Supplementary Material

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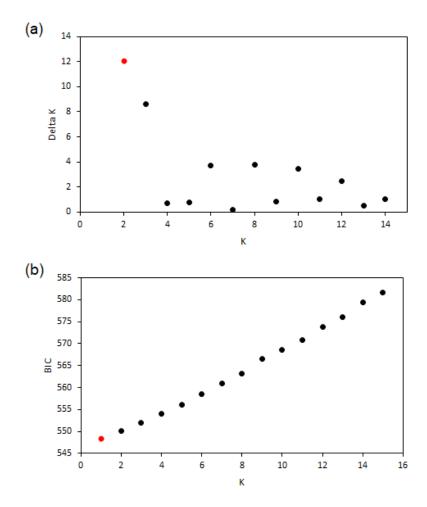
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Appendix 1. Complete breakdown of the 62 PCTs in Lake Macquarie and how they were assigned cell values for the least cost path analysis.

PCT Name	Value
Cladium procerum coastal freshwater wetland	100
Common Reed on the margins of estuaries and brackish lagoons along the New South	
Wales coastline	100
Grey Mangrove low closed forest	100
Jointed Twig-rush sedgeland	100
Kangaroo Grass - Coastal Rosemary grassland on coastal headlands	100
Lepironia articulata sedgeland	100
Red-fruit Saw-sedge - Baumea - Coral Fern shrubby sedgeland on the margins of freshwater	
coastal lagoons along the New South Wales coastline	100
Saltmarsh in estuaries of the Sydney Basin Bioregion and South East Corner Bioregion	100
Spinifex beach strand grassland Sydney Basin Bioregion and South East Corner Bioregion	100
Typha rushland	100
Water Couch - Tall Spike Rush freshwater wetland of the Central Coast and lower Hunter	100
Woolly Water lily - Sand Couch coastal freshwater wetland	100
Tuckeroo - Lilly Pilly - Coast Banksia littoral rainforest	75
Jackwood - Lilly Pilly - Sassafras riparian warm temperate rainforest of the Central Coast	75
Leptospermum liversidgei-Callistemon citrinus-Xanthorrhoea fulva wet heath on coastal	
sands of lower North Coast	75
Lilly Pilly - Grey Myrtle - Rasp Fern warm temperate rainforest on ranges of the Central and	1.0
lower North Coast	75
Needlebush - banksia wet heath on sandstone plateaux of the Sydney Basin Bioregion	75
Bangalay - Old-man Banksia open forest on coastal sands Sydney Basin Bioregion and	13
South East Corner Bioregion	20
Dwarf Casuarina - Prickly-leaved Paperbark - Hairpin Banksia Coastal Heath of the Central	20
Coast and lower North Coast	20
Paperbark swamp forest of the coastal lowlands of the NSW North Coast Bioregion and	20
Sydney Basin Bioregion	20
Paperbarks - Woollybutt swamp forest on coastal lowlands of the Central Coast	20
Swamp paperbark - Baumea juncea swamp shrubland on coastal lowlands of the Central	20
Coast and Lower North Coast	20
Wallum Banksia-Monotoca scoparia heath on coastal sands of the Central Coast and lower	20
North Coast	20
	20
Fern-leaf Banksia - Prickly-leaved Paperbark-Tantoon - Leptocarpus tenax wet heath on coastal sands of the Central Coast and lower North Coast	10
Melaleuca biconvexa - Swamp Mahogany - Cabbage Palm swamp forest of the Central	10
	10
Coast Prinkly Jacyard Department. Form Jacyard Benkeig beeth an excepted headlands of Control Coast.	10
Prickly-leaved Paperbark - Fern-leaved Banksia heath on coastal headlands of Central Coast	10
Prickly-leaved Paperbark forest on coastal lowlands of the Central Coast and Lower North	10
Coast	10
Smooth-barked Apple - Cabbage Palm - Broad-leaved Mahogany woodland on Wallarah	40
Peninsular	10
Swamp Mahogany - Broad-leaved Paperbark - Swamp Water Fern - Plume Rush swamp	40
forest on coastal lowlands of the Central Coast and Lower North Coast	10
Swamp Mahogany - Flax-leaved Paperbark swamp forest on coastal lowlands of the Central	1.5
Coast	10
Swamp Mahogany swamp sclerophyll forest on coastal lowlands of the Sydney Basin	
Bioregion and South East Corner Bioregion	10

Swamp Oak - Sea Rush - Baumea juncea swamp forest on coastal lowlands of the Central	
Coast and Lower North Coast	10
Banksia oblongifolia-Hakea teretifolia/Leptocarpus tenax-Lepyrodia scariosa wet heath on	10
sandstone ranges of the Central Coast	1
Blackbutt - Narrow-leaved White Mahogany shrubby tall open forest of coastal ranges	<u> </u>
Northern Sydney Basin Bioregion	1
Blackbutt - Turpentine - Sydney Blue Gum mesic tall open forest on ranges of the Central	
Coast	1
Broad-leaved Paperbark - Swamp Oak - Saw Sedge swamp forest on coastal lowlands of the	
Central Coast and Lower North Coast	1
Cabbage Gum - Forest Red Gum - Flax-leaved Paperbark Floodplain Forest of the Central	
Coast	1
Coast Banksia - Coast Wattle dune scrub of the Sydney Basin Bioregion and South East	
Corner Bioregion	1
Coast Tea Tree - Coast Banksia - Ficinia nodosa low open shrubland on coastal foredunes	1
Forest Red Gum grassy open forest on floodplains of the lower Hunter	1
Grey Gum - Smooth-barked Apple - Blue-leaved Stringybark shrub - grass open forest on	
coastal ranges of the Sydney Basin	1
Grey Ironbark - Broad-leaved Mahogany - Forest Red Gum shrubby open forest on Coastal	
Lowlands of the Central Coast	1
Grey Ironbark - Broad-leaved Mahogany - Smooth-barked Apple coastal headland low open	
forest of the Central Coast	1
Red Bloodwood - Silvertop Ash - Stringybark open forest on ironstone in the Sydney region	1
Red Ironbark - Spotted Gum - Prickly-leaved Paperbark shrubby open forest of the Lower	
Hunter	1
Scribbly Gum - Red Bloodwood - Angophora inopina heathy woodland on lowlands of the	
Central Coast	1
Smooth-barked Apple - Blackbutt - Old Man Banksia woodland on coastal sands of the	
Central and Lower North Coast	1
Smooth-barked Apple - Red Bloodwood - Brown Stringybark - Hairpin Banksia heathy open	
forest of coastal lowlands	1
Smooth-barked Apple - Red Bloodwood - Scribbly Gum grass - shrub woodland on lowlands	4
of the Central Coast	1
Smooth-barked Apple - Red Mahogany - Swamp Mahogany - Melaleuca sieberi heathy swamp woodland of coastal lowlands	1
Smooth-barked Apple - Swamp Mahogany - Red Mahogany - Cabbage Palm open forest on	<u> </u>
lowlands of the Central Coast	1
Smooth-barked Apple - Sydney Peppermint - Turpentine heathy open forest on plateaux	'
areas of the Sydney Basin Bioregion	1
Smooth-barked Apple - Turpentine - Blackbutt open forest on ranges of the Central Coast	1
Smooth-barked Apple - Turpentine - Sydney Peppermint heathy woodland on sandstone	<u> </u>
ranges of the Central Coast	1
Spotted Gum - Broad-leaved Mahogany - Red Ironbark shrubby open forest	1
Sydney Blue Gum - Lilly Pilly mesic tall open forest of coastal ranges and tablelands	
escarpment	1
Tallowwood - Smooth-barked Apple - Blackbutt grass tall open forest of the Central and	
lower North Coast	1
Turpentine - Rough-barked Apple - Mountain Blue Gum shrubby open forest on ranges of the	
Sydney Basin	1
White Mahogany - Spotted Gum - Grey Myrtle semi-mesic shrubby open forest of the central	
and lower Hunter Valley	1
	1



Appendix 2. (a) STRUCTURE tested 15 clusters (K = 1 - 15) with 8 replicates each, and the Structure Harvester Evanno method results were graphed. $\Delta K = \text{mean}|\text{Ln''}(K)|/\text{sd}(\text{L}(K))$. K = 2 had the largest ΔK value and is displayed in red. (b) Output of the DAPC *find.clusters* analysis showing Bayesian Information Criterion (BIC) versus number of clusters (K). The ideal number of clusters (K = 1) is displayed in red and indicated by the lowest BIC value.