estuaries, reefs and head lands are addressed on Page 20-21.

4. Zoning of coastal National Parks as part of the Coastal Use Area.

It is deeply concerning that the 100 m width of the CEA applies to National Parks adjacent to the coast and that the Coastal Use Area also applies and extends for 1 km into them. The application of the Coastal Use Area to National Parks appears to override the objectives of the National Parks and Wildlife Act, which primarily focus on conservation of these natural environmental icons.

We recommend that:

Rec 9. Coastal Parks are not included in the Coastal Use Area and that further consideration be given to their inclusion in the Coastal Environment Area and Coastal Vulnerability Areas.

The high coastal environmental values of National Parks are not adequately protected in the CEA due to the 100 M limit to the Coastal Environment Area, the 1 km extent of the Coastal Use Area and the fact that the CUA does not include environment protection objectives and no environmental assessments are required by development controls for the CUA.

It is beyond belief that National Parks are categorised more for use and associated development than for environmental protection under the proposed provisions which could result in development expansion in National Parks without any consideration of their exceptional conservation values or consideration of the impacts of such development, especially when The coastal National Parks should not be subjected to development except those types of development allowable under the NPW Act.

It would be appropriate however for National Parks to be included in Coastal Vulnerability Areas and Coastal compartments.

Many Shoalhaven National Parks and Nature Reserves would be included the Coastal Use Area and thus potentially under threat. These include:

Seven Mile Beach National Park.

Comerong Island Nature Reserve

Jervis Bay National Park adjacent to Jervis Bay

Booderee National Park. Booderee is a Commonwealth Park. Yet the Draft SEPP maps include in the Coastal Use and Coastal Environment Areas.

Conjola NP

Narrawallee Nature Reserve

Meroo National Park

Murramarang National Park.

5. Other issues with the mapping and Local Government Area boundary.

For Jervis Bay, which is a Marine Park, the red line appears to delineate the State boundary both on land and water from the Commonwealth Territory. However no red line applies to the shoreline of Jervis Bay itself although a supposed 100 m boundary and Coastal Environment Area is applied.

Also no red line is indicated for the eastern shore of Jervis Bay along the Beecroft Peninsula shore. In addition the Beecroft Peninsula is Commonwealth land apart from Currarong, yet it is mapped for Coastal Use Area.

These anomalies need to be clarified.

B. Coastal Environment Area- Coastal Lakes.

Sensitive Coastal Lakes Schedule 1.

We are very pleased to see recognition of the research into the character, values and sensitivity of coastal lakes by the Coastal Lakes Inquiry of 2002 and more recently by the Office of Environment and Heritage with and inclusion in Schedule 1 of the most sensitive and high conservation value lakes and inclusion of their waters and their entire catchments in the Coastal Environment Area.

We recommend that:

Rec 10. The draft list of Schedule 1 Coastal Lakes is accepted in the final SEPP together with inclusion of the lake waters and catchments in the Coastal Environment Area.

See Pages 20-22 regarding development controls in 14.1 a-g.

More recent research by OEH and others shown how the “sensitivity” of coastal lakes is related to their physical, hydrological and ecological character and their natural sensitivity to change and how they can best be protected. Intermittently closing and opening coastal lakes and lagoons, (ICOLLs) are now recognized as particularly unique, diverse and sensitive.

OEH has further assessed “Back Dune lagoons” as the most sensitive ICOLLs. These ecosystems are in large part influenced by low-nutrient ground water.

No matter how good “water sensitive urban design” is, these methods cannot remove nutrients, chemicals and other pollutants from ground water.

So in these cases policies and development controls applying to the entire catchment are justified.

In Lake Wollumboola’s case, the South Coast Sensitive Urban Lands Review 2006 recommended that due to the lake’s high sensitivity to water quality impacts from urban development that urban expansion should not occur in its catchment. This recommendation was adopted in the South Coast Regional Strategy 2007 and is reflected in the Illawarra Shoalhaven Regional Plan 2015.

The 2015 Department of Planning and Environment Determination for the Halloran Planning Proposal sets specific environmental and Aboriginal cultural heritage requirements for planning and development for lands owned by the Halloran Trust.

These provisions include the statements that:

- Due to the high environmental sensitivity of the Lake Wollumboola catchment, particularly Long Bow Point,..... Council is to zone Long Bow Point for environment protection dependent on the outcomes of the biodiversity offset strategy.”
- Other “land within the surface and groundwater catchment of the Lake should also be zoned for environmental protection unless the water quality management strategy identifies that an alternative zoning can achieve a neutral or beneficial effect on the Lake.”

It is recognised that these are planning directives as distinct from development controls. **Nevertheless we request that careful consideration is given to the development controls for Schedule 1 Coastal Lakes to ensure that they do not undermine the planning directions for the Lake Wollumboola catchment.**

We do not consider that new urban development expansion should occur in the catchments of Schedule 1 lakes because of the likely water quality and ecosystem impacts and are concerned that the previous

constraints on subdivisions in SEPP 71 will no longer apply. We trust such measures can also be taken up in reconsideration of the Standard Provisions of LEPS.

Recommendations regarding the development controls for Schedule 1 coastal lakes are discussed on pages 20-22.

7. Schedule 2 Coastal Lakes and catchments.

We recommend that:

Rec 11. The coastal lakes and catchments listed in Schedule 2 are adopted in the final SEPP, subject to further review of evidence justifying reclassification.

The catchments of Coastal Lakes listed in Schedule 2 are to be mapped in the Coastal Environment Area up to 500 m from the shore.

This represents a reduction of 500 m compared to the existing 1 km coastal zone applying to these lake catchments.

No advice was provided in the Fact sheets for the Draft SEPP to indicate why the coastal zone for these lakes had been reduced. It is possible that recent research may suggest this. However no public explanation of the reduction has been provided

Accordingly, if the catchments extend more than 500 m landward of the shore, environmental values and sensitive area beyond 500 m would no longer be protected under the coastal protection objectives or considered in assessments of development impact as they currently are with the Coastal Zone of 1 km from coastal waters.

In some cases special consideration to extend the coastal boundary to the entire catchment may be justified. Accordingly whilst we support the 500 m applying to Schedule 2 lakes, we consider there is for special consideration to allow for special cases to be considered where there is substantial evidence of their high conservation value and sensitivity.

St Georges Basin provides an example, as the western catchment is likely to extend more than 500 m landward of the Basin and Tallawalla lagoon, which flows into it. Although parts of St Georges Basin have been significantly impacted by previous uncontrolled urban expansion, the western area of the Basin including Tallawalla Lagoon are in near natural condition and do not experience the same degree of tidal flushing as the more open areas of the Basin.

These areas possess high coastal environmental values and have been under consideration for inclusion in Conjola National Park. Proposed development in the south west catchment under the previous Part 3 A did not proceed because the water quality measures were assessed as not likely to meet the Neutral or Beneficial requirements.

We therefore recommend that:

Rec 12. The reduction in the extent of the Coastal Zone from 1 km to 500 m in the case of St Georges Basin and other lakes included in Schedule 2 should be reconsidered, indicating that protection of sensitive waters and land areas such as the western catchment of St Georges Basin at Tallawalla Lagoon should be expanded to include the adjacent catchment.

Coastal Environment Area Development controls.

General

We have compared the draft SEPP development controls for the Coastal Environment Area to existing provisions in Standard LEP clause 5.5 (reflecting the Coastal Policy 1997) and SEPP 71 and consider they are comparable or stronger than the existing controls particularly through the use of “development consent must not be granted ... unless the consent authority is satisfied....”

Accordingly we generally support the proposed controls with the following suggested amendments.

Division 3. clause 14. 1 and 2 sets out the requirements for development on land within the Coastal Environment Area. (CEA)

Clause 14 Development on land within the coastal environment area, requires “that development consent must not be granted to development on lands wholly or partly in the Coastal Environment Area unless the consent authority **is satisfied** that the proposed development” meets conditions set out in a) to g).

Sub-clauses a) to d) which cover the natural biophysical, hydrological and ecological environments and coastal processes, provide requirements that consent authorities must be “satisfied that the proposed development **“is not likely to cause adverse impacts”** to the specified environments.

Being “**satisfied that the proposed development**” meets conditions, is a stronger requirement than existing provisions that simply require “consideration.” Accordingly we support the change.

There are also variations regarding use of “adverse impacts” and “significant impacts.”

Subclauses c) and g) specify that Consent authorities must be satisfied that a proposed development “**will not adversely impact.**” This is a higher standard of certainty than “not likely to cause significant impacts.”

The development controls for the Coastal Wetlands and Littoral Rain Forest Area also use “**will not adversely impact**” in the controls.

The draft SEPP also refers in some cases to “.. is not likely to cause **adverse** impacts eg for 14.1 a) whereas 14. 1. b) refers to “.... **significant impacts**...”

The term “adverse impacts” covers all impacts likely to cause damage to these sensitive environments and therefore is stronger than “significant.”

For the sake of greater certainty and consistence we recommend that:

Rec 13. The words: “ will not adversely impact,” should replace the words, “is not likely to cause adverse (or significant) impacts” in the Coastal Environment Area Development controls.

Consistency with SEPP 71.

We also consider that the proposed CEA development controls provide protections consistent with SEPP 71 for the following matters:

- existing wildlife habitat corridors and assessment of any impacts.
- the ecological environment and native vegetation and fauna and their habitats including Endangered Ecological Communities and Threatened Species except for specific mention of protecting the connectivity of the north-south wildlife corridor along the coast which supports migratory species both Australian native species as well as migratory shorebirds, as previously mentioned. ie the NSW part of the East Asian Australasian Flyway.

SEPP 71 provided for “Sensitive Coastal Locations,” including applying development controls to the first 100 m of these areas. We note that “sensitive coastal locations” are not included in the draft SEPP.

We do however consider that a 100 m perimeter area landward from Schedule 1 coastal lakes should continue to apply, with development controls excluding new development in the first 100m landward of high water mark.

We oppose development occurring in the first 100 landward of the waters of Schedule 1 Coastal Lakes. However if development is to be permitted, it should be identified as Designated Development, requiring a full Environmental Impact Statement, consistent with controls for the Coastal Wetland and Littoral Rain Forest Area,

We strongly support the draft SEPP development controls for the coastal hydrological systems and ecosystems that are most sensitive to water pollution proposed for the Coastal Environment Area. They are more comprehensive than SEPP 71 and 5.5 as they identify and include all potential pollution pathways, both surface and ground water- 14. 1 a) and c).

The specific mention of ground water is important because research by Office of Environment and Heritage and other experts has identified ground water pollution as a significant cause of degradation of coastal waters sensitive to nutrient pollution. This is particularly the case for “back dune lagoons” including Lake Wollumboola. Once pollutants enter ground water sources they cannot be removed or their impacts prevented or reduced.

We welcome the water quality control 14. 1 c) which refers to “cumulative impacts of the proposed development on the marine estate including sensitive coastal lakes.”

We welcome also Clause 14. 1 g) which requires that the consent authority be satisfied that development “incorporates water sensitive urban design: including consideration of effluent and storm water management.”

However whilst WSUD involves measures that attempt to reduce pollutants in surface runoff by establishing water pollution control ponds and other measures to absorb nutrients and recycle water, such measures cannot prevent water pollution and need to be constantly maintained, to reduce the impacts to acceptable levels for eg well-flushed estuaries. However they are a significant improvement on previous practices where no water pollution controls were built in to subdivisions or developments.

Therefore a precautionary approach to reliance on their longterm effectiveness is important as is reflected in the conditions for consent referring to cumulative impacts. As previously proposed, the controls would be strengthened by the statement “will not cause adverse impacts.”

Additional Development Controls for Coastal Environment Area 100 m as it applies to open beaches, dune systems, estuaries, reefs and headlands.

We recommend that:

Rec 14. Development controls should exclude new development for the first 100m landward from high water mark of open beaches dune systems, estuaries, reefs and headlands.

Rec 15. Further consideration and public consultation should apply to decisions regarding whether or not coastal National Parks should be included in Coastal Management Areas.

We further propose additional Development Controls for Coastal Lakes.

Schedule 1 Coastal Lakes.

We support application of development controls for the entire catchments of Schedule 1 Coastal Lakes.

We recommend the following additional controls:

Rec 16 a. New development is excluded within 100 m perimeter landward of the high water level of Schedule 1 Coastal lakes or alternatively 100 m landward of the high water level is protected by regarding any proposed development in that area as Designated Development.

Schedule 2 Coastal Lakes

We also support application of development controls for the Schedule 2 coastal lakes for 500 m landward of the high water level.

We recommend that:

Rec 17. Development controls for the Schedule 2 coastal lakes as proposed for 500 m should be extended to parts of the catchment where there is substantial evidence of high conservation value and sensitivity.

(See also Recommendation 12)

Division 4. Coastal Use Area.

We recommend:

Rec 18. retaining the existing coastal zone boundary of 1 km landward from coastal waters as the boundary of the Coastal Use Zone.

The draft SEPP, as previously discussed, reduces protection of parts of the coastal environment by reducing Coastal Environment Areas along the open coast to 100 m and not including special coastal environment protections in the conditions of consent for development in the Coastal Use Area.

It is concerning that substantial areas, which support elements of the coastal environment will not be afforded protection within the proposed Coastal Use zone. These areas include significant pockets of remnant vegetation, natural habitat for fauna species and habitat corridors and surface and ground water soaks in areas more than 100 m landward of open coastal waters.

Reduction in the Coastal Zone as it affects the environmental values of the open coast is likely to affect protection of north-south habitat corridors for coastal species, particularly migratory birds both Australian native birds and internationally significant migratory birds.

15. Development within the Coastal Use Area

We recommend that:

19. the conditions for consent in the Coastal Use Area include clauses that development must not be granted etc unless the consent authority is satisfied that the proposed development,

- **“will not adversely impact on the biophysical, hydrological (including ground and surface water) and ecological environment.”**
- **“will not adversely impact on native vegetation and the fauna and their habitats.”**

Otherwise the proposed conditions for consent in the Coastal Use Area are supported.

Matters for consideration for development applications, present and future benefits to the coastal environment, scenic values and to beach and estuary amenity, would be lost if decision-making bodies no longer need to consider conservation of coastal biodiversity and ecological integrity in accordance with the principles Ecologically Sustainable Development in deciding development applications further than 100 m from the high tide level.

Division 5. General.

16. Development in coastal zone generally-development not to increase risk of coastal hazards.

We support Clause 1) that development consent is not be granted unless the consent authority is satisfied that it will not increase risk of coastal hazards.

17. Development in the coastal zone generally.

We support the conditions that development consent must not be granted to development on land within the coastal zone unless the consent authority has taken into consideration the relevant provisions regarding:

- a) An applicable coastal management program that applies to the land
- b) A Coastal Zone Management Plan under the Coastal Protection Act 2016.

Arrangements for approval of both a Coastal Management Program and application of a Coastal Zone Management Plan under the new Act would depend on assessment of these Plans by the Coastal Council and acceptance of that advice by the Minister.

We therefore support these oversight arrangements as part of the conditions for consent.

18. Other development controls not affected.

Support.

19. Hierarchy of controls if overlapped.

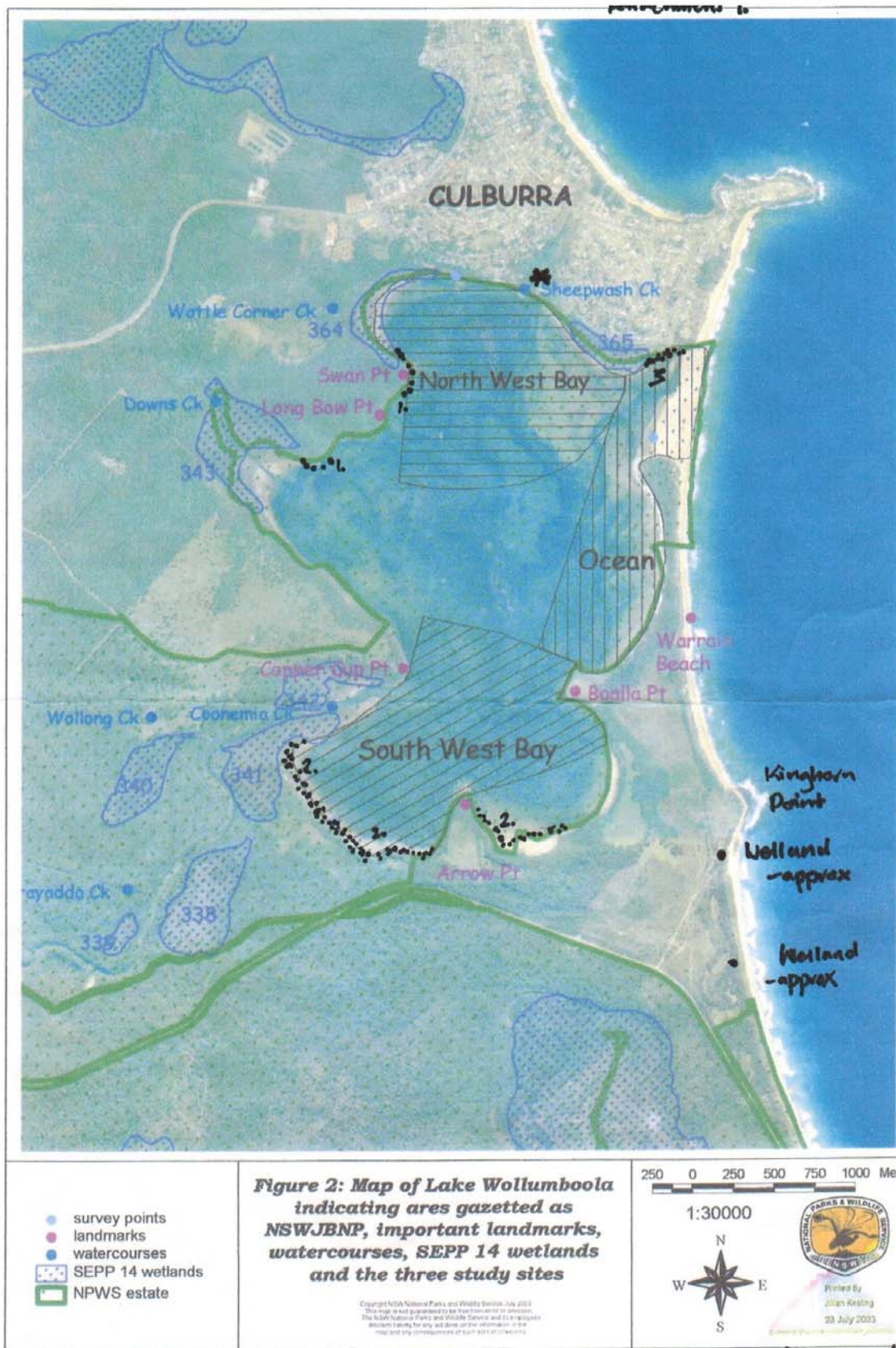
As advised in submissions regarding the draft Coastal Management Bill it is considered that the Coastal Environment Area should be the second priority.

Part 3. Miscellaneous.

All sections on Coastal Protection Works supported.

20th January 2017.

LWPA Coastal Management SEPP Submission. Lake Wollumboola-Coastal Wetlands Attachment 1.



LWPA Draft Coastal Management SEPP Submission Attachment 1.

LWPA Draft Coastal Management SEPP submission. Attachment 2.

Beach and dune “survey” of draft Coastal Environment Area digital mapping of Shoalhaven-South Coast beaches and dunes.

Most of this information was provided by Shorebird Volunteers who spends many hours each year, during Spring to Autumn monitoring shorebirds and their habitat on local beaches. They are therefore very knowledgeable about each beach and dune system.

The beach and dune widths they have provided are well-informed estimates rather than precise surveys.

Nevertheless they demonstrate that in most cases the 100 m wide Coastal Environment Area as applied to a considerable number of open beaches and dunes in the Shoalhaven, is completely inadequate and would not protect the beach and dune vegetation and habitat for native fauna species, most of which are Endangered Species. These species include nesting Shorebirds and migratory waders and sea birds.

Many of these beaches suffered extensive erosion during the June 2016 East Coast low affecting the width of beaches and dunes. These changes are unlikely to be reflected in the CEA mapping.

Name of Beach	Metres width-Beach low tide approx	Metres width Dune approx	Coastal Environment Area coverage estimated as per digital mapping
Culburra Beach South	85 m	100 m	Beach and foredune included, but not majority of dune.
Warrain Beach at Culburra Beach	50 m	200 m	Beach included but not most of dune system.
Warrain Beach at Kinghorn Point	20 m	30 m	Beach and dune not included-red line follows offshore reef.
Curarong Beach North of Creek	30 m	150 m	Foredune included- but not extensive high hind dune.
Abraham’s Bosom Beach	20 m	100	Beach and dune not included-red line follows offshore reef.
Collingwood Beach Jervis Bay	40 m	40 to property fences	Beach and dune included.
Greenfields Beach Jervis Bay, Jervis Bay National Park.	60 m waterline to dune	40 to property fences	Beach included, not dune.
Cudmirrah Beach Surf Club end			Part of beach and high, extensive dunes not included.
Bendalong Boat harbour beach			Beach and Dune not included, part of Conjola National Park
Cunjurong Point- Manyana Beach Conjola Beach			Beach and dune not included Conjola-beach only -part of Conjola National

			Park
Mollymook Beach	100 m	10—50 m depending on development extent	Parts of dune not included.
Racecourse Beach Ulladulla	70 m low tide to dune scarp	100 m	Most of dune not included.
Wairo Beach	Centre of beach 50 m Ends of beach 150 m	Centre of dune 150 m Ends of dune 300 m	Centre-beach and part of dune included Ends of beach 50 m not included, dunes not included. These are massive high dunes up to 800 m wide in parts
Tabourie-ends of beach	Centre 50 m Ends 150 m	Centre of dune 150 m Ends 300 m	Centre beach and part of dune included. Ends of beach 50 m not included. Dunes not included.
Sunburnt Beach	Centre of beach 50 m Ends of beach 80 m	Dune 120 m	Beach included. Most of dunes not.
Termeil Beach	Centre of beach 50 m Ends of beach 100 m	Dune 200-300 m	Beach covered except for south end adjacent to Stokes Is. Massive, unique dune system with Burrwand and Banksia forest not covered. Part of Meroo National Park.
Bawley Point North Beach-Willinga	40 m low tide south end 150 adjacent to lagoon	?	Beach and dune likely covered as included in CEA as Schedule 2 Coastal Lake. Part of Meroo National Park.
Bawley Point Beach	70 m low tide	?	Both beach and dune likely to be covered.

January 2017.

Lake Wollumboola Protection Association Inc Submission regarding the draft Coastal Management SEPP and draft Maps of the Coastal Management Area.

1. Photographs to accompany submission. Lake Wollumboola birds.



Royal Spoonbills in flight.



Little Terns, White-winged Black Terns roosting.



Little Tern feeding fledgling.



Bar-tailed Godwits.



Pied Oyster Catcher and chicks.

Lake Wollumboola Protection Association Inc Submission regarding the draft Coastal Management SEPP and draft Maps of the Coastal Management Area.

2. Photographs of development in sensitive Wetland Areas-residential zoning.



Medium density housing in wetland heath Sheepwash Creek area Lake Wollumboola



Remnant wetland heath adjacent to development Sheepwash Creek Area.



Local resident- Green and Golden Bell Frog.

Lake Wollumboola Protection Association Inc Submission regarding the draft Coastal Management SEPP and draft Maps of the Coastal Management Area.

3. 1. Photos of 3 proposed Coastal Wetland sites. See Submission Pages 8-9 and Map Att 1.

1. Coastal Wetland sites at Lake Wollumboola-Swan Point-Long Bow Point Peninsula.



Long Bow Point east- Swan Point-*Wilsonia Rotundifolia*



Long Bow Point Peninsula south-*Wilsonia Rotundifolia*.

Lake Wollumboola Protection Association Inc Submission regarding the draft Coastal Management SEPP and draft Maps of the Coastal Management Area.

3. 2. Photographs regarding 3 proposed Coastal Wetland sites. See Submission Pages 8-9 and Att 1.

2. Coastal Wetland sites at Lake Wollumboola- Coonemia Creek to Boalla Point.



South of Coonemia Creek entrance-Wilsonia Rotundifolia and Cuscuta Tasmanica



South West shore, Sarcocornia and Wilsonia Rotundifolia



Southern Shore, Boalla Bay, Sarcocornia and Wilsonia Rotundifolia.

3.3 Lake Wollumboola Protection Association Inc Submission regarding the draft Coastal Management SEPP and draft Maps of the Coastal Management Area.

3. 3. Photographs regarding 3 proposed Coastal Wetland sites. See Submission Pages 8-9 and Att 1.

Coastal Wetlands Lake Wollumboola north east shore, east of SEPP 14 Wetland 365.



Coastal Salt Marsh-*Juncus Kraussii*, *Sarcocornia quinqueflora*, *Selliera radicans* trampled by prawlers and crabbers.



Coastal Salt Marsh, detail.

5. Lake Wollumboola Protection Association Inc Submission regarding the draft Coastal Management SEPP and draft Maps of the Coastal Management Area.

Lake Wollumboola. Schedule 1 Sensitive Coastal Lake-development impacts with 100 m of shore. See pages 18 and 20-22 of submission.



House and road filled and built over wetland and Lake, Pre-SEPP 71. Culburra Beach.



Detail of garden, rock wall and road.



All houses are in Lake Coastal Flood zone. House on right under going major rebuild. No provision for flood protection. SEPP 14 Coastal Wetland in background.