

Ecological Statement – Proposed development of a portion of Batemans Bay Hospital

1. Introduction and project understanding

At the request of bd infrastructure, on behalf of Health Infrastructure, Lesryk Environmental Pty Ltd (Lesryk) has conducted an ecological investigation within a portion of the grounds of Batemans Bay Hospital. The survey has been conducted within, and in proximity to, the southern section of the existing Batemans Bay hospital and emergency department. The study was undertaken to assess the potential ecological impacts associated with the removal of the sites existing vegetation and infrastructure.

The works are required to permit the development of a “HealthOne” at Batemans Bay, now referred to as Batemans Bay Community Health (BBCH), this constructed within the existing Batemans Bay hospital site. The BBCH will be located immediately south of Batemans Bay Hospital and will consist of a new purpose-built single storey building with approximately 850 square metre (m²) gross floor area and new carpark.

Establishment of the BBCH will require the removal of the existing car park, hospital access and associated infrastructure.

To determine if there were any ecological constraints associated with the development of a portion of the exiting Batemans Bay hospital site, this including the removal of the vegetation that is present, a site inspection has been conducted.

The area in which the proposed development will occur, and that was inspected, is identified in Figure 1.

The objectives of the field-based investigation were to:

- 1) Determine the character of the vegetation community(ies) present within, and in proximity of, the proposed development site.
- 2) Identify the flora and fauna species present, and their State/national conservation status.
- 3) Determine if any species of conservation concern are present, or could occur at other times/during other seasons of the year.
- 4) Consider and asses the impacts associated with the proposed development of a portion of the exiting Batemans Bay hospital site.

The assessment of possible impacts associated with the proposed Batemans Bay hospital development work is based on the field investigation of the study area, a literature review of previous studies carried out within this portion of the Eurobodalla Local Government Area (LGA), and the consultation of standard databases and a consideration of the objectives of the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), NSW *Environmental Planning and Assessment Act 1979* (EPA Act), NSW *Biodiversity Conservation Act 2016* (BC Act) and any relevant State Environmental Planning Policy (SEPP).



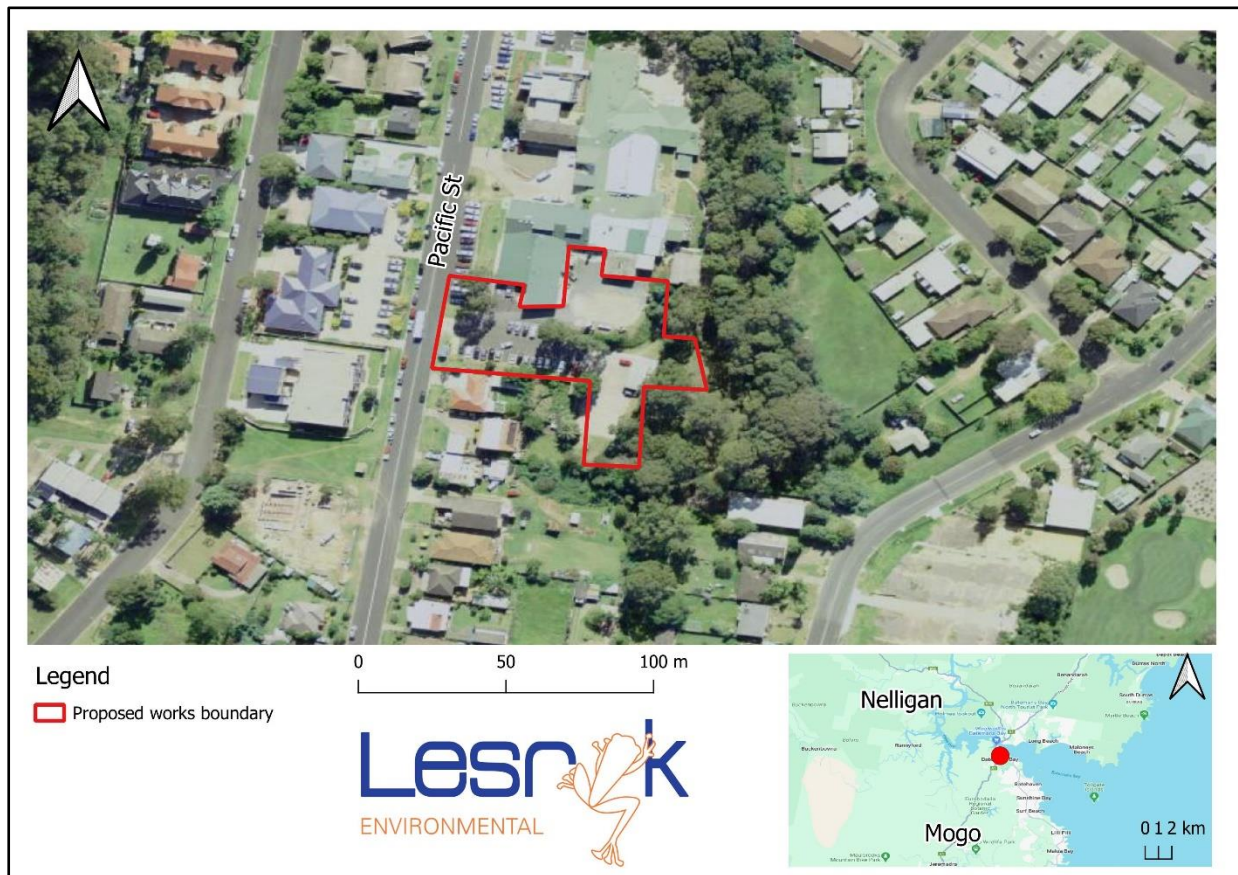


Figure 1: Area investigated during the course of the field inspection

2. Environmental Setting

The project site is located within the grounds of Batemans Bay Hospital, this present adjacent to Pacific Street, about 840 metres (m) south-east of the NSW township of Batemans Bay. Batemans Bay Hospital was erected in the early 1930s, the facility covering an area that is about 1.2 hectares (ha) in size. Given the nature and history of the hospital, the site is highly disturbed, modified and heavily developed. Numerous buildings are present within the existing hospital grounds, as are a series of internal roads, footpaths, carparks and other modified environments.

For reference, a photographic record of the area investigated has been provided (Attachment 1).

The proposed development area is in the order of 80 m long by 30 m wide and covers an area of about 3,560 square metres (m²). Within the proposed development site is an existing carpark, hard stand areas, demountable buildings, gas storage facility, garden beds, landscape plantings, maintained lawns and an internal network of sealed surfaces used by hospital vehicles. Services present include an underground stormwater management system and car park lighting.

Areas where native vegetation is present is limited to narrow strips of exposed land, these being in the order of 30 m by 3 m and 15 m by 2 m in size. Isolated native trees are also present throughout the area surveyed.

Land uses that occur in proximity to the proposed development site are buildings and infrastructure that are associated with the functions of the hospital, and residential areas. Associated within these are garden beds, manicured shrubs, maintained lawns and isolated plantings of native and exotic species. A network of hard surfaces (including internal roads, walkways and parking areas) are also present.

No conservation reserves or other protected lands are present within the area investigated. Water Garden Town Park, a Council managed reserve, is present about 210 m to the west of the hospital, this covering an area of about 6 ha. This park supports a variety of habitats, including open expanses of fresh water, casuarina lined banks, eucalypt woodlands and grasslands, these occupied by a number of native animals, including a colony of the State and Federally listed (as Vulnerable) Grey-headed Flying-fox (*Pteropus poliocephalus*) (authors field notes). Considering the scope of works proposed to develop a portion of the hospital site, no direct or indirect impacts on the habitat value of Water Garden Town Park will arise.

Due to a gap in the soil landscape mapping for the area, and as no mapping is provided by the 'Soil and Land information dataset' (The Central Resource for Sharing and Enabling Environmental Data [SEED] in NSW 2024), it is not possible to identify the official soil landscape that overlies the geology.

Reference to eSPADE v2.2 (NSW PIE 2024) identified the nearest soil Profile (no. 11) to the study area was surveyed west of Vesper Street, Batemans Bay (this about 770 m west of the hospital site and located adjacent to the tidal section of Mcleods Creek). The soil technical report written by NSW Soil and Land Information System (1994) identified the soil at this location as Hydrosol, Supratidal, Mottled, slightly gravelly, clayey soils. The soil technical report notes the soil profile 11 physiography is characterised by tidal flat under swamp complex. The soil substrate was alluvium, clay, sand, with a slight erosion hazard and strong salting evident.

Observations made at the time of the inspection indicate that a large percentage of the proposed development area is terraced and located on fill, with construction rubble observed imbedded in exposed embankments. Considering the altered topography of the hospital grounds, the soil profile of the site is not considered to reflect the original landscape.

The site inspected is at an elevation of about 24 m Above Sea Level.

No water bodies are present within, or in close proximity of, the proposed development site. The Clyde River is present to the north of the area investigated (about 335 m [north]), this discharging into Batemans Bay. Both the Clyde River and Batemans Bay are identified as Key Fish Habitat (DPI 2024c), though, beyond existing inputs, the proposed development of a portion of the Batemans Bay Hospital property will not have an adverse impact on the water quality and aquatic lifeforms in either of these water bodies. As no impacts will arise, a consideration of matters that pertain to the NSW *Fisheries Management Act 1994* is not required.

Through reference to the listings provided under the EPBC Act, it is noted that no gazetted areas of critical habitat for any flora or fauna species, populations or communities occur within, or in the vicinity of, the area investigated. Similarly, none of the Areas of Outstanding Biodiversity Value listed under Part 3 of the Biodiversity Conservation Regulation 2017 occur within, or in the vicinity of, the area surveyed.

3. Methods

3.1 Definitions

For the purpose of this assessment, the following definitions apply:

- **Subject site** is the area directly affected by the proposed development of a portion of the existing Batemans Bay hospital site, this including the removal of the existing car park and landscaped areas.
- **Study area:** is the subject site and any additional areas that are likely to be affected by the proposal, either directly or indirectly (Office of Environment and Heritage [now known as NSW Environment and Heritage] 2018).
- **Study region:** is considered to include the lands that surround the subject site for a distance of 10 km (Department of Environment and Climate Change [now known as NSW Department of Climate Change, Energy, the Environment and Water (DCCEEW)] 2007).

3.2 Field investigation

The proposed hospital development area was investigated by Deryk (B.Env.Sc Hons) [Director and Senior Ecologist], and Leslie (B.Sc), Engel [Ecologist] on 21 March 2024, the investigation undertaken between 1245 and 1400 hours.

The aims of the field investigation were to:

- conduct a flora and fauna survey of all areas likely to be directly or indirectly impacted (up to 5 m beyond the limits of likely disturbance) by the development of the area investigated
- identify all of the plants, animals, vegetation communities and fauna habitats present within, and adjacent to, the development footprint
- conduct specific searches within appropriate habitats for those threatened species, vegetation communities and populations previously recorded in the study region.

To achieve the objectives of the site investigation, all portions of the proposed development site were traversed by foot. During the course of this, those species, plant community and fauna habitat types present were identified, with all species being identified in the field.

The field investigation broadly followed the 'Random Meander Method' (Cropper 1993). This method is suitable for covering large areas and for locating any rare species (and their associated vegetation communities/habitat types) that may occur within a particular site.

By the completion of the field survey a total of 2.5 person hours of active searches had been accumulated. Considering the predicted extent of the works proposed, the likely disturbance footprint, the aims of the investigation, and the types of fauna habitats and vegetation stands present, this length of time is considered more than adequate when endeavouring to achieve the objectives of the field investigation.

No limitations to achieving the aims of the ecological survey, such as reduced site visibility or access, adverse weather conditions or seasonal constraints, were encountered. For reference, the weather conditions experienced during the site investigation were cool temperatures (~21 °C), clear skies and a no winds.

Considering the objectives of the investigation, the nature (and limited size) of the fauna habitats present, the predicted disturbance footprints and the expected duration of the works, combined with the outcomes of the diurnal survey and literature review process, it was not considered that the conducting of any species-specific survey methods (such as the conducting of nocturnal studies or employment of echolocation detectors to target Yangochiroptera) were required. Within the area investigated, no habitats important for the local occurrence of any fauna species, particularly those threatened nocturnal animals previously recorded within this portion of the Eurobodalla LGA, were observed.

3.3 Database searches and literature reviews

A number of publicly available databases were consulted prior to conducting the site inspection (Table 1).

Table 1. Database searches.

Database	Date Accessed	Search Area
Department of Climate Change, Energy the Environment and Water (DCCEEW) Protected Matters Search Tool (PMST) (DCCEEW 2024)	March 2024	10-kilometre buffer
Department of Primary Industries (DPI) WeedWise Database (DPI 2024)	March 2024	Eurobodalla
Department of Planning and Environment (DPE) BioNet database (Atlas of NSW Wildlife) (DPE 2024a)	March 2024	10-kilometre buffer
Office of Environment and Heritage Threatened Species website (Office of Environment and Heritage 2024)	March 2024	N/A
NSW Government BioNet Vegetation Classification database (NSW Government 2024)	March 2024	N/A
NSW State Type Vegetation Mapping (C2.0M2.0) [State Government of NSW and NSW Department of Climate Change, Energy, the Environment and Water 2022]	March 2024	N/A

These sources were consulted to identify the diversity of ecological communities, flora and fauna species previously recorded, or potentially occurring in, the study region. The identification of those known or potentially occurring native species and communities that have been previously recorded within this portion of the Eurobodalla LGA, particularly those listed under the Schedules to the EPBC and BC Acts, thereby permits the tailoring of the field survey strategies to the detection of these plants and animals, their vegetation associations and/or necessary habitat requirements. By identifying likely species, particularly any threatened plants and animals, either the most appropriate species-specific survey techniques may be selected or a precautionary approach to their presence adopted [should their documented vegetation communities/habitat requirements be present].

The carrying out of a literature search also ensures that the results from surveys conducted during different climatic, seasonal and date periods are considered and drawn upon as required. This approach therefore increases the probability of considering the presence of, and possible impact(s) on, all known and likely native species, particularly any plants and animals that are of State and/or national conservation concern. This approach avoids issues inherent with a one off 'snap-shot' study.

Nomenclature used within this report follows that presented in the EPBC and BC Acts. It is noted that the current accepted scientific names for some of the threatened fauna species previously recorded in this locality are not consistent with the names used/provided under either the EPBC or BC Acts. In

these instances, nomenclature used within this report follows the current accepted scientific conventions.

Where applicable, any Threatened Ecological Communities (TEC) were classified and named according to the NSW Scientific Committee's Final and Preliminary Determinations (various dates).

The conservation significance of ecological communities, plants and animals recorded is made with reference to the:

- EPBC and BC Acts
- NSW State Type Vegetation Mapping (C2.0M2.0) [State Government of NSW and NSW DCCEE 2022]
- the BioNet Vegetation Classification database (NSW Government 2024) for Plant Community Types (PCTs) description.

Field guides and standard texts used during the course of this study included:

- Costermans (2009) [used to identify those plants present]
- Royal Botanic Gardens and Domain Trust Sydney [plants]
- Harden (1992, 1993, 2000 and 2002) [plants]
- Brooker and Kleinig (2006) [eucalypts]
- Simpson and Day (2019) [birds]
- Van Dyck and Strahan (2008) [mammals]
- Cogger (2014) [reptiles and frogs]
- Triggs (1996) [identification of scats, tracks and markings].

3.3.1 Vegetation mapping

Vegetation in the locality has been mapped at a broad scale in State Vegetation Type Map (State Government of NSW and DCCEE 2022). The vegetation communities are described in terms of dominant species and understorey characteristics.

These communities are also related to the NSW vegetation formation and classes taken from Keith (2004) and the NSW PCTs assigned to the vegetation type in the Vegetation Information System database maintained by the NSW Government.

With reference to the State Vegetation Type Map (State Government of NSW and DCCEE 2022), the following PCTs are mapped within the study area (Figure 2):

- PCT 4052 – South Coast Low Hills Red Gum Grassy Forest
 - This PCT is:
 - associated with Illawarra Lowlands Grassy Woodland in the Sydney Basin Bioregion which is listed as Endangered under the BC Act
 - associated with Lowland Grassy Woodland in the South East Corner Bioregion which is listed as Endangered under the BC Act
 - associated with Illawarra and south coast lowland forest and woodland ecological community which is listed as Critically Endangered under the EPBC Act.
- PCT 0 – No native vegetation.



Figure 2: Vegetation mapping that encompasses the subject site

In relation to the conservation status of PCT 4052 within the study area, it is noted that:

- Batemans Bay is not identified as being present within the Sydney Basin Bioregion
 - Illawarra Lowlands Grassy Woodland is only identified as being present within the Sydney Basin Bioregion (NSW Threatened Species Scientific Committee 2024)
- The existing hospital site is at an elevation of 24 m Above Sea Level
 - Lowlands Grassy Woodland in the Sydney Basin Bioregion occurs at higher elevations and on different soils to those present within the study area (NSW Threatened Species Scientific Committee 2024).

The plants present within the proposed hospital development site are not considered to meet either the key diagnostic characteristics, or minimum condition thresholds, required to be compliant with the Federal listing for Illawarra and south coast lowland forest and woodland ecological community (Threatened Species Scientific Committee 2016). Based on the results of the site investigation the tree canopy is not composed of Forest Red Gum (*Eucalyptus tereticornis*), nor any of the other characteristic tree species, there is no native ground cover or shrub layer and the site is not near a drainage line or periodically inundated area. In total the stands of native vegetation present are less than 0.5 ha and none support an understory of native plants (Threatened Species Scientific Committee 2016).

3.3.2 Threatened species

A review of the PMST (DCCEEW 2024a) and BioNet Atlas (NSW DCCEEW 2024a) identified 5 threatened plants and 48 threatened animals listed under the Schedules of the EPBC and BC Acts that have been previously recorded, or are considered to have habitat, within a 10 km radius of the study area (Attachment 2). For reference, those that have been recorded in proximity to the study area are identified on Figure 3.

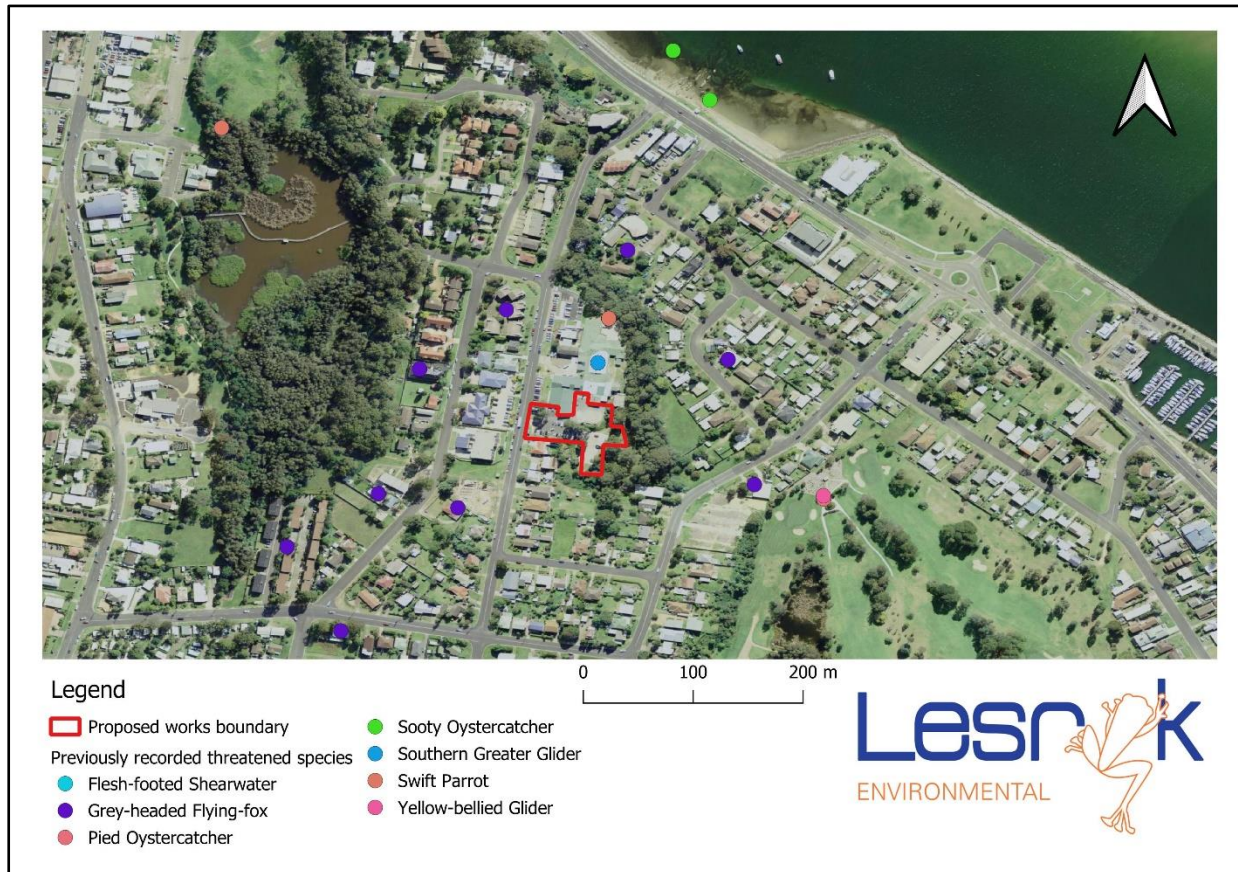


Figure 3. Previously recorded threatened flora and fauna within the study area.

In regards to several of the species identified in Figure 3, being the Yellow-bellied Glider (*Petaurus australis*) and Greater Glider (*Petauroides volans*), it is considered that each of these animals are now locally extinct in the study area due to urban expansion and habitat removal.

A number of the threatened species listed in Attachment 2 may fly over (e.g. raptors, Grey-headed Flying-fox and microbats), and potentially forage within/close to the area investigated; however, the scale of site's development, whilst removing in the order of 20 Spotted Gums (*Corymbia maculate*), is not considered to have an adverse impact on any of these species or their lifecycle requirements. No areas of habitat relied upon by these animals for any part(s) of their lifecycle requirements are to be removed or significantly disturbed, and, considering the environment of the existing hospital, no additional barriers to their movement patterns erected.

The removal of vegetation within the boundary of the disturbance footprint will not affect the presence of any of those threatened species previously recorded, or any areas of their habitat. It is considered that the works will not significantly affect these species or their habitats thereby affecting the viability of their local populations.

It is therefore considered unnecessary that any assessments that draw upon the criteria provided under either the EPBC Act (Significant Impact Guidelines) and/or Section 7.3 of the BC Act are required to be carried out in regards to the potential presence of the majority of species previously recorded within the surrounding region.

It is acknowledged that a colony of the State and Federally listed Grey-headed Flying-fox was observed within Water Garden Town Park. Reference to the National Flying-fox monitoring viewer indicates that (in 2022) there were between 10 and 15 thousand individuals in this colony (DCCEEW 2024). The BBCH development will require the removal of about 20 Spotted Gums, these available to this species as a foraging resource when in flower. Whilst a stand of plants in an urban landscape would not be significant to the foraging requirement of this species, it is considered appropriate to assess the proposal further by drawing upon the criteria provided under both the EPBC Act (Significant Impact Guidelines) and/or Section 7.3 of the BC Act (Attachment 4).

Drawing on these criteria it was concluded that the BBCH development would not have a significant effect on the Grey-headed Flying-fox, its population or habitat. As such, referral of the matter to the Federal Minister for the Environment and Water as a Controlled Action is not required, neither is the preparation of a Species Impact Statement (of Biodiversity Development Assessment Report were NSW Health to choose that option).

4. Results

4.1 Vegetation Communities

The field survey found that, with reference to the communities mapped as encompassing the proposed development site (as presented in Figure 2), the State Vegetation Type Map was inaccurate.

The site investigation identified a stand of sixteen (16) Spotted Gums within the central portion of the proposed BBCH development site. These trees are between 8 m and 15 m in height, occur as a 'line of even aged plants' that have established on fill material, with none observed to be hollow-bearing. The understorey under these trees is absent, or composed of isolated shrubs such as a 6 m high Cheese Tree (*Glochidion ferdinandi*). The ground cover supports a range of those exotic plants listed in Attachment 3.

Two isolated Spotted Gums are also present near (northern side) the entrance to the BBCH development site. These occur above a maintained lawn. Only one of these will require removal, the other being retained.

Near the entrance to (southern side) the proposed development site, on an embankment, is a line of 4 m high Swamp She-Oak (*Casuarina glauca*). These occur above a landscaped bed that supports exotic, horticulturally produced, species such as African Daisy (*Dimorphotheca ecklonis*) and Treasure Flower (*Gazania rigens*). A rank layer of the exotic grasses Kikuyu Grass (*Cenchrus clandestinus*) and Paspalum (*Paspalum dilatatum*) is also present where the embankment is not mown.

Near the entrance to one of the existing hospital buildings is a hard paved area and rock edge garden bed that supports exotic plants such as Agave (*Agave* sp).

Whilst supporting several plants characteristic of the descriptions provided for PCT 4052 – South Coast Low Hills Red Gum Grassy Forest, these being Spotted Gum, Swamp She-Oak and Cheese Tree, considering the land use history of the hospital site, and the modifications to the site's topography, the vegetation present is considered more consistent with PCT 0 as opposed to a native plant community type.

4.2 Flora species recorded during the field investigation

By the completion of the field survey a number of plants, the majority of which were either exotic species or horticulturally produced landscape plantings, were recorded (Attachment 3). It is noted that Attachment 3 is not intended to be a comprehensive list of all of the species present within the area investigated, and only represents those plants that were recorded whilst undertaking searches for:

- Native species and ecological communities of State and/or national conservation concern that are known, or expected to occur, in the locality.
- Schedule 3 Weeds of the NSW Biosecurity Regulation 2017 that would require treatment.

In relation to the native species recorded, none are listed, or currently being considered for listing, under either the EPBC or BC Acts.

Given the highly disturbed and modified nature of subject site, the area is not considered to contain habitat suitable for any of the threatened plant species previously recorded within the surrounding region.

Based on the results of the field investigation, it is considered that no listed threatened plant species would be present within the proposed development site, including within the soil seed bank.

Large-leaved Privett (*Ligustrum lucidum*) and Small-leaved Privett (*Ligustrum sinense*) were recorded in association with the line of Spotted Gums. These weeds are expected to be removed during the course of the site's development works.

4.3 Fauna

As would be expected for a highly disturbed and essentially cleared urban site, few native species were recorded. Those that were detected were the Sulphur-crested Cockatoo (*Cacatua galerita*) (heard calling off site), Rainbow Lorikeet (*Trichoglossus haematodus*) (observed flying over site), Superb Fairywren (*Malurus cyaneus*) (observed immediately east of proposed development site), Australian Magpie (*Cracticus tibicen*) (observed within development area), Welcome Swallow (*Hirundo neoxena*) (observed flying over development site), Grey Shrike-thrush (*Colluricincla harmonica*) (observed immediately east of proposed development site) and Dark-flecked Garden Sun-skink (*Lampropholis delicata*) (observed within development area), none of which are listed, or currently being considered for listing under the EPBC or BC Acts.

Within the area investigated, no bird nests (including large stick nests characteristic of the White-bellied Sea-eagle *Haliaeetus leucogaster*), white-wash accumulations, chewed eucalyptus fruits, characteristic diggings or scats/scratching were observed, and the ground cover layer supported limited to no leaf

litter or natural ground debris. There were no hollow-bearing trees, or any other habitats that maybe relied upon by those species recorded or expected to be present at other times of the year.

The native trees may provide sheltering opportunities or a foraging resource when in flower those the loss of these plants would not limit the extent of these resources in either the local or surrounding area.

Within the proposed BBCH development site, no fauna habitats were noted that would be important for the local occurrence of a native species. No habitats were observed within the proposed development site that could be occupied by locally viable populations of those threatened animals previously recorded within this portion of the Eurobodalla LGA. As such, none of these animals will be present, or reliant upon, the study area at other times of the year.

The removal of the vegetation present within the area investigated would not compromise the quality or connectivity of any important local or regional fauna movement corridors. The development of the site will not further fragment or isolate any habitat areas that are currently interconnected.

Threatened flying species that have been previously recorded in this part of the Eurobodalla LGA may traverse the site during their dispersal and foraging periods. That stated, the extent of site development would not have an impact on these species, their movement patterns or foraging/breeding requirements.

5. Conclusions

A flora and fauna investigation has been carried out to consider the development of a portion of Batemans Bay Hospital. The development of this part of the existing hospital grounds will require the clearing of a number of the existing native and exotic plants, the majority of which appear to be plantings.

Within the area investigated, no State or Federally listed threatened species or populations were recorded. Similarly, no habitats important for those threatened species previously recorded within this portion of the Eurobodalla LGA were observed within, or close to, the limits of the proposed works.

A colony of Grey-headed Flying-foxes was observed within Water Garden Town Park, this present is about 210 m west of the hospital site. Whilst the native plants present are not considered to constitute a significant foraging resource for these species, it was considered appropriate to assess the proposal with regards to the criteria provided under both the EPBC Act (Significant Impact Guidelines) and/or Section 7.3 of the BC Act (Attachment 4). Reference to these criteria concluded that the BBCH development would not have a significant effect on the Grey-headed Flying-fox, its population or habitat. As such, referral of the matter to the Federal Minister for the Environment and Water as a Controlled Action is not required, nor is the preparation of a Species Impact Statement (of Biodiversity Development Assessment Report were NSW Health to choose that option) triggered.

Whilst mapped as supporting stands of South Coast Low Hills Red Gum Grassy Forest, the field investigation confirmed that the PCT present was more akin to PCT 0 'Non-native vegetation'. Within the area surveyed, no threatened ecological communities were recorded.

In preparing this ecological statement, consideration has been given to the purposes of the BC Act. The field survey and subsequent report has considered the biodiversity of the area investigated and the State significance of the species and plant communities present or potentially occurring. This independent and scientifically based survey has assessed the risk of extinction to a species and ecological community, and considered any key threatening processes¹. The survey has determined that the development of the southern portion of the existing Batemans Bay Hospital site will not have a significant effect on species, ecological communities or their habitats. The investigation has concluded that there are no ecological constraints with the proposal proceeding as planned.

6. Recommendation

In line with the principles of ecologically sustainable development (as described in Division 5, item 193 of the Environmental Planning and Assessment Regulation 2021), the following recommendation is presented:

- 1) To off-set the loss of those native trees that are to be cleared, similar plants should be established within other portions of the hospital grounds.

¹ None of the Key Threatening Process listed under the EPBC or BC Act would be applicable to the proposed development of a portion of the existing Batemans Bay Hospital site.

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Version	Date	Prepared by	Approved for distribution
1	1 April 2024	Deryk Engel (Director) Lesryk Environmental Pty Ltd)	D.Engel 15 July 2024

Attachment 1. Photographic record of the subject site (photographs taken 21/03/24)



Character of proposed development site. Line of Spotted Gums evident. Photograph taken looking east through site.



Character of proposed development site. Line of Spotted Gums evident. Photograph taken looking east through site.



Character of proposed development site. Nature of landscaped garden present.



Character of proposed development site. Line of Spotted Gums evident. Photograph taken looking west through site.



Character of vegetation present within south-western corner of proposed development site on embankment.
Plantings overshadowed and dominated by exotic grasses.



Nature of vegetation present to east of proposed development site, these plants being retained.

Attachment 2. PMST and BioNet Atlas search results

Data from the BioNet Atlas website, which holds records from a number of custodians. The data are only indicative and cannot be considered a comprehensive inventory, and may contain errors and omissions. Species listed under the Sensitive Species Data Policy may have their locations denatured (^ rounded to 0.1°C; ^^ rounded to 0.01°C. Copyright the State of NSW through the Department of Planning, Industry and Environment. Search criteria: Public Report of all Valid Records of Threatened (listed on BC Act 2016) or Commonwealth listed Entities in selected area [North-35.62 West: 150.09 East: 150.29 South: -35.80] returned a total of 2,051 records of 66 species. Report generated on 13/03/2024

	Class	Family	Scientific Name	Common Name	NSW status	Comm. status	Records in locality
Plants	Flora	Rutaceae	<i>Correa baeuerlenii</i>	Chef's Cap Correa	V	V	3
	Flora	Rubiaceae	<i>Galium australe</i>	Tangled Bedstraw	E1		1
	Flora	Polygonaceae	<i>Persicaria elatior</i>	Tall Knotweed	V	V	1
	Flora	Rhamnaceae	<i>Pomaderris bodalla</i>	Bodalla Pomaderris	V		1
	Flora	Myrtaceae	<i>Rhodamnia rubescens</i>	Scrub Turpentine	E4A	CE	7
Amphibia		Hylidae	<i>Litoria aurea</i>	Green and Golden Bell Frog	E1,P	V	1
Animals	Aves	Columbidae	<i>Ptilinopus superbus</i>	Superb Fruit-Dove	V,P		1
	Aves	Apodidae	<i>Hirundapus caudacutus</i>	White-throated Needletail	P	V,C,J,K	9
	Aves	Ardeidae	<i>Ixobrychus flavicollis</i>	Black Bittern	V,P		2
	Aves	Accipitridae	<i>Haliaeetus leucogaster</i>	White-bellied Sea-Eagle	V,P		23
	Aves	Accipitridae	<i>Hieraaetus morphnoides</i>	Little Eagle	V,P		1
	Aves	Accipitridae	^^ <i>Pandion cristatus</i>	Eastern Osprey	V,P,3		9
	Aves	Haematopodidae	<i>Haematopus longirostris</i>	Pied Oystercatcher	E1,P		51
	Aves	Scolopacidae	<i>Numenius madagascariensis</i>	Eastern Curlew	P	CE,C,J,K	7
	Aves	Psittacidae	<i>Glossopsitta pusilla</i>	Little Lorikeet	V,P		44
	Aves	Psittacidae	<i>Lathamus discolor</i>	Swift Parrot	E1,P	CE	21
	Aves	Strigidae	^^ <i>Ninox strenua</i>	Powerful Owl	V,P,3		31
	Aves	Neosittidae	<i>Daphoenositta chrysoptera</i>	Varied Sittella	V,P		13
	Aves	Artamidae	<i>Artamus cyanopterus cyanopterus</i>	Dusky Woodswallow	V,P		2
	Aves	Burhinidae	<i>Esacus magnirostris</i>	Beach Stone-curlew	E4A,P		1
	Aves	Climacteridae	<i>Climacteris picumnus victoriae</i>	Brown Treecreeper (eastern subspecies)	V, P	V	2
	Aves	Charadriidae	<i>Thinornis cucullatus cucullatus</i>	Eastern Hooded Dotterel	E4A	V	8
	Aves	Cacatuidae	<i>Callocephalon fimbriatum</i>	Gang-gang Cockatoo	V,P,3	E	47
	Aves	Tytonidae	<i>Tyto novaehollandiae</i>	Masked Owl	V,P,3		26
	Aves	Pachycephalidae	<i>Pachycephala olivacea</i>	Olive Whistler	V,P		2
Aves	Dasyornithidae	<i>Pycnoptilus floccosus</i>	Pilotbird	p	V	1	

Aves	Tytonidae	<i>Tyto tenebricosa</i>	Sooty Owl	V,P,3		26
Aves	Haematopodidae	<i>Haematopus fuliginosus</i>	Sooty Oystercatcher	V,P		38
Aves	Cacatuidae	<i>Calyptorhynchus lathami lathami</i>	South-eastern Glossy Black-Cockatoo	V,P,2	V	143
Aves	Accipitridae	<i>Lophoictinia isura</i>	Square-tailed Kite	V,P,3		18
Mammalia	Phascolarctidae	<i>Phascolarctos cinereus</i>	Koala	E1,P	E	1
Mammalia	Pseudocheiridae	<i>Petauroides volans</i>	Southern Greater Glider	E1,P	E	98
Mammalia	Pteropodidae	<i>Pteropus poliocephalus</i>	Grey-headed Flying-fox	V,P	V	181
Mammalia	Emballonuridae	<i>Saccolaimus flaviventris</i>	Yellow-bellied Sheath-tail-bat	V,P		9
Mammalia	Molossidae	<i>Micronomus norfolkensis</i>	Eastern Coastal Free-tailed Bat	V,P		22
Mammalia	Vespertilionidae	<i>Chalinolobus dwyeri</i>	Large-eared Pied Bat	V,P	V	3
Mammalia	Vespertilionidae	<i>Falsistrellus tasmaniensis</i>	Eastern False Pipistrelle	V,P		4
Mammalia	Vespertilionidae	<i>Myotis macropus</i>	Southern Myotis	V,P		11
Mammalia	Vespertilionidae	<i>Scoteanax rueppellii</i>	Greater Broad-nosed Bat	V,P		7
Mammalia	Miniopteridae	<i>Miniopterus orianae oceanensis</i>	Large Bent-winged Bat	V,P		11
Mammalia	Dasyuridae	<i>Phascogale tapoatafa</i>	Brush-tailed Phascogale	V,P		2
Mammalia	Peramelidae	<i>Isoodon obesulus obesulus</i>	Southern Brown Bandicoot (eastern)	E1,P	E	1
Mammalia	Dasyuridae	<i>Dasyurus maculatus</i>	Spotted-tailed Quoll	V,P	E	6
Mammalia	Petauridae	<i>Petaurus norfolcensis</i>	Squirrel Glider	V,P		12
Mammalia	Petauridae	<i>Petaurus australis</i>	Yellow-bellied Glider	V,P	V	303

Attachment 3. Flora species recorded

Key

Exotic species - *

FAMILY	Scientific Name	Common Name
FILICOPSIDA		
Adiantaceae	<i>Adiantum aethiopicum</i>	Common Maidenhair Fern
MAGNOLIOPSIDA - DICOTYLEDONS		
Apocynaceae	<i>Araujia hortorum</i> *	Moth Plant
Araucariaceae	<i>Araucaria heterophylla</i> *	Norfolk Island Pine
Asteraceae	<i>Bidens pilosa</i> *	Farmers Friend
	<i>Cirsium vulgare</i> *	Scotch Thistle
	<i>Conyza bonariensis</i> *	Fleabane
	<i>Dimorphotheca ecklonis</i> *	African Daisy
	<i>Gazania rigens</i> *	Treasure Flower
	<i>Taraxacum officinale</i> *	Dandelion
Caprifoliaceae	<i>Lonicera japonica</i> *	Japanese Honeysuckle
Casuarinaceae	<i>Casuarina glauca</i>	Swamp She-Oak
Euphorbiaceae	<i>Glochidion ferdinandi</i> var. <i>ferdinandi</i>	Cheese Tree
Fabaceae: Faboideae	<i>Robinia pseudoacacia</i> *	Black Locust
Geraniaceae	<i>Geranium</i> sp. *	Geranium
Lamiaceae	<i>Lavandula</i> sp.	Lavender
Myrtaceae	<i>Corymbia maculate</i>	Spotted Gum
	<i>Eucalyptus pilularis</i>	Blackbutt
Oleaceae	<i>Ligustrum lucidum</i> *	Large-leaved Privett
	<i>Ligustrum sinense</i> *	Small-leaved Privett
Pittosporaceae	<i>Pittosporum undulatum</i>	Sweet Pittosporum
Polygalaceae	<i>Polygala virgata</i> *	Purple Broom
Polygonaceae	<i>Acetosa sagittata</i> *	Turkey Rhubarb
Violaceae	<i>Viola hederacea</i>	Ivy-leaved Violet
MAGNOLIOPSIDA - MONOCOTYLEDONS		
Asparagaceae	<i>Agave</i> sp.*	Agave
Poaceae	<i>Arundo donax</i> *	Giant Reed
	<i>Cenchrus clandestinus</i> *	Kikuyu Grass
	<i>Paspalum dilatatum</i> *	Paspalum
	<i>Poa annua</i> *	Winter Grassa

1. State - Biodiversity Conservation Act 2016

No State listed threatened species or ecological communities were recorded within, or in proximity to, the area investigated and none were considered to occur as locally viable populations at other times of the year. A colony of Grey-headed Flying-fox, which is listed as Vulnerable under this Act, were noted in proximity (210 m west of) the subject site. There is the potential that, when the Spotted Gums that are identified for removal are in flower, this species could forage within the subject site.

The potential impacts associated with the proposed removal of these plants as part of the hospital development works on the Grey-headed Flying-fox is considered with reference to the assessment criteria provided under Section 7.3 of the BC Act. These criteria are designed to determine whether the proposal is likely to significantly effect on this threatened species, or its habitats, and consequently whether a Species Impact Statement [or Biodiversity Development Assessment Report] would be required.

(a) in the case of a threatened species, whether the proposed development or activity is likely to have an adverse effect on the life cycle of the species such that a viable local population of the species is likely to be placed at risk of extinction

The removal of the Spotted Gums and other native trees present within the BBCH development site will not affect or cause a decrease in the size of the Grey-headed Flying-fox camp that is present in Water Garden Town Park. The works proposed will not affect any areas of habitat important to the local occurrence of this population.

No evidence to suggest the area inspected is used as a permanent or transient camp by the Grey-headed Flying-fox was obtained.

The works proposed will not have an adverse effect on this species such that its local population is placed at risk of extinction.

(b) in the case of an endangered ecological community or critically endangered ecological community, whether the proposed development or activity:

- (i) is likely to have an adverse effect on the extent of the ecological community such that its local occurrence is likely to be placed at risk of extinction, or*
- (ii) is likely to substantially and adversely modify the composition of the ecological community such that its local occurrence is likely to be placed at risk of extinction*

Not applicable to threatened species.

(c) in relation to the habitat of a threatened species, population or ecological community:

- (i) the extent to which habitat is likely to be removed or modified as a result of the proposed development or activity, and*

The development of a portion of the Batemans Bay Hospital site will affect an area that is about 3,560 m². Within this, the works will clear patches of native vegetation these being in the order of 30 m by 3 m and 15 m by 2 m in size. Isolated native trees will also be cleared.

(ii) whether an area of habitat is likely to become fragmented or isolated from other areas of habitat as a result of the proposed development or activity,

While the proposed work would result in the removal of up to 20 Spotted Gums and a number of other native plants, it would not erect any permanent barriers that would fragment or isolate areas of Grey-headed Flying-fox habitat. Opportunities for the movement of this species within the study area would be retained, thereby meeting the Grey-headed Flying-fox's dispersal and movement needs.

(iii) the importance of the habitat to be removed, modified, fragmented or isolated to the long-term survival of the species or ecological community in the locality

The habitats within the proposed BBCH development site would not be important to the long-term survival of the Grey-headed Flying-fox.

(d) whether the proposed development or activity is likely to have an adverse effect on any declared area of outstanding biodiversity value (either directly or indirectly)

No declared AOBV would be directly or indirectly affected by the proposal. The subject site is not listed as a declared AOBV under Part 3 of the NSW Biodiversity Conservation Regulation 2017.

(e) whether the proposed development or activity is part of a key threatening process or is likely to result in the impact of a key threatening process

Currently 35 key threatening processes for mainland NSW are listed under Schedule 4 of the BC Act. Of these, the 'clearing of native vegetation' would be applicable to the presence of the Grey-headed Flying-fox. The removal of up to 20 Spotted Gums and a number of other native plants is not considered a significant loss in comparison with the extent of similar resources within the study area and surrounding region. As such, it is not considered that the proposal would significantly contribute to this key threatening process such that it would adversely affect the presence or long-term survival of the Grey-headed Flying-fox in this locality.

Expected impact on the Grey-headed Flying-fox

The proposed BBCH development is not considered to have a significant impact on the local status of the Grey-headed Flying-fox. The work would not remove any habitat critical to the Grey-headed Flying-fox roosting or breeding needs, and no major foraging areas would be significantly affected. Given the extent of similar resources within both the study area and surrounding locality, the loss of some native vegetation would not have a significant impact on the Grey-headed Flying-fox or its habitat. The work would not present a barrier to the dispersal or movement patterns of this species. Therefore, it is not considered that the proposal would have a significant impact on this species or its habitat; as such, the preparation of a Species Impact Statement that further considers the impact of the proposal on the Grey-headed Flying-fox is not required.

2. Commonwealth – *Environment Protection Biodiversity Conservation Act 1999*

No Nationally listed threatened species or ecological communities were recorded within, or in proximity to, the area investigated and none were considered to occur as locally viable populations at other times of the year. A colony of Grey-headed Flying-fox, which is listed as Vulnerable under this Act, were noted in proximity (210 m west of) the subject site. There is the potential that, when the Spotted Gums that are identified for removal are in flower, this species could forage within the subject site.

The Significant Impact Guidelines prepared under the EPBC Act (DE 2013) are used to determine whether the action has, will have, or is likely to have a significant impact on this MNES and, as such, whether the proposal is a controlled action requiring referral of the matter to the Federal Minister for the Environment.

An action is likely to have a significant impact on a vulnerable species if there is a real chance or possibility that it will:

- *lead to a long-term decrease in the size of an important population of a species,*

The removal of the Spotted Gums and other native trees within the BBCH development site will not affect or cause a decrease in the size of the Grey-headed Flying-fox camp that is present in Water Garden Town Park. The works proposed will not affect any areas of habitat important to the local occurrence of this population.

No evidence to suggest the area inspected is used as a permanent or transient camp by the Grey-headed Flying-fox was obtained.

- *reduce the area of occupancy of an important population,*

The removal of the Spotted Gums and other native trees within the BBCH development site will not reduce the area of occupancy of an important population of the Grey-headed Flying-fox.

- *fragment an existing important population into two or more populations,*

Considering the Grey-headed Flying-foxes ability to fly and negotiate open spaces and urban infrastructure, the removal of the Spotted Gums and other native trees within the BBCH development site will not fragment an existing population into two or more populations.

- *adversely affect habitat critical to the survival of a species,*

The Spotted Gums and other native trees that are to be removed to permit the BBCH development site are not considered critical to the survival of the Grey-headed Flying-fox.

- *disrupt the breeding cycle of an important population,*

The removal of the Spotted Gums and other native trees within the BBCH development site will not disrupt the breeding cycle of an important population of this species.

- *modify, destroy, remove or isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline,*

The proposed work is not considered to modify, destroy, remove, isolate or decrease the availability or quality of habitat to an extent that the potentially occurring Grey-headed Flying-fox would decline.

- *result in invasive species that are harmful to a vulnerable species becoming established in the vulnerable species' habitat,*

Beyond those that currently occur, the proposal is not expected to result in the establishment of any further invasive species that may be harmful to the presence of the Grey-headed Flying-fox or its habitat.

- *introduce disease that may cause the species to decline,*

The proposal is unlikely to introduce diseases that may cause the Grey-headed Flying-fox to decline.

- *or interfere substantially with the recovery of the species*

A Draft National Recovery Plan for the Grey-headed Flying-fox has been prepared (DEE 2017). The overall objectives of this recovery plan are:

- to improve the Grey-headed Flying-foxes national population trend by reducing the impact of threatening processes on Grey-headed Flying-foxes through habitat identification, protection, restoration and monitoring
- to assist communities and Grey-headed Flying-foxes to coexist through better education, stakeholder engagement, research, policy and continued support to fruit growers.

The scope of proposed work would not affect any known roosting camps. The scope of work proposed would not be inconsistent with the objectives specified in this species' recovery plan, specifically the following two objectives of the plan:

- **Objective 1.** Identify, protect and enhance native foraging habitat critical to the survival of the Grey-headed Flying-fox.

No foraging habitat critical to the survival of the Grey-headed Flying-fox is present within the area proposed to be disturbed.

- **Objective 2.** Identify, protect and enhance roosting habitat of Grey-headed Flying-fox camps.

No Grey-headed Flying-fox roosting sites are present within, or in close proximity to, the area proposed to be disturbed.

Conclusion

The proposal is not considered to have a significant impact on the Grey-headed Flying-fox, its population or its habitat. As such, it is not considered necessary that the matter be referred to the Federal Minister for the Environment and Water for further consideration or approval.