ECO LOGICAL AUSTRALIA PTY LTD
ABN 87 096 512 088
www.ecoaus.com.au

Peter and Linda Billington
Port Stephens Hexham Junction Pty Ltd
610 Parramatta Road

Croydon NSW 2132

17SUTENV- 6912

12 April 2017

Dear Peter and Linda,

Preliminary Biobank Feasibility Assessment – 1733 and 1839 Pacific Highway - Tomago

Thank you for the opportunity to provide some initial advice on the biobanking potential of your property at Hexham and an indication of the resulting value of the biodiversity credits that the property could generate.

Eco Logical Australia are experts in the biobanking field having assessed and had registered over 20 Biobank sites on behalf of landholders since 2009, are currently completing a further 25 formal assessments and have delivered the biobanking accredited assessor training course to over 300 consultants in NSW under licence to the Office of Environment and Heritage (OEH) as a Registered Training Organisation since 2009.

Our appraisal of your property is based on an initial one-day site inspection by an accredited assessor and experienced bush regenerator to confirm the Plant Community Types (PCTs) present, their condition and relative areas and asses the management issues. We have also undertaken a review of the current demand for biodiversity credits in the region and current sales activity to inform our opinion of the 'value' of these credits.

Our site inspection has confirmed the presence of five PCTs on site, all but one of which are listed endangered ecological communities (EECs) (**Figure 1**). The site is generally in good to very good ecological condition with only scattered weeds, occasional thickets of lantana and blackberry and rubbish from the adjacent highway and river.

Based on the condition of the vegetation, the fact that the property forms part of a SEPP14 wetland, we estimate that the property, if registered as a Biobank site under BBAM 2014, would generate in the order of 830-840 '*ecosystem credits*' based on 11 credits generated per hectare (a SEPP14 wetland is a strategic location, getting a landscape score of 18 and generates additional credits as a result) (**Table 1**). Please note, the number of credits generated under the new Biodiversity Assessment Methodology (BAM) is difficult to predict at the moment.

We have not undertaken a detailed survey of threatened flora and fauna yet, however, based on the habitat types present, their condition and nearby records (included in the NSW Wildlife Atlas), we consider that the '*species credit*' generating species Green and Golden Bell Frog, Eastern Chestnut Mouse, Osprey breeding sites, Black Bittern, Maundia triglochinoides and Asperula asthenes are all high likelihood species, and if recorded by subsequent surveys, would generate additional species credits.

With the proposed new *Biodiversity Conservation Act* 2016 becoming operational in late 2017, and the more mandatory requirement to provide offsets, we expect that demand for credits will increase, and if supply is low, the credit prices to also increase. We also note that the proposed Conservation Fund, is a potential buyer of credits. Similarly, the F3 to Raymond Terrace proposed upgrade project is also a likely purchaser of credits.

Finally, we have completed a Biobanking EOI form that you may wish to submit to OEH who will then place it on the Biobanking EOI register. This is an obligation free first step to 'test' the market for current demand and interest in purchasing credits form your property and will be viewed by proponents and consultants seeking credits for their clients.

Yours sincerely,

Robert Humphries

Robert Humphries

Manager, BioBanking and Offset Programs

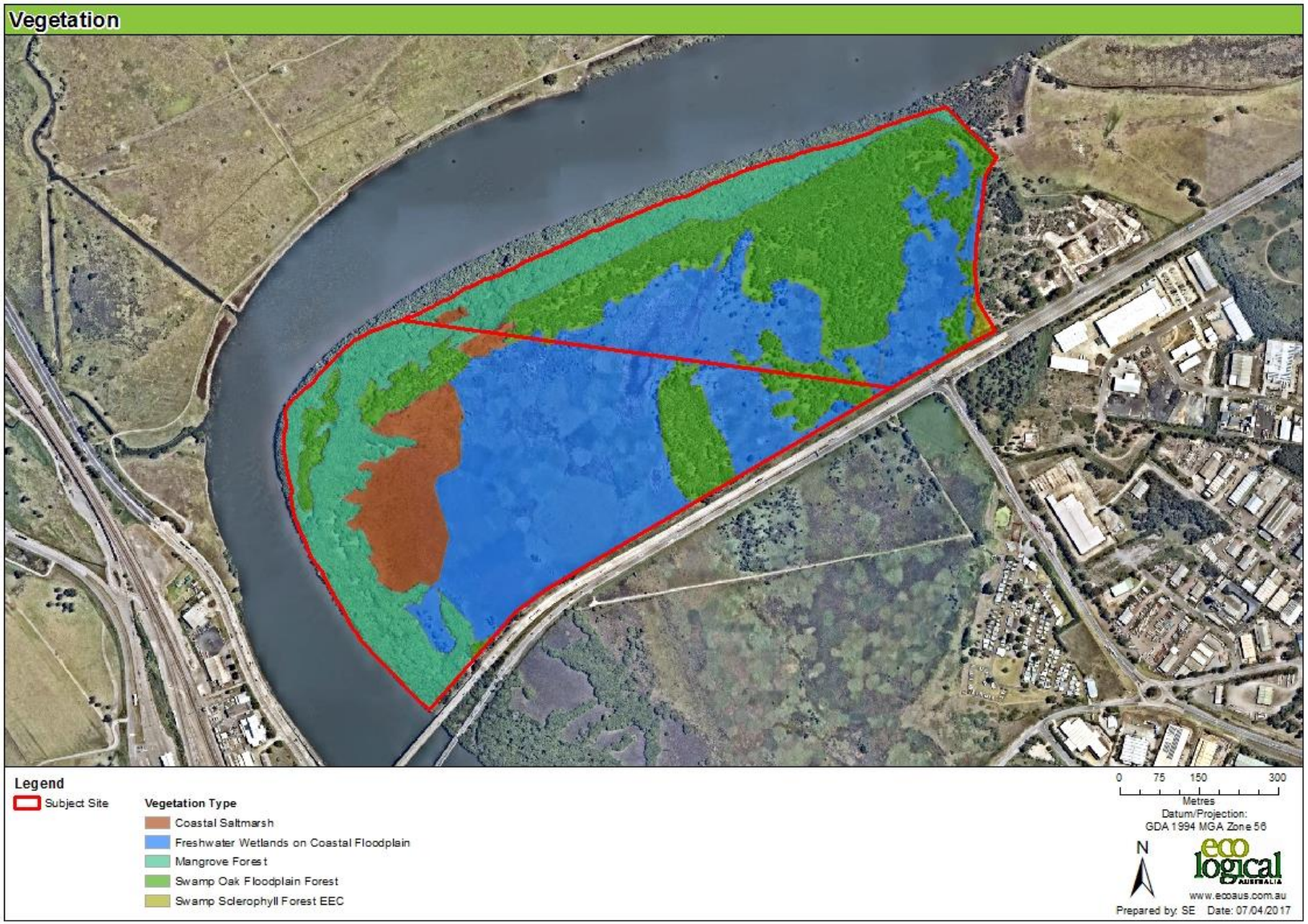

Figure 1: Validated Plant Community Types at 1733 and 1839 Pacific Highway, Tomago

Table 1: Area of each Vegetation type, estimate of number of credits

Vegetation Type/EEC	Plant Vegetation Type (PCT)	Lot 1	Lot 102	Total Area (ha)	No. of Credits per/ha	No Credits		
Swamp Oak Floodplain Forest of the New South Wales North Coast, Sydney Basin and South East Corner Bioregion	PCT 1234 - Swamp Oak swamp forest fringing estuaries, Sydney Basin Bioregion and South East Corner Bioregion	6.9	15.77	22.67	11	249		
Freshwater Wetlands on Coastal Floodplains of the New South Wales North Coast, Sydney Basin and South East Corner Bioregions	PCT 1071 - Phragmites australis and Typha orientalis coastal freshwater wetlands of the Sydney Basin Bioregion	21.55	10.98	32.53	11	358		
Coastal Saltmarsh in the New South Wales North Coast, Sydney Basin and South East Corner Bioregions	PCT 1126 - Saltmarsh in estuaries of the Sydney Basin Bioregion and South East Corner Bioregion	5.53	0.19	5.72	11	63		
Swamp sclerophyll forest on coastal floodplains of the NSW North Coast| Sydney Basin and South East Corner bioregions	PCT 1725 - Swamp Mahogany - Broad-leaved Paperbark - Swamp Water Fern - Plume Rush swamp forest on coastal lowlands of the Central Coast and Lower North Coast	0	0.23	0.23	11	3		
Grey Mangrove low closed forest	PCT 1747 - Mangrove forest in estuaries of the Sydney Basin Bioregion and South East Corner Bioregion	9.57	5.42	14.99	11	165		
Total		**43.55**	**32.59**	**76.14**		**838**		