COJ - Hillarys — Kallaroo Coastal Foreshore Reserve Management Plan — 07 Sept 2016

Lot 501 is located in the southern portion of the Kallaroo Foreshore Reserve, at Pinnaroo Point, on the Hillarys Foreshore, in Hillarys, just south of Whitfords Avenue and Northshore Drive roundabout.

WAPC 'Bush Forever' Strategy 2000

The Strategy identifies regionally significant bushland in the Perth Metropolitan Region to be retained, managed and protected forever. The Hillarys – Kallaroo Foreshore Reserve forms part of Bush Forever Site 325, which extends from Burns Beach south to Hillarys (City of Joondalup - Hillarys-Kallaroo Coastal Foreshore Reserve Management Plan 2016 [FMP]; https://www.joondalup.wa.gov.au/wp-content/uploads/2017/12/Hillarys-Kallaroo-Coastal-Foreshore-Management-Plan.pdf)

The City of Joondalup is committed to conserving and enhancing the City's natural assets to ensure the long-term protection of the environment for future generations (Page 8, FMP)

The majority of the native vegetation at Hillarys – Kallaroo Foreshore Reserve is in Very Good – Excellent condition (Eco Logical Australia, 2016), and is part of the regional ecological linkage chain that extends along the coast from Burns Beach in the north to North Beach in the south. Lot 501 is located very close to the thin strip of unique vegetation complex comprising only 10.7% of all the vegetation of the Hillarys-Kallaroo Foreshore Reserve. In 2010, according to WALGA, only 12.55% of the pre-European vegetation still existed in the City of Joondalup. The surrounding areas to embedded Lot 501 are therefore a rare commodity for our local fauna. The range and diversity of species recorded incudes endangered and vulnerable and migratory and priority species indicating a metastable ecological community within the reserve.

Key Fauna Occurring in Hillarys - Kallaroo Foreshore Reserve

Vs Environment Protection and Biodiversity Conservation Act 1999

- Australian Painted Snipe (Rostratula australis) Endangered
- Carnaby's Cockatoo (Calyptorhynchus latirostris) Endangered
- Cattle Egret (Ardea ibis coromanda) Migratory Species
- Chuditch (Dasyurus geoffroii) Vulnerable
- Eastern Great Egret (Ardea modesta) Migratory Species
- Fork-tailed Swift (Apus pacificus) Migratory Species
- Grey Wagtail (Motacilla cinerea) Migratory Species
- Osprey (Pandion haliaetus) Migratory Species
- Rainbow Bee-eater (Merops ornatus) Migratory Species
- Western Ringtail Possum (Pseudocheirus occidentalis) Vulnerable

Vs Wildlife Conservation Act 1950

- Black-striped Snake (Neelaps calonotos) (snake) Priority 3
- Quenda (Isoodon obesulus fusciventer) (mammal) Priority 5
- Graceful Sun Moth (Synemon gratiosa) (insect) Priority 4
- Peregrine Falcon (Falco peregrinus) (bird) Specially Protected Fauna.

Vs International Union for Conservation of Nature Red List of Threatened Species as

• Carnaby's Cockatoo (Calyptorhynchus latirostris)

Priority vegetation communities identified in the City of Joondalup Hillary's Kallaroo Foreshore Management Plan 2016

Vegetation community 1 (ArAcTOS): Acacia rostellifera and Acacia cyclops tall open shrubland over Spyridium globulosum and Olearia axillaris shrubland to open shrubland over Melaleuca systena, Rhagodia baccata subsp. baccata and Acanthocarpus preissii low shrubland over Lepidosperma gladiatum open sedgeland. It is common for Acacia rostellifera to form dense thickets in this vegetation community. Other associated species include Acacia lasiocarpa var. lasiocarpa, Clematis pubescens, Hardenbergia comptoniana, Leucopogon parviflorus, Poa poiformis, Scaevola crassifolia and Templetonia retusa. Spinifex hirsutus is commonly found on the dunes adjacent to the beach

Finalised priority assessments list 2021

(https://www.dcceew.gov.au/environment/biodiversity/threatened/assessments/fpal)

Honey myrtle shrublands on limestone ridges of the Swan Coastal Plain

According to Eco logical Australia two Floristic Communities Types (FCTs) were recorded on site during 2015 site assessments, including

2 listed Priority Ecological Communities FCT 29a and FCT 29b.

Adding environmental threats adds the potential to degrade natural areas and to reduce biodiversity values. Weeds, plant disease, fire, non-native fauna species, disturbance to foraging wildlife from inadequate buffers to areas of human use impacts, access and infrastructure, are all threats to the local environment. Pathogenic fungi including water-borne Phytophthora cinnamomi. and Phytophthora multivora and soil-borne Armillaria luteobubalina can be carried by human footwear and need to be excluded from coastal conservation areas as they decimate ecosystems.

Further, human factors can exacerbate the rate and extent of coastal erosion via activities such as people and pets walking on the dunes instead of keeping to nominated pathways, or the installation of infrastructure in dune areas, fragmentation of bushland by Dual Use Paths and makeshift tracks/paths and car parks, or by the failure to adequately maintain bushland fencing of coastal conservation areas including that preventing human access from the beach to foredunes.

Robust pathogen protection plans and excellent bushland fencing are fundamental requirements for the protection of our coastal ecosystem.

Coastal commercial developments endanger our coastal ecosystem by delivering all hour pollution (light and litter and noise) to the heart of set aside sanctuaries. These developments then accelerate coastal erosion through their poor (and commonly cheap), token-restricted design. Once built and operating, inadequate enforcement of the inadequate restrictions results in a legacy act of vandalism setting low quality precedents and spiralling ecosystem degradation.

World Environment Day, June 2021

Ecosystems support all life on Earth. In early June 2021, the UN called on all of us to "prevent, halt and reverse the degradation of ecosystems worldwide," and started the UN's Decade on Ecosystem Restoration. By June 2031, the UN aims to prevent, halt and reverse the degradation of ecosystems on every continent and in every ocean. In so doing it can help end poverty, combat climate disruption and prevent our mass extinction. Every one of us was asked to play our part.

The Bush Forever 325 coastal ecosystem deserves our protection and in accordance with the requests of the UN we must prevent, halt and reverse its degradation, Lot 501 is not the place for any development that does otherwise.

Western Australia's coastal regions are facing a growing number of complex challenges, for example from growing populations, expanding developments, and a changing climate. The Foreshore here is at higher risk of coastal erosion. The shoreline at Pinnaroo Point has receded considerably since 2020. The vegetation line within 500 m either side of Pinnaroo Point experienced changes of up to 8 m between August 2020 and October 2021. This is notably more than the recession experienced in recent years. At chainage 4800 m, 100 m south of Pinnaroo Point, the shoreline has receded 35 m since 1987 Reference A development here would prohibit retreat and revegetation causing further loss of vegetation and ecological function and loss of foreshore reserve for general beach side recreation. ref Coj Coastal monitoring Program report 2021/22

State Planning Policy 6.1 principles

The objectives of the policy are to:

- conserve and enhance the special benefits arising from landscape elements that form the fabric of the region;
- respect and conserve its outstanding natural and cultural heritage and environmental values;

SPP 2.6 State Coastal Planning Policy

The objectives of this policy are to:

- ensure that the location of coastal facilities takes into account coastal processes, landform stability, coastal hazards, climate change and biophysical criteria
- ensure the identification of appropriate areas for the sustainable use of the coast for housing, tourism, recreation, ocean access, maritime industry, commercial and other activities
- provide for public coastal foreshore reserves and access to them on the coast
- protect, conserve and enhance coastal zone values, particularly in areas of landscape, biodiversity and ecosystem integrity, indigenous and cultural significance.

Planning in Bush Fire SPP Prone Areas SPP 3.7 [https://www.wa.gov.au/government/document-collections/state-planning-policy-37-planning-bushfire-prone-areas]

It does not appear that a sufficient setback is planned in this high Bush Fire Risk. Has the design of the tavern budgeted for higher building costs associated with building standards required for a high bushfire risk area?

Are there two exits apart for a bush fire incidence?

Developments should consider the increased risk of bushfires (Change in fire regimes) from human population density in settled areas which was advised to the Minister for the Environment from the Threatened Species Scientific Committee for key threatening processes to biodiversity 2022. https://www.dcceew.gov.au/environment/biodiversity/threatened/key-threatening-processes/fire-regimes-that-cause-declines-in-biodiversity

Social surroundings

The change of social surroundings of this peaceful natural setting will be a loss of areas for quiet enjoyment. Unbuilt landscapes in an urban setting are highly sought after for spiritual well being and is particularly important for Indigenous people's connection to country. This is unacceptable. This region is already over-cleared.

Adding environmental threats adds the potential to degrade natural areas and to reduce biodiversity values. Weeds, plant disease, fire, non-native fauna species, human impacts, access and infrastructure, are all threats to the local environment. Pathogenic fungi including water-borne Phytophthora cinnamomi.

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