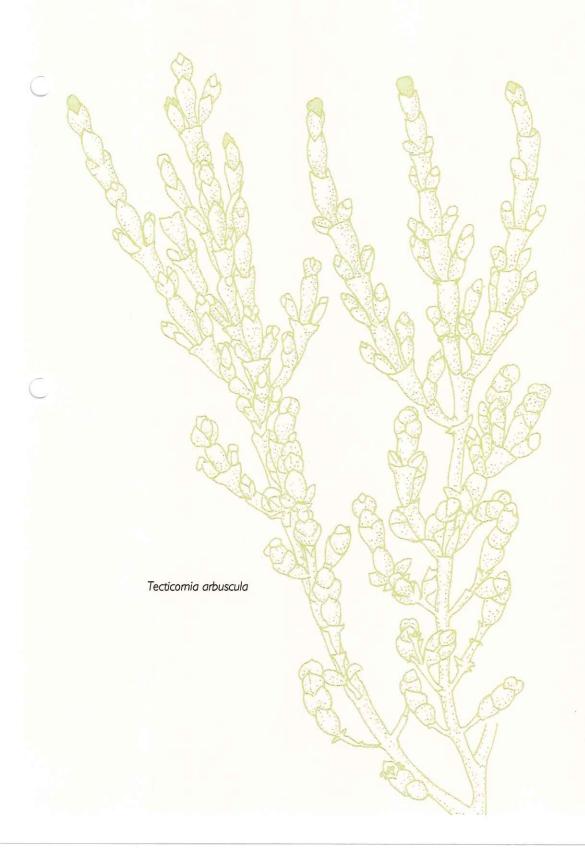
Vegetation Benchmarks

Saltmarsh and wetland



Saltmarsh and Wetlands



AAP Alkaline pans

Community Description:

This distinctive complex community occurs where limestone or dolomite outcrops or lies close to the surface, in at least one case as part of a mound spring system. The community occurs within buttongrass moorlands or scrub in south-west Tasmania. The large proportion of bare sand or gravel and exposed bedrock easily distinguishes the pans. A sparse but distinctive flora dominates the highly alkaline, central zone of the pan. Species can include Baumea spp., Drosera arcturi, Oreobolus spp., Baeckea spp., Milligania johnstonii and Trithuria filamentosa. This is the appropriate benchmark to use in assessing the condition of the listed Alkaline pans community (Schedule 3A, Nature Conservation Act 2002).

Component	Cover %	LF Code
Dominant Life Form	10%	LSR
Organic Litter	5%	

Expected Life Forms	LF code	#Spp	Cover %
Shrubs	S	2	4
Prostrate shrubs	PS	Ī	1
Herbs and orchids	Н	4	5
Tiny sedge/rush/sagg/lily	TGS	1	1
Large sedge/rush/sagg/lily	LSR	4	10
Medium sedge/rush/sagg/lily	MSR	6	5
Ground fern	GF	3	5
Т	otal 7	21	



Dominant Species	Common Name	LF Code	
Baumea spp.	twigsedge	LSR	Particular de la constantina della constantina d

Other Typical Species *	Common Name	LF Code
Baeckea leptocaulis	slender heathmyrtle	S
Bauera rubioides	wiry bauera	S
Melaleuca squamea	swamp honeymyrtle	S
Sprengelia incarnata	pink swampheath	S
Sprengelia distichophylla	tiny swampheath	PS
Centrolepis monogyna	common cebtrolepis	Н
Drosera binata	forked-leaved sundew	н
Drosera arcturi	alpine sundew	Н
Liparophyllum gunnii	alpine marshwort	Н
Oreobolus tholicarpus	western cushionsedge	Н
Baumea juncea	bare twigsedge	LSR
Empodisma minus	spreading rope rush	LSR
Tetraria capillaris	hair sedge	LSR
Baumea acuta	pale twigsedge	MSR
Calorophus elongatus	long rope rush	MSR
Calorophus erostris	black rope rush	MSR
Carpha alpina	small flower rush	MSR
Trithuria filamentosa	tasmanian hydatella	MSR
Schoenus biglumis	west coast bodsedge	MSR
Schoenus fluitans	floating bogsedge	MSR
Schoenus fluitans	floating bogsedge	MSR
Triglochin striata	streaked arrowgrass	MSR
Milligania johnstonii	Johnston's milligania	TGS
Gleichenia dicarpa	pouched coral fern	GF
Isoetes species nova	quillwart	GF
Lycopodiella diffusa	buttongrass clubmoss	GF

^{*}This list is provided as a guide only. The species listed are typical of this plant community type but may not necessarily be present.

Saltmarsh and Wetlands



AHF Freshwater aquatic herbland

Community Description:

Freshwater aquatic herbland is characterised by the presence of standing permanent or semipermanent freshwater that supports aquatic and/or emergent herbaceous vegetation. It can be found from coastal to alpine elevations. This community can occur in water from a few centimetres to several metres in depth but is usually at its most diverse in shallow water less than Im deep. Areas with clear water support the most species diverse communities while silty and tannin stained water support sparser and less diverse communities. Note that this benchmark has been determined assuming the wetland is 'wet'. This is the appropriate benchmark to use in assessing the condition of the freshwater aquatic herbland component of the listed Wetlands community (Schedule 3A, Nature Conservation Act 2002).

Component	Cover %	LF Code
Dominant Life Form	30%	Н
Organic Litter	10%	-

Expected Life Forms	LF code	# Spp	Cover %
Herbs and orchids	Н	5	30
Non-tussock grass	NTG	1	1
Large sedge/rush/sagg/lily	LSR	C C	5
Medium to small sedge/rush/sagg/lily	MSR	2	5
Total	4	9	



Dominant Species	Common Name	Life Form Code
Charaphyte spp.	stoneworts	Н
Crassula spp.	stonecrop	Н
Isolepis fluitans	floating clubsedge	Н
Lepilaena spp.	watermat	Н
Lilaeopsis polyantha	jointed swampstalks	Н
Mimulus repens	creeping monkeyflower	Н
Myriophyllum spp.	watermilfoil	Н
Potamogeton spp.	pondweed	Н
Ruppia spp.	seatassel	Н
Schoenus fluitans	floating bogsedge	Н
Triglochin procerum	greater waterribbons	н
Villarsia reniformis	running marshflower	Н
Other Typical Species *	Common Name	LF Code
Elatine gratioloides	waterwort	Н
Montia fontana	waterblinks	н
Neopaxia australasica	white purslane	н
Pratia surrepens	mud pratia	H
Ranunculus amphitrichus	river buttercup	Н
Utricularia spp.	bladderwort	н
Eleocharis sphacelata	tall spikesedge	LSR
Eleocharis acuta	common spikesedge	MSR

^{*}This list is provided as a guide only. The species listed are typical of this plant community type but may not necessarily be present.

Saltmarsh and Wetlands



AHL Lacustrine herbland

Community Description:

Lacustrine herbland includes marsupial lawns and herbfields, which occur in areas that are subject to short periods of inundation. They consist of species less than 20 cm in height, and are commonly less than 5 cm in height. Some communities of herbfield marginal to wetlands can be very speciesrich with upwards of 20 species in a square metre. Different facies of the community occupy sites ranging from fresh to brackish. As a general rule the species diversity decreases as salinity increases. This is the appropriate benchmark to use in assessing the condition of the lacustrine herbland component of the listed *Wetlands* community (Schedule 3A, *Nature Conservation Act 2002*).

Component	Cover %	LF Code
Dominant Life Form	60%	Н
Organic Litter	10%	

Expected Life Forms	LF code	# Spp	Cover %
Herbs and orchids	Н	10	60
Tussock grass	TG	ſ	5
Non-tussock grass	NTG	2	5
Tiny grass/tiny sedge/tiny lily	TGS	3	15
Large sedge/rush/sagg/lily	LSR	1	5
Medium to small sedge/rush/sagg/lily	MSR	2	5
Mosses and Lichens	ML	<u>I</u>	5
Total	7	20	



Dominant Species	Common Name	LF Code
Selliera radicans	shiny swampmat	Н
Wilsonia backhousei	narrowleaf wilsonia	Н
Wilsonia rotundifolia	roundleaf wilsonia	Н
Other Typical Species *	Common Name	LF Code
Centella cordifolia	swampwort	Н
Elatine gratioloides	waterwort	Н
Eryngium vesiculosum	prickfoot	Н
Gonocarpus micranthus	creeping raspwort	H
Goodenia humilis	swamp native-primrose	н
Hydrocotyle muscosa	mossy pennywort	H
Isotoma fluviatilis	swamp stars	Н
Leptinella reptans	creeping buttons	н
Lilaeopsis polyantha	jointed swampstalks	H
Limosella australis	southern mudwort	H
Mazus pumilio	swamp mazus	Н
Mimulus repens	creeping monkeyflower	H
Myriophyllum spp.	watermilfoil	н
Neopaxia australasica	white purslane	н
Pratia pedunculata	matted pratia	н
Ranunculus amphitrichus	river buttercup	н
Selliera radicans	shiny swampmat	Н
Utricularia spp.	bladderwort	H
Villarsia reniformis	running marshflower	Н
Wilsonia backhousei	narrowleaf wilsonia	н
Wilsonia rotundifolia	roundleaf wilsonia	Н
Eleocharis acuta	common spikesedge	LSR
Juncus holoschoenus	jointleaf rush	LSR
Juncus pallidus	pale rush	LSR
Juncus pauciflorus	looseflower rush	LSR
Lepidosperma laterale	variable swordsedge	LSR
Eleocharis pusilla	small spikesedge	MSR
Schoenus fluitans	floating bogsedge	MSR
Schoenus nitens	shiny bogsedge	MSR
Schoenus tesquorum	soft bogsedge	MSR
Ehrharta stipoides	weeping grass	NTG
Lachnagrostis aemula	tumbling blowngrass	NTG
Austrodanthonia spp.	wallabygrass	TGS
Centrolepis spp.	bristlewort	TGS
Centrolepis strigosa	hairy bristlewort	TGS
Isolepis cernua	nodding clubsedge	TGS
Isolepis marginata	little clubsedge	TGS
lsolepis platycarpa	flatfruit clubsedge	TGS
Poa spp.	tussockgrass	TGS
ou spp.	cussockgi ass	103

^{*}This list is provided as a guide only. The species listed are typical of this plant community type but may not necessarily be present.

Saltmarsh and Wetlands



AHS Saline aquatic herbland

Community Description:

Saline aquatic herblands incorporate the brackish and saline aquatic communities where water is noticeably salty to the taste. Species of *Ruppia*, *Lepilaena* and stonewort algae in the genus *Lamprothamnium* are often present in, but not necessarily restricted to, saline aquatic plant communities. These communities occur in areas of permanent or semi-permanent brackish to hyper-saline water that is commonly found in small pools in saltmarshes and along the edges of estuaries. Saline aquatic herblands are the most species-poor of wetland communities. This is the appropriate benchmark to use in assessing the condition of the saline aquatic herbland component of the listed *Wetlands* community (Schedule 3A, *Nature Conservation Act 2002*).

Component	Cover %	LF Code
Dominant Life Form	5	Н
Organic Litter	10%	

Expected Life Forms		LF code	# Spp	Cover %
Herbs and orchids		Н	2	5
	Total	I	2	



Dominant Species	Common Name	LF Code
Lamprothamnium spp.	stonewort (charophyte)	Н
Lepilaena spp.	watermat	Н
Myriophyllum spp.	watermilfoil	Н
Ruppia spp.	seatassel	Н
Other Typical Species *	Common Name	LF Code
Other Typical Species * Lepilaena cylindrocarpa	Common Name	LF Code
Lepilaena cylindrocarpa	longfruit watermat	Н
Lepilaena cylindrocarpa Mimulus repens	longfruit watermat creeping monkeyflower	H H

^{*}This list is provided as a guide only. The species listed are typical of this plant community type but may not necessarily be present.

Saltmarsh and Wetlands



ARS Saline sedgeland/rushland

Community Description:

Saline sedgeland/rushland is a coastal community frequently dominated by Juncus kraussii or, sometimes, other species such as Gahnia filum. Some succulent species may be intermixed. The community may be dense, or have sparse sedges and rushes with smaller sedges and herbs in the inter-tussock spaces. The height of the community may vary between 0.5-2m. These communities are restricted to the margins of saltmarsh areas and the lower reaches of estuaries often forming a zone on the landward margins of saline herbfields.

Component	Cover %	LF Code
Dominant Life Form	60%	LSR
Organic Litter	40%	

Expected Life Forms	LF code	# Spp	Cover %
Herbs and orchids	Н	4	10
Tussock grass	TG	I.	10
Non-tussock grass	NTG	2	5
Tiny grass/tiny sedge/lily	TGS	1	1
Large sedge/rush/sagg/lily	LSR	2	60
Medium to small sedge/rush/sagg/lily	MSR	2	10
Mosses and Lichens	ML	1	5
Total	7	13	



Dominant Species	Common Name	LF Code
Baumea juncea	bare twigsedge	LSR
Gahnia filum	chaffy sawsedge	LSR
Gahnia trifida	coast sawsedge	LSR
Juncus kraussii	sea rush	LSR
Leptocarpus tenax	slender twinerush	LSR
Phragmites australis	southern reed	LSR
Other Typical Species *	Common Name	LF Code
Centella cordifolia	swampwort	Н
Cotula spp.	buttons	Н
Mimulus repens	creeping monkeyflower	Н
Samolus repens	creeping brookweed	Н
Selliera radicans	shiny swampmat	Н
Wilsonia rotundifolia	roundleaf wilsonia	Н
Austrostipa stipoides	coast speargrass	TG
Poa poiformis	coastal tussockgrass	TG
Distichlis distichophylla	australian saltgrass	NTG
Schoenus spp.	bogsedge	TGS
Apodasmia brownii	coarse twinerush	LSR
Baumea arthrophylla	fine twigsedge	LSR
Carex appressa	tall sedge	LSR
Isolepis nodosa	knobby clubsedge	LSR
Schoenus nitens	shiny bogsedge	MSR

^{*}This list is provided as a guide only. The species listed are typical of this plant community type but may not necessarily be present.

Saltmarsh and Wetlands



ASF Freshwater aquatic sedgeland and rushland

Community Description:

Freshwater aquatic sedgeland and rushland includes wetlands dominated by sedges and rushes, with salinity ranging from fresh to brackish that occupy a diverse array of habitats from coastal to subalpine areas. A dense to sparse sward of a sedge or rush species (usually one species dominates) provides the tallest stratum in a sedge/rush wetland. A variety of smaller sedges and herbs commonly form a sparse to dense layer between and below this. The dominant sedges and rushes are generally greater than 50cm in height. This is the appropriate benchmark to use in assessing the condition of the freshwater aquatic sedgeland and rushland component of the listed Wetlands community and for the wetlands part of the listed Heathland scrub complex at Wingaroo community (Schedule 3A, Nature Conservation Act 2002).

Component	Cover %	LF Code
Dominant Life Form	50%	LSR
Organic Litter	0%	

Expected Life Forms	LF code	#Spp	Cover %
Herbs and orchids	Н	5	15
Tiny grass/tiny sedge/tiny lily	TGS	3	5
Large sedge/rush/sagg/lily	LSR	2	50
Medium to small sedge/rush/sagg/lily	MSR	3	5
Total	4	13	



Dominant Species	Common Name	LF Code
Baumea spp.	twigsedge	LSR
Carex spp.	sedge	LSR
Cyperus spp.	flatsedge	LSR
Eleocharis spp.	spikesedge	LSR
Gahnia spp.	sawsedge	LSR
Juncus spp.	rush	LSR
Lepidosperma spp.	swordsedge	LSR
Phragmites australis	southern reed	LSR
Typha spp.	native cumbungi	LSR
Other Typical Species *	Common Name	LF Code
Epilobium spp.	willowherb	Н
Lobelia spp.	lobelia	н
Myriophyllum spp.	watermilfoil	Н
Potamogeton spp.	thin pondweed	Н
Triglochin spp.	waterribbons	Н
Utricularia spp.	bladderwort	Н
Villarsia reniformis	running marshflower	Н
Isolepis spp.	clubsedge	TGS
Schoenus spp.	bogsedge	TGS
Baumea arthrophylla	fine twigsedge	LSR
Baumea juncea	bare twigsedge	LSR
Bolboschoenus caldwellii	sea clubsedge	LSR
Carex gaudichaudiana	fen sedge	LSR
Chorizandra spp.	bristlesedge	LSR
Eleocharis acuta	common spikesedge	LSR
Eleocharis sphacelata	tall spikesedge	LSR
Gahnia filum	chaffy sawsedge	LSR
Gahnia trifida	coast sawsedge	LSR
ļuncus kraussii	sea rush	LSR
luncus procerus	tall rush	LSR
Lepidosperma longitudinale	spreading swordsedge	LSR
Leptocarpus tenax	slender twinerush	LSR
Lindsaea linearis	screw fern	GF
Selaginella spp.	spikemoss	GF

^{*}This list is provided as a guide only. The species listed are typical of this plant community type but may not necessarily be present.

Saltmarsh and Wetlands



ASP Sphagnum peatland

Community Description:

Treeless Sphagnum communities cover a range of different Sphagnum peatland types, including tussock grassland mires, buttongrass Sphagnum bogs and floating aquatic Sphagnum mires. The most common type is the shrub-dominated Richea-Sphagnum bogs. They range in size from small patches to > 5 ha in size. The moss-derived peats range from quite shallow to two metres deep. Sphagnum peatlands can be almost pure moss beds, dominant or co-dominant with the sedges Empodisma minus, Baloskion australe, Gahnia grandis and Gymnoschoenus sphaerocephalus, with Gleichenia alpina and/or the shrubs Richea scoparia, Richea gunnii, Baeckea gunniana, Epacris serpyllifolia and/or Callistemon spp. This is the appropriate benchmark to use in assessing the condition of the listed Sphagnum peatland community (Schedule 3A, Nature Conservation Act 2002).

Component	Cover %	LF Code
Dominant Life Form	40%	ML
Organic Litter	1%	

Expected Life Forms	LF code	#Spp	Cover %
Shrub	S	2	10
Herbs and orchids	Н	2	1
Grass	LTG	I	1
Tiny grass/tiny sedge/tiny lily	TGS	1	1
Large sedge/rush/sagg/lily	LSR	I	5
Medium to small sedge/rush/sagg/lily	MSR	2	5
Ground fern	GF	1	I
Mosses and lichens	ML	I	40
Total	8	11	



Dominant Species	Common Name	LF Code	
Sphagnum cristatum	sphagnum	ML	
Sphagnum falcatulum	sphagnum	ML	

Other Typical Species *	Common Name	LF Code
Baeckea gunniana	alpine heathmyrtle	S
Callistemon viridiflorus	prickly bottlebrush	S
Epacris gunnii	coral heath	S
Epacris serpyllifolia	alpine heath	S
Leptecophylla juniperina subsp. parvifolia	mountain pinkberry	S
Ozothamnus hookeri	scaly everlastingbush	S
Ozothamnus rodwayi	alpine everlastingbush	S
Richea gunnii	bog candleheath	S
Richea scoparia	scoparia	S
Richea sprengelioides	rigid candleheath	S
Sprengelia incarnata	pink swampheath	S
Acaena novae-zelandiae	common buzzy	Н
Asperula gunnii	mountain woodruff	Н
Brachyscome spp.	daisy	Н
Celmisia asteliifolia	silver snowdaisy	Н
Gunnera cordifolia	tasmanian mudleaf	Н
Lagenophora stipitata	blue bottledaisy	Н
Rubus gunnianus	alpine raspberry	Н
Poa labillardierei	silver tussockgrass	LTG
Oreobolus pumilio	dwarf cushionsedge	TGS
Schoenus spp.	bogsedge	TGS
Baloskion australe	southern cordrush	LSR
Empodisma minus	spreading roperush	LSR
Gahnia grandis	cutting grass	LSR
Gymnoschoenus sphaerocephalus	buttongrass	LSR
Astelia alpina	pineapple grass	MSR
Isolepis spp.	clubsedge	MSR
Juncus spp.	rush	MSR
Luzula spp.	woodrush	MSR
Blechnum penna-marina	alpine waterfern	GF
Gleichenia alpina	alpine coralfern	GF

^{*}This list is provided as a guide only. The species listed are typical of this plant community type but may not necessarily be present.





ASS Succulent saline herbland

Community Description:

Succulent saline herblands are low growing communities dominated by Sarcocornia quinqueflora and in some cases Sclerostegia arbuscula, the latter being a shrub up to 80 cm high. Often the community has a strong reddish tinge resulting from the visibility of leaf anthocyanin, which is an adaptation to highly saline and sunny environments. They are distinguished by the dominance of one or more of the succulent coastal species. These communities occur on gently graded low energy coasts, most commonly in estuaries as well as in the lowest rainfall zone of the Midlands.

Component	Cover %	LF Code
Dominant Life Form	50%	Н
Organic Litter	10%	

Expected Life Forms	LF code	# Spp	Cover %
Medium shrub/small shrub	S	2	15
Herbs and orchids	Н	4	50
Tussock grass	TG	1	5
Non-tussock grass	NTG	2	5
Tiny grass/tiny sedge/tiny lily	TGS	2	5
Large sedge/rush/sagg/lily	LSR	3	5
Medium to small sedge/rush/sagg/lily	MSR	1	1
Mosses and Lichens	ML	Ī	5
Total	8	16	



Dominant Species	Common Name	LF Code
Sarcocornia quinqueflora	beaded glasswort	Н
Sarcocornia blackiana	thickhead glasswort	Н
Disphyma crassifolium	roundleaf pigface	Н
Hemichroa pentandra	trailing saltstar	Н
Other Typical Species *	Common Name	LF Code
Atriplex cinerea	grey saltbush	S
Rhagodia candolleana	coastal saltbush	S
Sclerostegia arbuscula	shrubby glasswort	S
Apium prostratum	slender sea-celery	Н
Carpobrotus rossii	native pigface	Н
Limonium australe	yellow sea-lavender	Н
Samolus repens	creeping brookweed	Н
Selliera radicans	shiny swampmat	н
Suaeda australis	southern seablite	Н
Triglochin striatum	streaked arrowgrass	Н
Wilsonia backhousei	narrowleaf wilsonia	н
Wilsonia humilis	silky wilsonia	Н
Austrostipa stipoides	coast speargrass	TG
Poa poiformis	coastal tussockgrass	TG
Austrodanthonia spp.	wallabygrass	NTG
Distichlis distichophylla	australian saltgrass	NTG
Puccinellia stricta	australian saltmarshgrass	NTG
Zoysia macrantha	prickly couch	NTG
Centrolepis spp.	bristlewort	TGS
Isolepis cernua	nodding clubsedge	TGS
lsolepis platycarpa	flatfruit clubsedge	TGS
Schoenus nitens	shiny bogsedge	TGS
Gahnia filum	chaffy sawsedge	LSR
Gahnia trifida	coast sawsedge	LSR
lsolepis nodosa	knobby clubsedge	LSR
luncus kraussii	sea rush	LSR

^{*}This list is provided as a guide only. The species listed are typical of this plant community type but may not necessarily be present.

Scrub, Heathland and Coastal Complexes



SMR Melaleuca squarrosa scrub

Community Description:

Melaleuca squarrosa scrub is a closed canopy scrub 2-3 (5) m high on poorly drained flats underlain by peat developed on various substrates. Melaleuca squarrosa dominates, usually with some of M. squamea, Banksia marginata, Hakea epiglottis and Acacia mucronata. There may be openings of buttongrass or sedges such as Baloskion tetraphyllum, Leptocarpus tenax, Lepyrodia tasmanica and Gahnia grandis. Melaleuca squarrosa scrub is widespread through western Tasmania, especially in lowland areas of poor drainage surrounded by heathland and sedgeland. The community also occurs in the north-east and far north-west of Tasmania.

Benchmarks:

Component	Cover (%)	LF Code
Dominant Life Form	75	Т
Organic Litter	10	

	LF code		# Spp	Cover (%) 75
Understorey Life Forms			4	
Tree (sub-canopy)/Large Shrub		1 S	2	5
Medium Shrub/Small Shrub		LSR	3	15
Large Sedge/Rush/Sagg/Lily		MSR	2	5
Medium to Small Sedge/Rush/Sagg/Lily		GF	1	5
Ground Ferns and fern allies		SCE	ı	2
Scramblers/Climbers/Epiphytes	Total	6	13	

species in the		LF Code
Dominant Life Form Species	Common Name	Lr Code
Melaleuca squarrosa	scented paperbark	Ţ
Melaleuca squarrosa		



