

Without Prejudice

2 July 2021

Our ref: 21SUT - 17950

Allen Price & Scarratts Pty Ltd
75 Plunkett Street
Nowra NSW 2541

Attention: Matt Philpott

Dear Matt,

RE: Request to provide information on bird studies at West Culburra Mixed Use Subdivision

We refer to your request to provide further information on the various bird studies commissioned by Sealark Pty Ltd relating to State Significant Development (SSD) – 3846 West Culburra Mixed Use Subdivision, which was originally lodged under (now repealed) Part 3A of the NSW *Environmental Planning and Assessment Act 1979* (EP&A Act) in March 2013 (John Toon Pty Limited 2013), refused by the IPC in October 2018, and is now the subject of an appeal in the NSW Land and Environment Court, and with leave of the Court, an amended development application as set out in the *West Culburra Concept Plan Environmental Impact Statement*, prepared by Allen Price & Scarratts Pty Ltd, dated November 2020 (**Amended Application**).

Contentions 3 and 16 in the Facts and Contentions filed on 24 May 2019 state, respectively, that *“the application does not adequately consider aquatic ecological impacts of the proposal and should be refused”* and that *“no information has been provided regarding the likely impacts {of the proposal} on the rich and diverse bird life in the vicinity flowing from impacts on the terrestrial and aquatic environments. Proper assessment of potential impacts on bird life should be provided”*

You have requested that we undertake a desk top review of the ‘bird life’ studies undertaken in the project area, the Crookhaven River and Lake Wollumboola catchments that the projects sits in and their conclusions regarding the likely impacts to ‘bird life’ in the vicinity of the project area to address the Department of Planning, Industry and Environment’s outstanding comments in relation to Contention 3 and Contention 16 respectively.

Background

The project site, adjacent and surrounding lands have been the subject of detailed flora and fauna surveys since 1993, with the most recent surveys undertaken in 2016, and reported by Eco Logical Australia (ELA) in 2019.

Surveys and impact assessment to 'avifauna' (including threatened species listed under the then NSW *Threatened Species Conservation Act 1995*, and migratory species listed under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* were undertaken as part of the Part 3A Concept Plan application (John Toon Pty Limited March 2013 and SLR 2013) in accordance with the Director-General's Environmental Assessment Requirements relevant to Flora and Fauna (requirements 9.1-9.5), dated 8 July 2010 (**Attachment 1**).

The SLR Ecological & Riparian Issues Assessment Report (SLR 2013) that accompanied the John Toon EA report (Appendix O of the EA report) was prepared to address those requirements, in particular requirement 9.2 (iv) which required targeted surveys for threatened fauna, and requirement 9.2 (v) which required an assessment of the riparian zone buffers to adjoining wetlands and waterways demonstrating how the wetlands, Crookhaven River and Curleys Bay will be protected.

The then NSW Office of Environment & Heritage (OEH) reviewed information presented in SLR (2013) as part of their submission on the exhibited documents (**Attachment 2**). In their submission, dated 21 June 2013, they concluded that "*OEH is satisfied that the development is unlikely to have a significantly [sic] impact on threatened species and their habitats.*" Further, in 2017 OEH maintained that the project's biodiversity issues "*...had been adequately assessed in accordance with the NSW Framework for Biodiversity Assessment, as described in the Biodiversity Offset Strategy summary*" (**Attachment 3**). OEH's main concerns were in relation to the location of proposed biodiversity offsets and stated that it was their preference that they be sourced from within the Lake Wollumboola catchment as required by the Governments Sensitive Urban Land Review (South Coast Independent Review Panel 2006).

In 2018 the Independent Planning Commission (IPC) acknowledged in paragraph 198 of the Statement of Reasons for Decision, dated 17 October 2018 "*that the OEH is satisfied that the Project is unlikely to have a significant impact on threatened species, subject to the exclusion of development within the foreshore and the provision of suitable offsets*" (**Attachment 4**).

The EIS in support of the Amended Application has taken into consideration the comment raised in the Department of Planning and Environment's Assessment Report for SSD 3846 (June 2018) and the Statement of Reasons prepared by the IPC resulting in a proposal that has a significantly reduced footprint (47.34 ha compared to the original refused Concept Plan of 102.23 ha), removal of all impacts to the foreshore area including viewing platforms and associated clearing, resulting in minimum buffers of 100-150m to sensitive waterfront areas, dedication of large tracks of foreshore land to the public for active and passive uses, and modified stormwater treatment that achieves neutral or beneficial effect (**NorBE**).

ELA understands that your request for further information is in relation to Contentions 3 and 16: Lack of information on birdlife provided in the Statement of Facts and Contentions filed by the IPC on 24 May 2019 (**Attachment 5**), which states:

Contention 3(l): “The aquatic habitats contain species that are protected or classified as threatened under NSW State or Commonwealth legislation (e.g. Syngnathidae, seahorses and pipefishes) or international convention (migratory bird waders). In particular, many aquatic species are listed under the Fisheries Management Act 1994. These have not been evaluated within the EA, with only a high-level assessment of habitat focusing primarily on mangroves and saltmarshes”.

Contention 16: “No information has been provided regarding the likely impacts on the rich and diverse bird life in the vicinity flowing from impacts on the terrestrial and aquatic environments. Proper assessment of potential impacts on bird life should be provided.”

ELA has conducted a review of the existing body of work produced throughout the lifecycle of the project, as well as publicly available information on the bird life in the vicinity of the proposal produced by members of the local community. The results of this review, as they pertain to terrestrial and aquatic bird life, are summarised in this letter and various attachments, tables and figures.

Previous surveys

A summary of fauna surveys (including threatened and general avifauna conducted within the site and adjoining lands (Long Bow Point and Lake Wollumboola) between 1993 and 2013 was compiled by SLR Consulting Australia (2013) (**Attachment 6**). The location of the ‘subject site’ and ‘subject land’, as referred to by SLR Consulting Australia, as well as the adjacent aquatic habitat of Curleys Bay are shown in Figure 1. It is noted that these studies covered a much larger study area than the Amended Application being considered by the Court. Bird surveys were conducted in and adjacent to the land proposed for development in 1997, 2001, 2002, 2007, 2010, 2012 and 2013 using the following methods:

- diurnal census for terrestrial and aquatic birds (Table A5 of **Attachment 6**);
- opportunistic observations and/or call identification;
- call playback for targeted threatened birds including the Black Bittern and nocturnal birds; Masked Owl, Powerful Owl and Barking Owl; and
- habitat search transects for Glossy Black Cockatoo.

The survey effort in the larger study area by SLR Consulting Australia in 2012-2013 is shown in **Figure 2**. A list of the 117 terrestrial and 60 aquatic birds (including 14 migratory species listed under the EPBC Act) recorded over a 20 year period within and adjacent to the study area from this and other studies is presented in **Attachment 7**.

SLR (2013) concluded that there were “no records of any roosting habitat by wetland and wading species on the subject site itself.” 76 terrestrial species were recorded in the subject land over surveys conducted in 2001, 2003, 2007, 2010 and 2013 (Columns A, B, C, E and F in Appendix L of SLR (2013).

Gunninah (2015) also compiled a list of 175 bird species (103 terrestrial and 72 aquatic) as part of the avifauna studies at Long Bow Point, which also included records from surrounding areas, including West Culburra and parts of the foreshore of Lake Wollumboola (**Attachment 8**).

Additional surveys for wetland and migratory birds in the broader study area were undertaken by ELA in 2016 (ELA 2019). Survey methods included:

- dawn and dusk census;
- habitat searches for sightings, nests, indicative footprints, or feathers; and
- deployment and analysis of songmeters.

Opportunistic observations and/or call identification of both terrestrial and wetland birds was also conducted throughout the survey period.

The survey effort by ELA is shown in Figure 3. A list of the 11 aquatic birds and 57 terrestrial birds were recorded during surveys conducted by ELA (2019) as part of a Biocertification assessment for West Culburra over a larger study area (**Attachment 9**).

Marine Pollution Research (MPR) between 2019 and 2020 confirmed that use of Curleys Bay by shore, wading and fishing birds is limited. MPR (2020) attributed this to the proximity of mangroves to the mudflats, stating that *“the low utilisation of the SE and SW Bay mud flats by wading and shore birds can be related back to the relatively narrow width of the intertidal mud flats immediately offshore from mature mangrove trees around 5 to 6 m high.”* MPR (2020) concluded that more suitable habitat was available for shore and wading birds at Lake Wollumboola and Comerong Island rather than Curleys Bay.

External data

The following publicly available bird watching resources written for the area were reviewed for species known from the area:

- Birds of Shoalhaven City (Shoalhaven City Council 2019);
- Bird Life Australia – Lake Wollumbolla Fact Sheet 2021
- Presenting the Birds of Lake Wollumboola 2014 (**Attachment 10**)

In their submission for the original Major Project (MP 09_0088), the Lake Wollumboola Protection Association Inc. (2013) identified the Crookhaven River, Curley’s Bay and Lake Wollumboola as important habitat for migratory waders, sea birds and shorebirds, including the Black Swan, Chestnut Teal, Little Tern, ducks, pelicans and spoonbills. A comprehensive list of species compiled by the Lake Wollumboola Protection Association Inc. over a 20 year period between 1993 and 2014 is presented in **Attachment 10**. The Lake Wollumboola Protection Association has recorded 104 species through this period, mainly aquatic species, many of which are migratory species listed under the EPBC Act.

Assessment of impacts to avifauna

The avifauna species recorded in and adjacent to the site are considered a ‘typical assemblage’ of terrestrial bird species that would be expected to be found in these habitats, with a number of threatened (Powerful Owl, Glossy Black Cockatoo, White-bellied Sea-eagle) and migratory species recorded. The terrestrial avifauna identified in and adjacent to the site are well represented in the extensive area of protected National Parks in the vicinity of the study area and the Lake Wollumboola Biobank site.

Impacts on terrestrial and aquatic birdlife were identified and assessed by SLR Consulting Australia (2013), in accordance with the Director-Generals requirements issued under the NSW *Environmental Planning and Assessment Act 1979* (EP&A Act) (**Attachment 1**) and concluded the following:

“The proposed development of the subject site for the Culburra West Project will doubtless remove some resources for at least individuals of some threatened species. The proposal will remove the tree canopy from the whole of the forested part of the subject site, thus removing foraging resources for the Cockatoos and foraging habitat for the Powerful Owl and microchiropteran bats. In addition, the removal of hollow-bearing trees constitutes a loss of nesting or roosting habitat for many of those species, at this specific location.

However, the impacts upon those threatened biota as a result of the proposed Culburra West Project are not regarded as of particular concern with respect to the survival of those biota on a landscape or locality scale, given that:

- *all of the relevant species are highly mobile and wide-ranging, with:*
 - *the Powerful Owl having a home range of up to 1,000 hectares, and the Square-tailed Kite having a home range of approximately 10,000 hectares; [...]*
 - *the Glossy Black Cockatoo also having a substantial home range;*
- *none of the threatened (or other native) species known or likely to occur would be dependent on the proposed development area per se for their survival in this locality, given the extent and distribution of suitable habitat and resources in the vicinity and locality, and the extent of records of such species in the locality;*
- *there are substantial areas of suitable habitats and resources for all of those species in the extensive vegetated lands in the immediate vicinity and general locality. In addition to the substantial National Parks and State Forests to the south and southwest of the subject land [...] there are substantial areas of native forest on private lands in the immediate vicinity and general locality which are not likely ever to be developed. As a consequence, there are significant areas of suitable habitat and resources for all of the threatened biota known to occur within the subject site at Culburra West;*
- *there are very substantial areas of conserved lands and State Forests in the Shoalhaven LGA [...]; and*
- *the proposal contemplates the dedication of private forested lands as offsets for the removal of vegetation. These lands contain the same habitats and resources as are present on the areas to be cleared for development activities [...].*

The significant habitats and ecosystems associated with the Crookhaven River estuarine environment (particularly sea-grass beds, mangrove forests and coastal saltmarsh communities) are all located outside the proposed development footprint. In addition, these estuarine ecosystem and habitats are protected from the Culburra West Project site both by the intervening 100m plus vegetated buffer along the Crookhaven River foreshore and the comprehensive water quality and water volume treatment management regime which has been incorporated into the Project.”

ELA concurs with this conclusion in regards to the significance of impacts to local populations of both terrestrial and aquatic bird life. Further, the **amended application** has taken into consideration the comment raised in the Department of Planning and Environment’s Assessment Report for SSD 3846 (June 2018) and the Statement of Reasons prepared by the IPC resulting in a proposal that has a

significantly reduced footprint (47.34 ha compared to the original refused Concept Plan of 102.23 ha), removal of all impacts to the foreshore area including viewing platforms and associated clearing, resulting in minimum buffers of 100-150m to sensitive waterfront areas, dedication of large tracks of foreshore land to the public for active and passive uses, modified stormwater treatment that achieves neutral or beneficial effect (**NorBE**), thus reducing any potential impacts further.

Aquatic and additional terrestrial habitat for bird species could be indirectly impacted by the proposed development. The outer perimeter of the proposed footprint is largely comprised of perimeter roads and APZs. In effect, these areas will provide a buffer between the development lands and retained areas buffering the Crookhaven River and Curleys Bay environs, thereby mitigating and buffering any indirect impacts such as increased weeds, run-off, changed noise and light conditions. Indirect impacts to aquatic bird habitat would also be mitigated through the proposed setback between the development and Curleys Bay (minimum 100 m)/ Lake Wollumboola (500 m) and the preparation/implementation of a Construction Environmental Management Plan and Vegetation Management Plan for the foreshore area as outlined in Section 17.2 Environmental Management Measures of SLR (2013) and re-stated in Allen Price & Scarratts 2020. The provision of these buffer areas addresses Director-General's Environmental Assessment Requirement 9.2.v. (**Attachment 1**).

As indicated above, as part of its review of the application, the then OEH stated that it *"is satisfied that the development is unlikely to have a significantly [sic] impact on threatened species and their habitats"* and that *"the projects biodiversity issues had been adequately assessed in accordance with the NSW Framework for Biodiversity Assessment"*.

ELA (2019) prepared offset calculations in accordance with the Framework for Biodiversity Assessment (FBA) and a Biodiversity Offset Strategy (BOS) in 2017 and updated these to reflect the significant reduction in size of the West Culburra Concept Plan in 2020 from 91.65 ha of vegetation impacted down to 46.27 ha within the 47.34 ha footprint (**Attachment 11**).

The BOS prepared by ELA in 2020 commits to the securing of offsets within the Lake Wollumboola Catchment as part of the 1,081 ha Lake Wollumboola Biobank site that was registered in February 2019 (**Attachment 12**). Based on the October 2020 Masterplan, 1,822 ecosystems credits would be 'retired' from the Biobank site on a 'like for like' basis in regards to the vegetation types/avian habitats being impacted. The retirement of these credits offsets impacts to bird habitat as supported by OEH.

Conclusion

Extensive avifauna surveys have been conducted within and adjacent to the site since 1993. These surveys include targeted bird surveys for both terrestrial and aquatic species as well as opportunistic observations of birds recorded while conducting other surveys within the site. Further information about bird life in the region is widely available from public sources.

Direct and indirect impacts to bird species have been assessed (SLR Consulting Australia 2013, ELA 2019) and OEH has concluded that the development is unlikely to have a significant impact on threatened species and their habitat (**Attachment 2**). Impacts to bird habitat would be offset through the retirement of biodiversity credits from a registered biobank site in the Lake Wollumboola Catchment area (**Attachment 12**) as required by OEH (**Attachment 2**).

Regards,

CMora

Carolina Mora
Ecologist

Robert Humphries

Robert Humphries

Principal Consultant, Eco Logical Australia

1. Figures and Tables

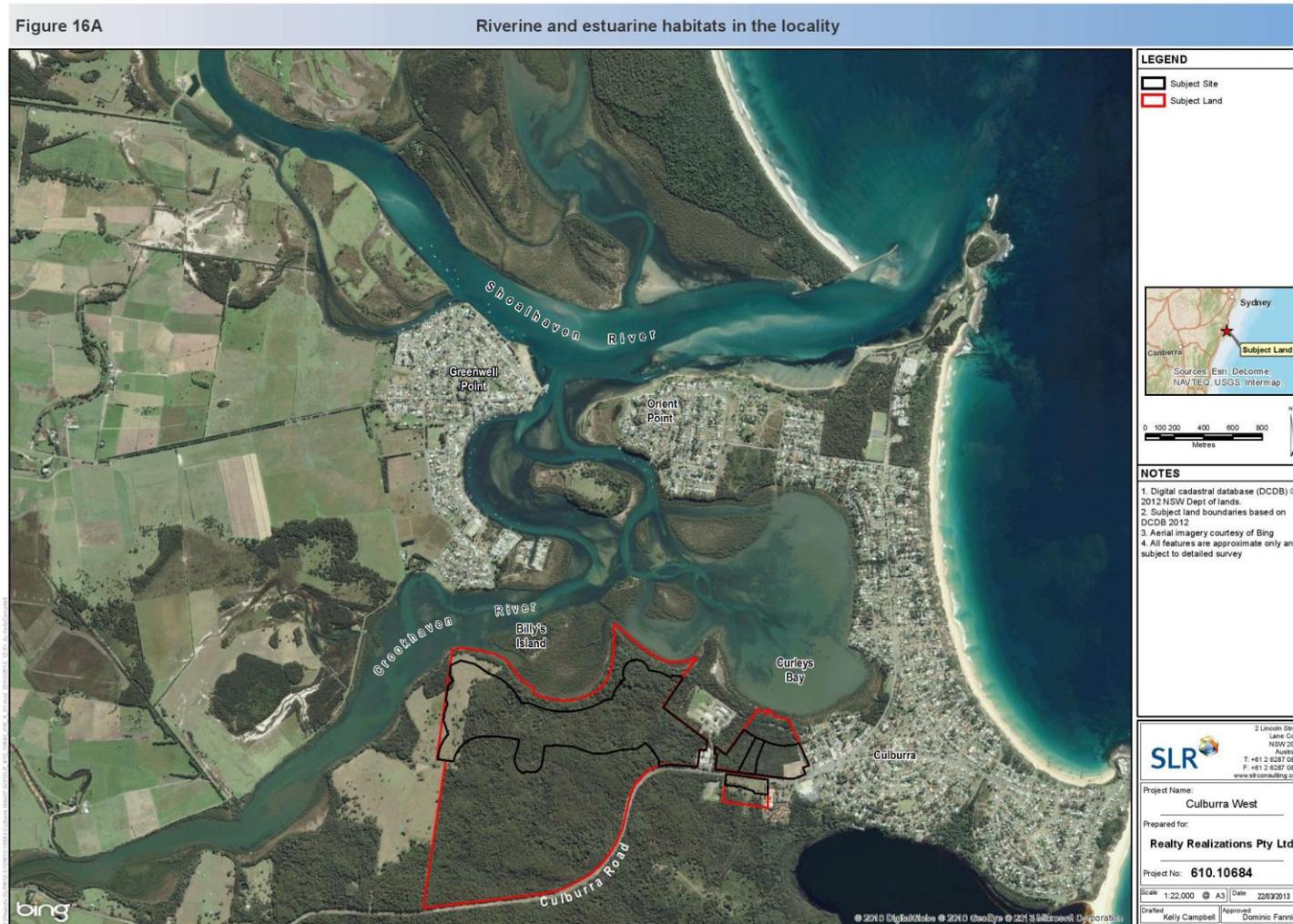


Figure 1: Location of 'subject site' and 'subject land' from SLR Consulting Australia 2013.

Figure A2

Some recent SLR walked surveys at Culburra West (August to March 2013)



Figure 2: Survey effort by SLR Consulting Australia from August 2012 to March 2013.

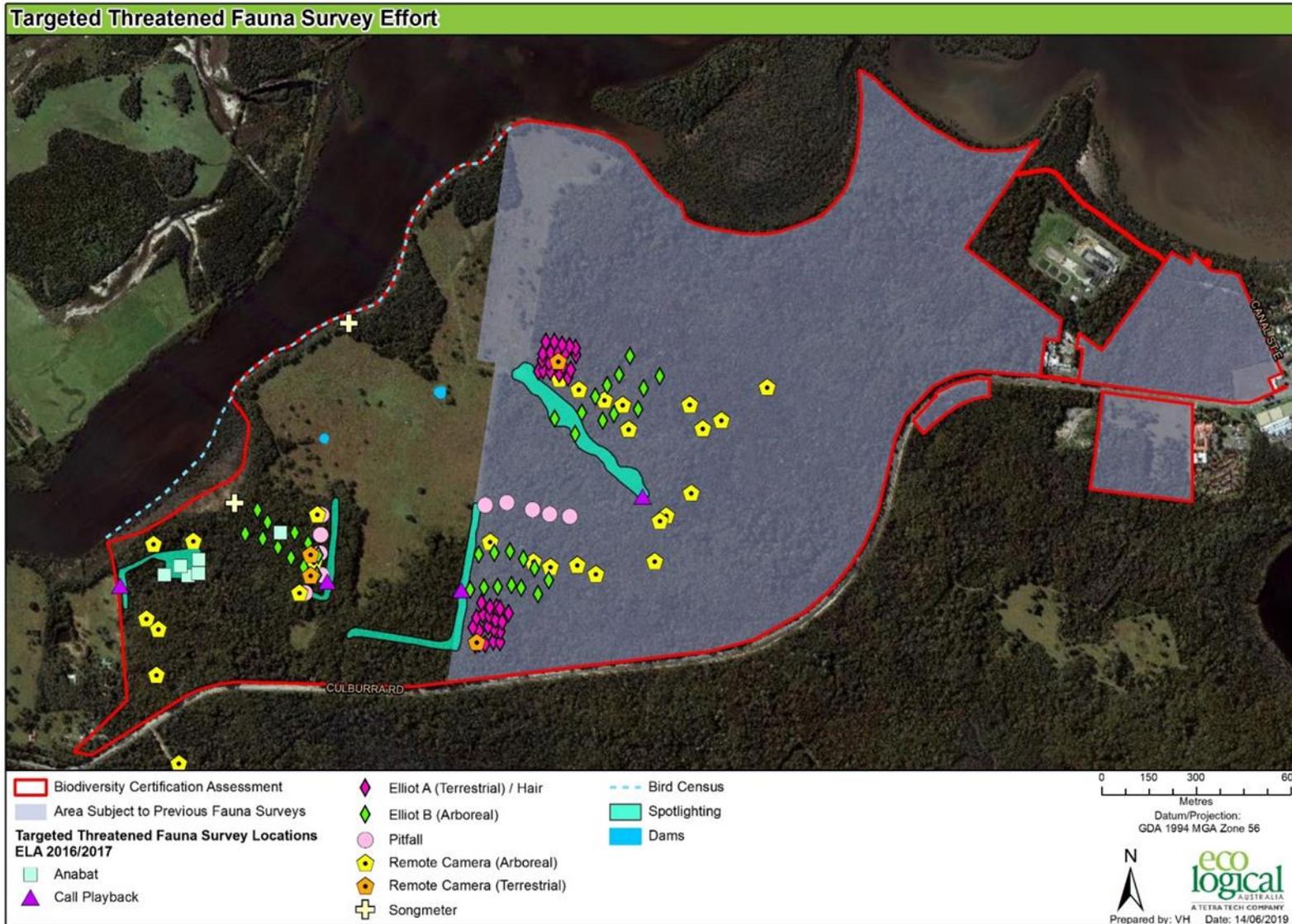


Figure 3: Fauna survey (ELA 2019).

2. References

Allen Price & Scarratts 2020. Environmental Impact Statement. West Culburra Beach Expansion Area Revised Concept Plan. NSWLEC Case Number 2019/00078149 (In response to Section 34 Conciliation Conference). Prepared for Sealark Pty Ltd, 4 November 2020.

Department of Planning and Environment (2018). State Significant Development Assessment: West Culburra Concept Proposal SSD 3846. Environmental Assessment Report, June 2018.

Eco Logical Australia (ELA) 2019. *Culburra Beach Biodiversity Certification*. Prepared for The Halloran Trust.

Eco Logical Australia (ELA) 2020. Updated Biodiversity Offset Obligations and strategy for the West *Culburra Concept Plan*. Prepared for Allen Price & Scarratts Pty Ltd, 13 October 2020.

Gunninah 2015. Culburra Golf Course – Long Bow Point part Lots 5 and 6 in DP 1065111. Species Impact Statement, August 2015.

Illawarra Bird observers Club Inc. 2021. Culburra Bird Walks. Available: <https://www.iboc.com.au/uploads/7/2/5/8/72581007/culburra-area.pdf>

Independent Planning Commission 2018. Statement of Reason for Decision. West Culburra Concept proposal (SSD 3846), 17 October 2018.

John Toon Pty Limited 2013. West Culburra Mixed Use Concept Plan. Major Project 09-0088 Environment Assessment Report, prepared March 2013.

Lake Wollumboola Protection Association Inc 2013. Submission for West Culburra mixed-use subdivision. Application MP 09_0088 Culburra Rd.

Shoalhaven City Council 2019. *Birds of Shoalhaven City*. Available: <https://doc.shoalhaven.nsw.gov.au/Displaydoc.aspx?Record=D11%2F171845>

Shoalhaven Tourism 2021. *Bird Walks*. Available for download at: <https://www.shoalhaven.com/bird-walks>.

SLR Consulting Australia 2013. *Culburra West Urban Development Project, Culburra Beach: Ecological & Riparian Issues & Assessment Report (Appendix O of John Toon Pty Limited 2013)*.

South Coast Independent Review Panel 2006. South Coast Sensitive Urban Lands Review. Report to the Honourable Frank Sartor MP, Minister for Planning.

3. Attachments

Attachment 1 – Director-General’s Environmental Assessment Requirements for Concept Plan Application – Mixed use Subdivision 09_0088. Dated 8 July 2010.

Attachment 2 – OEH Submission to Exhibition of Environmental Assessment for Concept Plan Approval – Mixed use Subdivision, West Culburra (MP09_0088). Dated 21 June 2013.

Attachment 3 – OEH Submission to Supplementary Response. Dated 9 August 2017.

Attachment 4 – IPC Statement of Reasons for Decision West Culburra Concept Proposal (SSD 3846). Dated 17 October 2018.

Attachment 5 – Statement of Facts and Contentions. Filed for Independent Planning Commission of New South Wales, Respondent 1. Filed 24 May 2019 12:04 PM.

Attachment 6 – Culburra West Urban Development Project Ecological & Riparian Issues and Assessment Report. Appendix D: Dedicated Flora and Fauna Field Surveys at Culburra. Prepared by SLR Consulting Australia on 22 March 2013.

Attachment 7 - Appendix L: Fauna Species Recorded on the Subject Site and in the Vicinity from Culburra West Urban Development Project Ecological & Riparian Issues and Assessment Report.. Prepared by SLR Consulting Australia on 22 March 2013.

Attachment 8 – Appendix R from Gunninah 2015 Low Bow Point Golf Course Species Impact Statement.

Attachment 9 –Appendix G Fauna species recorded in BCAA from Culburra Beach Biodiversity Certification prepared by ELA in 2019.

Attachment 10 - Presenting the Birds of Wollumboola. Prepared by Lake Wollumboola Protection Association Inc. 2014.

Attachment 11 - Updated Biodiversity Offset obligations and strategy for the West Culburra Concept Plan - State Significant Development Project. Prepared by ELA on 13 October 2020.

Attachment 12– BioBanking Agreement ID number: 364. Prepared for Sealark Pty Ltd for Lake Wollumboola Biobank Site 453 Culburra Road, Culburra Beach NSW 2540.