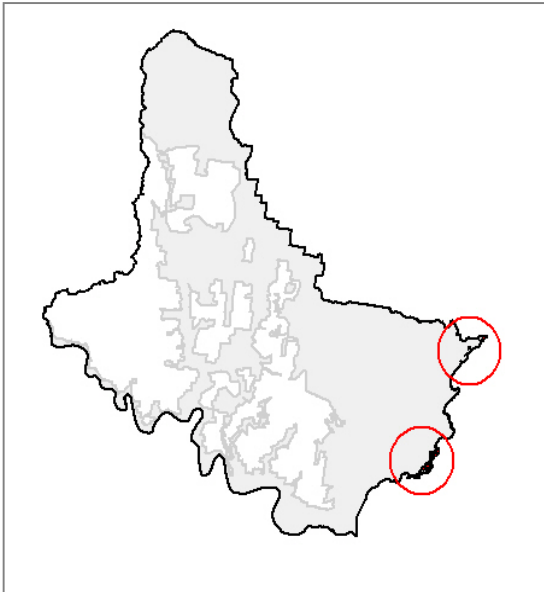


# Coastal Sand Wallum Heath

## Coastal Sand Wallum Woodland-Heath

Unit E34a  
REMS Unit 34a



### General Description:

Occurring on the older coastal dune systems, Coastal Sand Wallum Heath represents a vegetation type with no apparent tree layer, although small localised patches of stunted tree species (eg: *Corymbia gummifera*, *Angophora costata*, *Eucalyptus piperita*) may occur in places. More typical, however, is a dense low heath to tall scrub where Wallum Banksia (*Banksia aemula*) is characteristic, with other common shrub species such as *Pimelea linifolia*, *Ricinocarpus pinifolius*, *Allocasuarina distyla*, *Monotoca scoparia*, *Lambertia formosa*, and several *Acacia* and *Fabaceae* species. This vegetation type occurs in generally more exposed areas than the better structured forests and woodlands.

### Known Floristic/ Structural Variations:

- (a) Type variant (mapped as E34ai) – Coastal Sand Wallum Heath located on the Bombi Moors of Bouddi NP is the typical form of this vegetation type, occurring on perched aeolian sand masses. In this form, structure can vary from very low heath to tall heath or scrub, but always with *Banksia aemula* present.
- (b) Intermediate variant (mapped as E34aaii) - where the layer of sand thins out over bedrock material, an intermediate wallum heath occurs with species such as *Allocasuarina distyla* becoming more prominent.

### Distribution:

*Within Gosford LGA* – occurs mostly within Bouddi and Wyrabalong NP's on perched sand masses, but also in unreserved nearby areas.

*Within LHCC Region* – NPWS (2000) have mapped 1914ha of their Coastal Sand Wallum-Woodland Heath remaining within the region.

#### Examples Within Gosford LGA

- Bombi Moors, Bouddi NP (variant a)
- South of Crackneck Point, Wyrabalong NP (variant a)

Extent: *Extant* - 155.74 ha

### Relationship to Other Communities:

Coastal Sand Wallum Heath is floristically similar to Coastal Sand Blackbutt-Apple Forest (Unit 33), although structurally they are quite distinct. The two can be separated by the presence of a distinct tree layer in the latter community (*Eucalyptus pilularis*, *Corymbia gummifera*, *Angophora costata*, *Banksia serrata*), and with the dense heath or scrub vegetation of *Banksia aemula* characteristically very rare or absent. Other heath communities support a different suite of understorey species, and soils are not as obviously sandy.

### Equivalent Vegetation Types:

• Benson 1981 (Mangrove Creek):		n/a
• Benson & Falding 1981 (Brisbane Water)		n/a
• Benson 1986 (Gosf-Lake Mac):		Open-Heath (Unit 21b)
• Clarke & Benson 1986 (Dharug):		n/a
• Strom 1986 (Bouddi Peninsula):	Closed heath (Units 2.2.1, 2.2.2 & 4.7.1) & Open scrub (Unit 2.3)	
• Clarke & Benson 1987 (Mt White/ Mt Olive):		n/a
• McRae 1990 (Bouddi Peninsula):	Open-heath (Unit 3.1) & (?) Low open-woodland (Unit 3.2)	
• Binns 1996 (SF MFD):		n/a
• Payne 1997 (Cockle Bay/ Bouddi):	Open-heath (Unit 3.1) & (?) Low open-woodland (Unit 3.2)	
• Bell 1998 (Popran NP):		n/a
• Bell 2002 (Wyong LGA):		Coastal Sand Wallum Heath-Scrub (Unit 7)

### 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 Wyrribalong 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 with ground truthing. Small areas of other coastal sand-based communities may be included within polygons.

*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	3.88	1.50	8.00	52	40.7	3
Middle 1	2.00	2.00	2.00	100		1
Middle 2	1.00	0.50	1.50	30		1
Middle 3						
Lowest	1.50	1.00	2.00	51	70.0	2

### Key Diagnostic Species [based on 3 plots]:

Life Form	Species	Community		All others		Fidelity
		c/a	Freq.	c/a	Freq.	
Tree	<i>Elaeocarpus obovatus</i>	1	33%	1	0%	uninformative
Small tree	<i>Banksia serrata</i>	2	33%	2	25%	uninformative

## Coastal Sand Wallum Heath – E34a

	<i>Cupaniopsis anacardioides</i>	1	33%	2	2%	uninformative
Shrub	<i>Pimelea linifolia</i>	3	100%	1	20%	positive
	<i>Eriostemon australasius</i>	6	67%	2	5%	positive
	<i>Acacia ulicifolia</i>	3	67%	1	24%	positive
	<i>Allocasuarina distyla</i>	3	67%	2	3%	positive
	<i>Isopogon anemonifolius</i>	3	67%	1	18%	positive
	<i>Calytrix tetragona</i>	4	33%	0	0%	unique
	<i>Acacia quadrilateralis</i>	1	33%	0	0%	unique
	<i>Acacia suaveolens</i>	1	100%	1	27%	uninformative
	<i>Banksia aemula</i>	1	100%	2	0%	uninformative
	<i>Bossiaea scolopendria</i>	1	100%	1	10%	uninformative
	<i>Ricinocarpos pinifolius</i>	1	100%	1	5%	uninformative
	<i>Banksia integrifolia</i> subsp. <i>integrifolia</i>	1	67%	1	7%	uninformative
	<i>Bossiaea heterophylla</i>	4	33%	2	10%	uninformative
	<i>Platysace linearifolia</i>	4	33%	2	32%	uninformative
	<i>Woolisia pungens</i>	4	33%	1	10%	uninformative
	<i>Acacia longifolia</i>	3	33%	1	11%	uninformative
	<i>Leucopogon microphyllus</i>	3	33%	2	8%	uninformative
	<i>Macrozamia communis</i>	2	33%	2	11%	uninformative
	<i>Bossiaea ensata</i>	1	33%	1	3%	uninformative
	<i>Dillwynia glaberrima</i>	1	33%	5	0%	uninformative
	<i>Dodonaea triquetra</i>	1	33%	1	17%	uninformative
	<i>Exocarpos cupressiformis</i>	1	33%	1	5%	uninformative
	<i>Hakea teretifolia</i>	1	33%	1	17%	uninformative
	<i>Kunzea capitata</i>	1	33%	2	5%	uninformative
	<i>Leptospermum laevigatum</i>	1	33%	3	2%	uninformative
	<i>Leptospermum trinervium</i>	1	33%	2	27%	uninformative
	<i>Notelaea longifolia</i>	1	33%	1	16%	uninformative
	<i>Podocarpus spinulosus</i>	1	33%	3	1%	uninformative
Sub-shrub	<i>Euryomyrtus ramosissima</i>	1	33%	0	0%	unique
	<i>Hibbertia monogyna</i>	1	33%	1	5%	uninformative
Herb	<i>Actinotus helianthi</i>	5	67%	1	6%	positive
	<i>Amperea xiphoclada</i>	2	67%	1	4%	positive
	<i>Gonocarpus teucroides</i>	1	100%	1	14%	uninformative
	<i>Correa reflexa</i>	2	33%	1	5%	uninformative
	<i>Dampiera purpurea</i>	1	33%	1	2%	uninformative
	<i>Dampiera stricta</i>	1	33%	1	12%	uninformative
	<i>Senecio lautus</i>	1	33%	1	1%	uninformative
	<i>Xanthosia pilosa</i>	1	33%	1	13%	uninformative
Grass	<i>Anisopogon avenaceus</i>	1	33%	2	16%	uninformative
	<i>Entolasia stricta</i>	0	0%	2	54%	negative
Graminoid	<i>Lomandra glauca</i>	5	67%	2	18%	positive
	<i>Lomandra longifolia</i>	4	67%	2	44%	constant
	<i>Dianella caerulea</i>	2	33%	1	51%	uninformative
	<i>Haemodorum planifolium</i>	1	33%	1	2%	uninformative
	<i>Patersonia sericea</i>	1	33%	2	18%	uninformative
Ground fern	<i>Pteridium esculentum</i>	4	67%	2	42%	constant
	<i>Schizaea bifida</i>	1	33%	1	4%	uninformative
Climber	<i>Hardenbergia violacea</i>	1	67%	1	10%	uninformative
	<i>Hibbertia saligna</i>	5	33%	1	2%	uninformative
	<i>Cassytha glabella</i> forma <i>glabella</i>	3	33%	1	14%	uninformative
	<i>Marsdenia rostrata</i>	1	33%	1	5%	uninformative
Sedge/ Rush	<i>Saropsis fastigiata</i>	3	33%	0	0%	unique
	<i>Lepidosperma limicola</i>	3	33%	1	0%	uninformative
	<i>Hypolaena fastigiata</i>	3	33%	1	2%	uninformative
	<i>Gahnia clarkei</i>	1	33%	2	11%	uninformative
	<i>Lepidosperma laterale</i>	1	33%	2	27%	uninformative