

An Open Letter to Minister Greg Hunt

The Hon Greg Hunt MP
Minister for Environment
PO Box 6022
House of Representatives
Parliament House
Canberra ACT 2600

19 December 2014

Dear Minister Hunt,

We the undersigned represent the scientific, academic, conservation and tourism community working directly with Little Penguin (or 'fairy penguin') colonies and/or their natural habitats across Australia, and in some cases internationally.

We write to raise our strongest concerns over your recent approval and your department's failure to assess and include the Little Penguin (*Eudyptula minor*) in the proposed Mangles Bay Marina and Canal development project on 2 October 2014 (EPBC Decision 2010/5659) by proponents Cedar Woods and Landcorp (WA Government).

We are especially concerned that your decision failed to include impacts on the Little Penguin due to a decision taken on 27 October 2010 to exclude this federally protected marine species from the federal assessment process.

By way of national context, four developments currently threaten the Little Penguin: the St Kilda Breakwater Extension (VIC); the Kangaroo Island Sea Wall (SA); the Port Spencer Development (SA); and the Mangles Bay Marina Development (WA).

There are two iconic Little Penguin colonies living in close proximity to the Mangles Bay Marina and Canal development: the *Garden Island Colony* and the *Penguin Island Colony*. The Penguin Island colony is the largest known breeding colony in WA and in 1996 was given the highest conservation status of 256 colonies of Little Penguins around Australia (Dann et al. 1996).

We write to request your urgent reconsideration of the decision to approve this project.

Under section 78 of the *Environmental Protection Biodiversity Conservation Act 1999* you have the power to reconsider a decision if there is evidence of:

- Substantial new information that was not considered when the original decision was made (paragraph 78(1)(a))
- Substantial change in circumstances which are highly likely to cause adverse impacts of the action on a protected matter (paragraph 78(1)(aa))

We have compiled 12 such examples as grounds to reconsider and revoke your decision:

1. Since 2007, **the Little Penguin population on Penguin Island has experienced a drastic reduction with the overall population during the breeding season dropping by half.** This is considered to be a direct result of decreasing rates of breeding pairs returning to the island to attempt to breed, most likely due to reduced food availability (Cannell, 2012). In the longer term, this will impact the number of young penguins available to recruit back into their natal colony.

Specifically, new and yet to be published survey data revealed by Dr Belinda Cannell on the ABC 730 WA program “Saving the Penguins” (Ainsworth, 2014), revealed that since 2007 the Penguin Island Little Penguin breeding population has dropped by almost 40% (from approximately 1600 to approximately 1000 during comparable times in their breeding cycle). This reduction in penguins attempting to breed is most likely due to a reduction in fish abundance close to the colony potentially caused by warming of ocean temperatures - which has impacted on fisheries and likely moved them further south, and also coastal development (Cannell, 2012).

2. Unpublished GPS location tracking data - used with permission (Appendix 1) has revealed **the proposed development site is currently a foraging activity hotspot.** Of all the foraging areas in Cockburn Sound, **the breeding pairs are almost feeding exclusively in the Mangles Bay area when they are feeding chicks** (Cannell, 2012).
3. **The breeding pairs of the Garden Island Penguin colony feed exclusively in Cockburn Sound, often in the seagrass meadow directly adjacent to the proposed construction site** (See Appendix 1). Some breeding penguins from Penguin Island also feed in Mangles Bay and other areas of Cockburn Sound.
4. There has been **significant cumulative loss of seagrass meadows of 77% since 1967** in the greater Cockburn Sound area (in which Mangles Bay is located) with the remaining meadows in state of severe decline (Verduin & Sinclair, 2013). **The proposed removal of a further 5.6ha of seagrass will completely bisect the main remaining seagrass meadow in Cockburn Sound** and some researchers attest bisection could see the seagrass decimated altogether in Mangles Bay (bisection has maximum negative impact on a viable habitat). New research shows the ameliorative measure proposed by the proponent (to replant additional seagrass) uses a method that has been widely criticised by leading experts, particularly those raised in

submissions on the Mangles Bay PER (Strategen, 2013. p115). **Even if it were successful, the transplant sites will take seven to ten years to develop to full coverage**, according to the proponent (Strategen, 2013. p42).

5. The 2012 Federal Marine Bioregional Plan for the South-West Marine Region (prepared under the *Environment Protection and Biodiversity Conservation Act 1999*) noted the importance of the EPBC-listed marine species to the region, and **called for the Perth population of Little Penguins to be treated as a priority for conservation.**
6. **Dredging will occur during the Little Penguin breeding season, when the penguins are reliant on the Mangles Bay area for food.** The timing of a first peak number of egg lay is generally in June and a second peak in September, and on average a quarter of the colony will be feeding chicks from June to August. (Cannell unpublished data 2013, Cannell Appeal Form 2013, Cannell additional information sent to the Appeals Convener 2013). The EPA provided approval conditions contrary to data provided by Dr Cannell and instead made it an approval condition that dredging occur in precisely the time when a substantial proportion of penguins will be feeding chicks.
7. A 2013-2014 study using satellite tags shows **some Penguin Island penguins are swimming as far as Margaret River to feed during incubation periods** (roughly a 520 km round trip), with trip durations up to three times longer than normal. This data is consistent with previous findings from 2008 (Ainsworth, 2014) which was also a year with above average sea surface temperatures.
8. **In the second half of 2011, Little Penguin deaths reached four times the normal level**, with one of the causes of mortality attributed to starvation as a direct result of decreasing fish stocks – which were tied to prolonged and above average sea surface temperature and potentially coastal development (Ainsworth, 2014).
9. Recreational activities in Cockburn Sound, Warnbro Sound and Comet Bay such as boating and jet skiing are already impacting on the colonies, with experts recently saying **boat strikes are contributing to one third of penguin deaths. A new marina with an additional 500 boats could devastate both colonies** (Ainsworth, 2014).
10. An investigation in June 2013 found **penguins in the Mangles Bay area contain mercury at concentrations above levels considered safe.** The studies profiling heavy metal exposure in seabirds using their feathers have both indicated that the southern end of Cockburn Sound, and in particular Mangles Bay, may be providing the conditions for mercury bio-accumulation in the marine food-chain, with both the Little Penguins that forage at the southern end of Cockburn Sound and Caspian Terns that fish in that area when breeding show elevated levels of mercury in their feathers, with some individuals of both seabirds having mercury levels (as measured in feathers)

above the level considered safe for marine birds of 5 mg/kg (Dunlop, McNeill & Cannell, 2013).

11. **The proposed Mangles Bay Marina and Canal development could elevate the existing mercury contamination hazard in at least two ways.** Firstly, the dredging program may release methyl-mercury into the water column causing a spike in contamination in fish and other marine life. Secondly, the settling organic matter in the dredged channel, and in the poorly-flushed, blind-ending canal development, is likely to further enhance the conditions for mercury methylation by bacteria in the long-term. This would present a threat to the commercial & recreational fisheries in Cockburn Sound and to the local aquaculture industry (Paddenburg, 2011; Dunlop, McNeill & Cannell, 2013).
12. One of Australia's most eminent penguin experts with more than 20 years' research experience, Dr Belinda Cannell, recently stated that **the Mangles Bay Marina will have a likely impact on the viability of the Garden Island colony through dredging, removal of sea grass, potential impacts on fish abundance and increased risk of propeller strike.**

Each item above provides a clear example of grounds for reconsideration under s78, namely new information that was not considered when the original decision was made in 2010 to exclude the Little Penguin from assessment, and clear examples of a change in circumstances that will impact adversely on the Little Penguin.

We repeat our sincere request for urgent reconsideration of your decision to approve the Mangles Bay Marina at Point Peron.

We also acknowledge considerable community opposition to the Mangles Bay marina and the great affection and care the Point Peron community feel for their iconic penguins, which are as much an important tourist attraction as part of their local identity.

For the Penguins,

Signed:

1. **Dr Belinda Cannell** Assistant Professor WA
School of Animal Biology
University of Western Australia
and
Research Associate
School of Veterinary and Life Sciences
Murdoch University

One of Australia's most eminent penguin experts with more than 20 years' research experience, Dr Belinda Cannell, actively monitors the Western Australian little Penguin colony. Dr Cannell continues to research and publish data on the Penguin and Garden Island Penguin Colonies.

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| 2. Mayor Graham Philp | Mayor, City of Victor Harbor
and
Chair, Save Granite Island Penguins,
Victor Harbor
<i>Little Penguins in the vicinity of Victor Harbor are almost extinct. They have dropped from 5,000 birds on three different Islands to 30 birds on Granite Island. West Island and Wright Island are now extinct. We have been lobbying our State Government to implement strategies to save our penguins.</i> | SA |
| 3. Dr André Chiaradia | Research Scientist
Penguin Specialist Group
International Union for Conservation of Nature
(IUCN) | VIC |
| 4. Dr Yolanda van Heezik | Senior Lecturer in Zoology
Department of Zoology
University of Otago | New Zealand |
| 5. Dr Peter Dann | Research Associate
Melbourne University
and
University of NSW | VIC/NSW |
| 6. Dr J N Dunlop | Chair, BirdLife Western Australia | WA |
| 7. Angelika Treichler | Coordinator and Founding Member
Manly Volunteer Penguin Wardens,
Volunteer Penguin Protectors,
Manly Beach
<i>Angelika Treichler is the founding member of the community led Manly Volunteer Penguin Wardens, which has saved the last remaining Australian mainland Little Penguin colony. The Penguin Wardens actively patrol the Manly area and protect the Little Penguin colony from human contact and dangerous – often fatal, pet dog interference. Four of the following signatories are currently active penguin wardens.</i> | NSW |
| 8. Patricia Michel | Penguin Protector
Manly Volunteer Penguin Wardens | NSW |
| 9. Anne McCloghry | Penguin Protector
Manly Volunteer Penguin Wardens | NSW |
| 10. Chris McCloghry | Penguin Protector | NSW |

	Manly Volunteer Penguin Wardens	
11. Marie Alricsdotter	Penguin Protector Manly Volunteer Penguin Wardens	NSW
12. Anne Davie	President Phillip Island Conservation Society Inc.	VIC
13. Zoe Bainbridge	PhD Candidate (JCU/CSIRO) Centre for Tropical Water & Aquatic Ecosystem Research James Cook University (QLD)	WA/QLD
14. Catherine Cooper	Principle Environmental Scientist Lomandra Environmental (Pty Ltd)	WA
15. Dr Kym Campbell	Resident in Veterinary Anatomic Pathology School of Veterinary and Life Sciences Murdoch University	WA
16. Dr Elizabeth Sinclair	Research Associate Professor School of Plant Biology University of Western Australia	WA
17. Dr Eric J Woehler	Associate, Marine and Antarctic Futures Centre Institute for Marine and Antarctic Studies (IMAS), University of Tasmania and Convenor, BirdLife Tasmania	TAS
18. Sandra Vogel	PhD Candidate Evolution & Ecology Research Centre (E&ERC) University of New South Wales	NSW
19. Dr Barbara Wienecke	Research Scientist Australian Antarctic Division	TAS
20. Professor Stuart Bradley	Emeritus Professor School of Veterinary and Life Sciences Murdoch University	WA
21. Perviz Marker	PhD Candidate School of Biological Sciences	TAS

Faculty of Science, Engineering and Technology
University of Tasmania

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|-----------------------------------|---|-----|
| 22. Dr Beth Schultz AO | Advisory Group, WA Forest Alliance | WA |
| 23. Piers Verstegen | Director
Conservation Council of Western Australia | WA |
| 24. Jenita Enevoldsen | State Director
The Wilderness Society WA Inc.
Western Australia | WA |
| 25. Dr Lorraine Marshall | Vice Chair
Birdlife Western Australian | WA |
| 26. Ross Marshall | Member, Birdlife Western Australia | WA |
| 27. Professor George Burns | Adjunct Professor of Psychology
Nature and Human Wellbeing
Cairnmillar Institute, Melbourne | VIC |

References

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- Dunlop, J., McNeill, S., & Cannell, B. (2013). Seabird Feathers as Indicators of Mercury & Selenium Contamination in the Coastal Waters of South Australia. Conservation Council of Western Australia [CCWA]. Retrieved from <http://ccwa.org.au/sites/default/files/Seabirds%20Coastal%20Metals%20v3.pdf>
- Paddenburg, T. (2011, February 20). Seafood Jeopardy – High Mercury Found in Perth Waters. *The Sunday Times*, p. 11.
- Strategen Environmental Consultants (2013). Detailed Responses to Matters Raised in Submissions on the Mangles Bay Per (Prepared for on Behalf of Cedar Woods). Retrieved from <http://www.bushlandperth.org.au/campaigns/hands-off-point-peron>
- Verduin, J., & Sinclair, E. (2013). Seagrass Meadow Restoration Trial Using Transplants – Cockburn Sound, Western Australia. Retrieved from <http://site.emrprojectsummaries.org/category/coastal-marine>

Legislation

- Environment Protection and Biodiversity Conservation Act 1999* (Cth) Declaration under section 248: List of Marine Species
<http://www.comlaw.gov.au/Details/F2008B00465>)

Appendices

Appendix 1

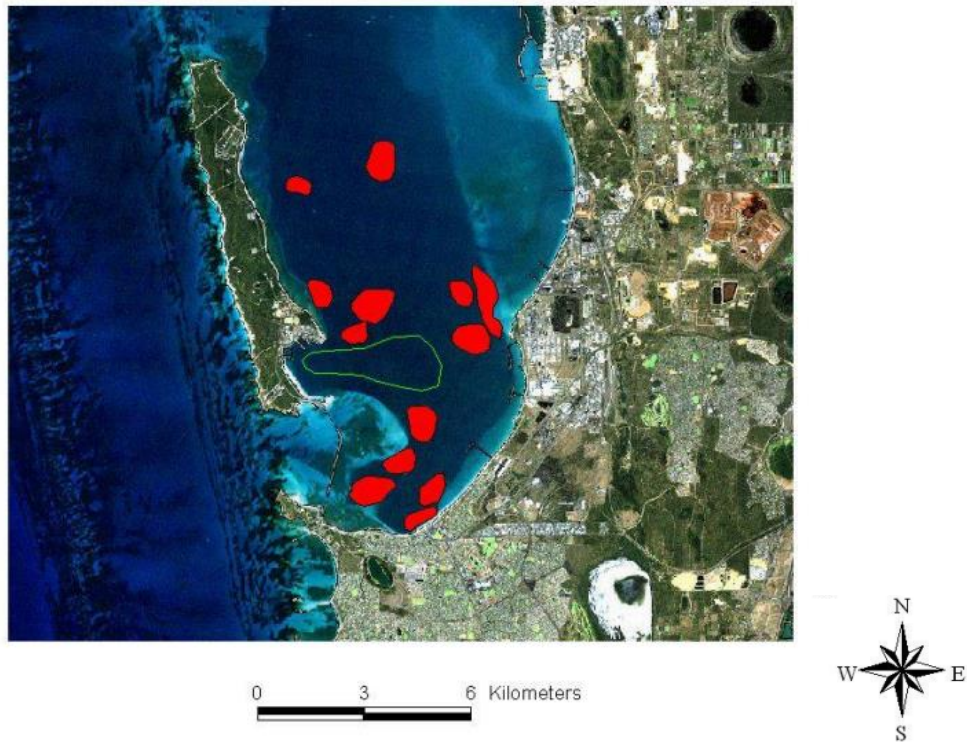


Figure 1 - Hotspots of foraging activity during incubation or chick rearing (red) and directed movement from the colony (green) in 2012, from Cannell, B. (2012). *Fine Scale Habitat Use by Little Penguins in Cockburn Sound*. (Unpublished). Penguin Consulting, Murdoch, WA.

Appendix 2



Figure 2 – Proposed Mangles bay Marina development site. Retrieved from - Strategen Environmental Consultants (2013). Mangles Bay Marina Based Tourist Precinct, Public Environmental Review (Prepared for on Behalf of Cedar Woods).