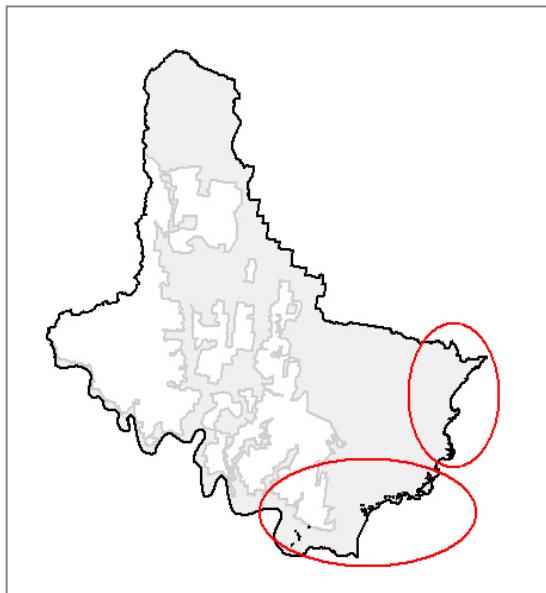


Coastal Headland Low Forest

Coastal Headland Complex

Unit E51c
REMS Unit 51



General Description:

On coastal clay headlands and slopes exposed to onshore winds, Coastal Headland Low Forest occurs. This community forms a complex of merging vegetation types dependant on local soil conditions and disturbance history, including Grassland (Units E51a), Shrubland (Unit E51b & E51d), and Gully Scrub (E51e). In areas with protection from on-shore winds away from the immediate coastline a low closed forest develops. Stunted canopy species such as *Eucalyptus capitellata*, *Eucalyptus paniculata* subsp. *paniculata*, *Eucalyptus umbra* and *Angophora costata* occur over a sparse shrub layer, and a normally well developed herb layer including *Lomandra longifolia* and *Macrozamia reducta*. The ground surface is also often rocky supporting a thin soil.

Known Floristic/ Structural Variations:

No variations have been delineated for this sub-community.

Distribution:

Within Gosford LGA – occurs on exposed coastal headlands on clay substrates on the Bouddi Peninsula and other headland locations.

Within LHCC Region – NPWS (2000) have mapped 126ha of their Coastal Headland Complex (Unit 51) remaining in the region.

Examples Within Gosford LGA

- Captain Cooks Memorial Lookout, Copacabana
- Coast Road, North Avoca

Extent: *Extant* - 184.85 ha

Relationship to Other Communities:

Coastal Headland Shrubland is distinct from all other communities in the study area due to the low closed forest structure supporting *Eucalyptus capitellata*, *Eucalyptus paniculata* and *Eucalyptus umbra*, and the position in the landscape.

Equivalent Vegetation Types:

- Benson 1981 (Mangrove Creek): n/a
- Benson & Fallding 1981 (Brisbane Water) n/a
- Benson 1986 (Gosf-Lake Mac): Open-Heath (Unit 21a)
- Clarke & Benson 1986 (Dharug): n/a
- Strom 1986 (Bouddi Peninsula): (?) Low open forest (Unit 3.1)
- Clarke & Benson 1987 (Mt White/ Mt Olive): n/a
- McRae 1990 (Bouddi Peninsula): Woodland/ low woodland (Unit 1.5)
- Binns 1996 (SF MFD): n/a
- Payne 1997 (Cockle Bay/ Bouddi): Woodland/ low woodland (Unit 1.5)
- Bell 1998 (Popran NP): n/a
- Bell 2002 (Wyong LGA): Coastal Headland Complex (Grassland & Shrubland) (Unit 13)

Significant Species:

- Undescribed species – *none recorded*
- Threatened (TSC Act) – *none recorded*
- Rare (ROTAP) – *none recorded*

Community Conservation Status:

Reserve Representation - within Gosford, areas of this vegetation type are present in Bouddi NP and Wyrrabalong NP.

TSC Act (1995) Status - not currently listed.

Mapping Reliability & Included Units:

High Resolution Area - this vegetation type has been mapped from aerial photographic interpretation. Areas of heavy infestation by Bitou Bush (*Chrysanthemoides monilifera*) may be included in this mapping.

Low Resolution Area - no occurrence within the low resolution area expected.

Vegetation Structure:

Stratum	Mean height (m)	Min height (m)	Max height (m)	Mean cover (%)	Sdev	n
Emergent						
Tallest	11.25	6.00	25.00	62	15.2	5
Middle 1	2.06	1.00	3.00	22	9.1	5
Middle 2						
Middle 3						
Lowest	0.67	0.10	2.00	60	32.2	5

Key Diagnostic Species [based on 5 plots]:

Life Form	Species	Community		All others		Fidelity
		c/a	Freq.	c/a	Freq.	
Tree	<i>Eucalyptus paniculata</i> subsp. <i>paniculata</i>	3	100%	2	8%	positive
	<i>Eucalyptus umbra</i>	5	80%	2	9%	positive
	<i>Syncarpia glomulifera</i> subsp. <i>glomulifera</i>	2	20%	2	29%	uninformative
	<i>Eucalyptus botryoides</i>	2	20%	2	2%	uninformative
	<i>Acmena smithii</i>	1	20%	2	14%	uninformative
	<i>Eucalyptus pilularis</i>	1	20%	3	14%	uninformative
	<i>Glochidion ferdinandii</i>	2	40%	2	28%	positive
Small tree	<i>Synoum glandulosum</i> subsp. <i>glandulosum</i>	1	40%	1	12%	uninformative

	<i>Acacia maidenii</i>	1	20%	1	5%	uninformative
	<i>Allocasuarina littoralis</i>	1	20%	2	14%	uninformative
	<i>Tristaniopsis collina</i>	1	20%	3	0%	uninformative
Shrub	<i>Pittosporum undulatum</i>	3	80%	1	13%	positive
	<i>Banksia spinulosa</i>	4	40%	2	16%	positive
	<i>Dodonaea triquetra</i>	3	40%	1	17%	positive
	<i>Acacia longifolia</i>	2	40%	1	11%	positive
	<i>Leptospermum polygalifolium</i>	2	40%	2	24%	positive
	<i>Maytenus silvestris</i>	2	40%	1	9%	positive
	<i>Persoonia linearis</i>	2	40%	1	26%	positive
	<i>Podolobium ilicifolium</i>	2	40%	2	12%	positive
	<i>Rapanea variabilis</i>	2	40%	1	15%	positive
	<i>Pomaderris lanigera</i>	1	20%	0	0%	unique
	<i>Macrozamia communis</i>	1	100%	2	10%	uninformative
	<i>Breynia oblongifolia</i>	1	80%	1	32%	uninformative
	<i>Polyscias sambucifolia</i>	1	80%	1	17%	uninformative
	<i>Leucopogon lanceolatus var lanceolatus</i>	1	60%	1	4%	uninformative
	<i>Pittosporum revolutum</i>	1	60%	1	12%	uninformative
	<i>Elaeocarpus reticulatus</i>	1	40%	1	9%	uninformative
	<i>Notelaea longifolia</i>	1	40%	1	16%	uninformative
	<i>Acacia myrtifolia</i>	4	20%	1	11%	uninformative
	<i>Lasiopetalum ferrugineum</i>	3	20%	1	5%	uninformative
	<i>Xanthorrhoea macronema</i>	3	20%	2	3%	uninformative
	<i>Leptospermum laevigatum</i>	2	20%	3	2%	uninformative
	<i>Hibbertia empetrifolia subsp. empetrifolia</i>	2	20%	1	11%	uninformative
	<i>Pomaderris ferruginea</i>	2	20%	1	3%	uninformative
	<i>Allocasuarina distyla</i>	2	20%	2	3%	uninformative
	<i>Acacia suaveolens</i>	1	20%	1	28%	uninformative
	<i>Acacia ulicifolia</i>	1	20%	1	24%	uninformative
	<i>Banksia integrifolia subsp. integrifolia</i>	1	20%	1	7%	uninformative
	<i>Clerodendrum tomentosum</i>	1	20%	1	11%	uninformative
	<i>Eupomatia laurina</i>	1	20%	1	7%	uninformative
	<i>Hakea sericea</i>	1	20%	1	11%	uninformative
	<i>Indigofera australis</i>	1	20%	1	4%	uninformative
	<i>Leptospermum polyanthum</i>	1	20%	4	0%	uninformative
	<i>Leucopogon juniperinus</i>	1	20%	1	1%	uninformative
	<i>Petrophile pulchella</i>	1	20%	2	18%	uninformative
	<i>Phyllanthus gunnii</i>	1	20%	1	2%	uninformative
	<i>Platylobium formosum</i>	1	20%	2	10%	uninformative
	<i>Pultenaea daphnoides</i>	1	20%	1	7%	uninformative
	<i>Woollsia pungens</i>	1	20%	1	10%	uninformative
	<i>Xanthorrhoea media</i>	1	20%	2	15%	uninformative
	<i>Xanthorrhoea resinifera</i>	1	20%	1	8%	uninformative
	<i>Zieria smithii</i>	1	20%	1	4%	uninformative
Tree fern	<i>Cyathea australis</i>	1	20%	1	1%	uninformative
Herb	<i>Actinotus helianthi</i>	1	40%	1	6%	uninformative
	<i>Commelinia cyanea</i>	1	20%	1	7%	uninformative
	<i>Correa reflexa</i>	1	20%	1	5%	uninformative
	<i>Pseuderanthemum variabile</i>	1	20%	2	17%	uninformative
	<i>Viola hederacea</i>	2	20%	2	13%	uninformative
Grass	<i>Imperata cylindrica var major</i>	1	60%	2	29%	uninformative
	<i>Entolasia stricta</i>	2	60%	2	53%	constant
	<i>Oplismenus aemulus</i>	2	20%	1	5%	uninformative
	<i>Themeda australis</i>	1	20%	2	24%	uninformative
Graminoid	<i>Dianella caerulea</i>	2	100%	1	50%	positive
	<i>Lomandra obliqua</i>	4	20%	2	19%	uninformative
	<i>Patersonia sericea</i>	1	20%	2	18%	uninformative
	<i>Lomandra longifolia</i>	1	100%	2	44%	negative

Coastal Headland Low Forest – E51c

Ground fern	<i>Adiantum aethiopicum</i>	3	20%	2	12%	uninformative
	<i>Blechnum cartilagineum</i>	1	20%	2	16%	uninformative
	<i>Doodia aspera</i>	1	20%	2	13%	uninformative
	<i>Schizaea bifida</i>	1	20%	1	4%	uninformative
	<i>Pteridium esculentum</i>	1	40%	2	42%	negative
Epiphytic fern	<i>Davallia solida</i> var <i>pyxidata</i>	1	20%	1	1%	uninformative
Climber	<i>Cissus hypoglauca</i>	2	60%	1	17%	positive
	<i>Smilax australis</i>	4	40%	1	22%	positive
	<i>Eustrephus latifolius</i>	1	100%	1	24%	uninformative
	<i>Geitonoplesium cymosum</i>	1	100%	1	23%	uninformative
	<i>Pandorea pandorana</i> subsp. <i>pandorana</i>	1	100%	1	23%	uninformative
	<i>Glycine clandestina</i>	1	80%	2	22%	uninformative
	<i>Billardiera scandens</i>	1	60%	1	29%	uninformative
	<i>Kennedia rubicunda</i>	1	40%	1	11%	uninformative
	<i>Sarcopetalum harveyanum</i>	1	40%	1	11%	uninformative
	<i>Hibbertia dentata</i>	2	20%	1	10%	uninformative
	<i>Parsonsia straminea</i>	2	20%	1	20%	uninformative
	<i>Cayratia clematidea</i>	1	20%	1	6%	uninformative
	<i>Clematis aristata</i>	1	20%	1	10%	uninformative
	<i>Desmodium varians</i>	1	20%	2	11%	uninformative
	<i>Dioscorea transversa</i>	1	20%	1	11%	uninformative
	<i>Hibbertia scandens</i>	1	20%	1	14%	uninformative
	<i>Mirbelia rubrifolia</i>	1	20%	2	6%	uninformative
	<i>Rubus moluccanus</i> var <i>trilobus</i>	1	20%	1	7%	uninformative
	<i>Smilax glyciphylla</i>	1	20%	1	19%	uninformative
Sedge/ Rush	<i>Lepidosperma laterale</i>	2	60%	2	27%	positive
	<i>Gahnia melanocarpa</i>	2	40%	1	4%	positive
	<i>Lepidosperma longitudinale</i>	6	20%	1	1%	uninformative
	<i>Cyathochaeta diandra</i>	1	20%	2	21%	uninformative
	<i>Gahnia clarkei</i>	1	20%	2	11%	uninformative