

BAWLEY POINT BUSHCARE GROUP ACTION PLAN

Document Number: D20/28686 **Adopted:** 28 November 2022 **File:** 26281E **Produced By:** City Development (Environmental Services) **Review Date:** 28 November 2028

RESERVE INFORMATION

Reserves: Willinga Headland, Bawley Headland, Bawley Point Wetland,

Watts Reserve, Malibu Drive and Gannet Beach

Reserve Numbers: SBP886, SBP860, SBP870 and SBP887

Land Tenure: Crown and Council Community Land

Community Land: Natural Area Wetland and Bushland; Park

1. BUSHCARE GROUP GOALS

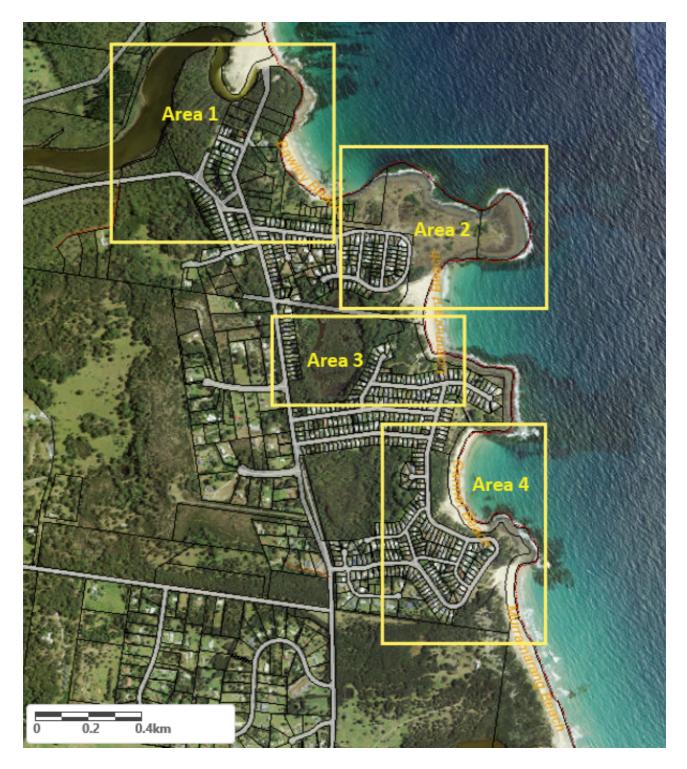
The goals of the Bawley Point Bushcare Group Action Plan are to:

- 1. Continue to regenerate the public foreshore reserves in and around the village of Bawley Point by using environmentally and culturally sensitive methods that maximise the natural regeneration potential of the bushland and provide resilience, with particular focus on areas that show a high diversity of native species and relatively low levels of weed infestation.
- 2. Foster and promote these natural areas as a valuable community resource and recruit new volunteers to be part of the Bushcare group, thereby raising awareness of biodiversity in and around Bawley Point and the impact of weeds on these areas.

2. SITE ACHIEVEMENTS TO DATE

Actions	Lessons Learnt
Reduction in weed density around Bawley Point.	Constant maintenance is required to stop reinfestation
Condition of bushland has improved and some native species have had the opportunity to regenerate.	Reducing edge effects is important to stop spread of certain weed species
Planting in vacant niches where weeds have been removed has enriched plant diversity and fauna habitat in reserves	Planting needs to be done according to season and rainfall. In some places, plants need extra guarding to limit being eaten by animals (e.g., wallabies).

3. BAWLEY POINT BUSHCARE GROUP ACTION PLAN MAPS



Bawley Point Bushcare Group Areas

Please note, the southern side of Juwin, south of Harrington Cr, is included in the plan for the Friends of Juwin Head volunteer group



Area 1: Crown reserves south of Willinga Lake entrance



Area 2 Bawley Headland



Area 3 Bawley wetland and Cormorant Beach



Area 4 Gannet Beach to Murramarang Beach

4. SHOALHAVEN BUSHCARE GROUP ACTIVITIES TABLE

Priority rated as H = High (started within 12 months); M = Medium (started 1-3 years); L = Low

Area 1: Crown reserves south of Willinga Lake entrance



GROUP ACTION	PRIORITY	METHOD	TIMING
1. Weed control – Monitor and control weed species primarily on the urban interface in this area: Dipogon lignosus (Dolichos pea), Lonicera japonica (Japanese honeysuckle), Senna pendula (Easter Senna), Nephrolepis cordifolia (fishbone fern), Thunbergia alata (black eyed Susan), Crassula multicava (Crassula), Lillium formosanum (Formosan Lily), Ochna serrulata (Micky Mouse plant), Chlorophytum comosum (spider plant), Aristea ecklonii (blue stars), Stenotaphrum secundatum (buffalo grass) Crocosmia sp. (montbretia) Asparagus aethiopicus (ground asparagus), Hakea salicifolia (willow-leafed Hakea)	Н	Manual weed control or herbicide use as per product labels or Australian Pesticides and Vet Medicines Authority permits.	As required
2. Post-2019 bushfire monitoring	Н	Establish photo points to monitor changes in vegetation and identify plant species that grow.	Annually
3. Liaise with adjacent landholders regarding invasive weeds species and how to remove these from domestic gardens and properly dispose of propagules.	Н	Council and Bushcare coordinator to identify key contacts and undertake communications.	As required

Area 1: Crown reserves south of Willinga Lake entrance



GROUP ACTION	PRIORITY	METHOD	TIMING
 Buffer or edge planting with 'understory' (see Section 10) endemic species as required. 	М	Source local provenance stock – e.g., from Milton Ulladulla Landcare Nursery.	As required
5. Investigate increasing the diversity of vegetation at Willinga Point	M	Assess whether Sweet Pittosporum is affecting diversity and if so, seek required approvals to undertake selective replacement with other indigenous shrub and tree species.	2022-26

Area 2: Bawley Headland



GROUP ACTION	PRIORITY	METHOD	TIMEFRAME
Monitor and control weed species around Bawley Headland. Species include Lilium formosanum (Formosan lily), Bryophyllum delagoense (mother of millions) and Rubus fruiticosus (blackberry)	Н	Manual weed control or herbicide use as per product labels or APVMA permits. Council Bush Regenerator crew to assist with control	Ongoing
 Control and contain weed species around old dwelling near boat ramp <i>Dipogon lignosus</i> (Dipogon), <i>Anredera cordifolia</i> (Madiera vine), <i>Leonurus sibiricus</i> (lion's tail) and <i>Rubus</i> fruiticosus (blackberry) 	Н	Manual weed control or herbicide use as per product labels or APVMA permits. Council Bush Regenerator crew to assist with control	Ongoing
Monitor seasonal changes and inform Council's Bushcare Coordinator if more assistance is required regarding weed control	Н	Document, report and monitor any new weed infestations	Quarterly

Area 3: Bawley wetland and Cormorant Beach



GROUP ACTION	PRIORITY	METHOD	TIMEFRAME
Maintain emerging exotic weed species to low levels throughout resilient areas from Terragong Avenue, north to Tingira Drive	Н	Manual weed control or herbicide use as per product labels or APVMA permits.	Ongoing
2. Monitor reserves urban edges around Murramarang Rd, Lurnea Ave, Tingira Dr and Terragong Ave and alert Council's Bushcare Coordinator if extra spraying by bush regeneration staff is required. Weeds to monitor include: Anredera cordifolia (Madiera vine), Acetosa sagittata (turkey rhubarb), Senecio macroglossus (Natal ivy), Tradescantia fluminensis (wandering trad), Rubus fruiticosus (blackberry) Jasminum ployanthum (jasmine) Senna pendula (Easter Senna) and Bambusa spp. (bamboo), Asparagus aethiopicus (ground Asparagus), Solanum mauritianum (Wild Tobacco Tree)	Н	Document, report and monitor any new weed infestations and/or significant increases Council Bush Regeneration crew to assist with maintenance weed spraying.	Ongoing

Area 3: Bawley wetland and Cormorant Beach



GROUP ACTION	PRIORITY	METHOD	TIMEFRAME
3. Weed control (maintenance). Weeds species incl- Asparagus aethiopicus (ground Asparagus), Zantedeschia stricta (arum lily), Senna pendula (Easter Senna), Ochna serrulata (Mickey Mouse plant), Stenotaphrum secundatum (buffalo grass), Senecio macroglossus (Natal ivy), Tradescantia fluminescensis (Wandering trad), Vinca major (periwinkle), Plectranthus verticillatus (creeping Charlie), Phoenix canariensis (Canary Island date palm) seedlings, Chlorophytum comosum (spider plant) and Chrysanthemoides monilifera (boneseed and bitou bush)	Н	Manual weed control or herbicide use as per product labels or APVMA permits.	Ongoing
 Native species enrichment, fortification and stabilisation planting in spare niches particularly where weeds have been removed, within areas of Endangered Ecological Communities (EEC; Appendix 1) between Terragong Ave and Tingira Dr. 	Н	Source local provenance stock from Milton Ulladulla Landcare Nursery, stake and guard plants to limit being eaten by animals (e.g., wallabies)	As required
 Monitor and control Bryophyllum delagoese (mother of millions) in smaller patches amongst natives where handweeding can be undertaken. 	Н	Hand removal and bagging all propagules, dispose of in rubbish, not compost. Council Bush Regeneration staff assistance	



Area 4: Gannet Beach to Murramarang Beach

GROUP ACTION	PRIORITY	METHOD	TIMEFRAME
Maintain emerging exotic weed species to low levels throughout resilient areas of Bangalay Sand Forest (Endangered Ecological Community) east of Beachglade Place.	Н	Manual weed control or herbicide use as per product labels or APVMA permits.	As required
2. Maintenance weed control of species including Asparagus aethiopicus (ground Asparagus), Senna pendula (Easter Senna), Ochna serrulata (Mickey Mouse plant), Stenotaphrum secundatum (buffalo grass), Polygala myrtifolia (milkwort Polygala), Chrysanthemoides monilifera (boneseed and bitou bush), Lilium formosanum (Formosan lily), Crocosmia sp. (montbretia), Myrsiphyllum asparagoides (bridal veil creeper), Bryophyllum delagoense (mother of millions), Osteospermum fruiticosum (sailor boy daisy) and Sporobolus africanus (Paramatta grass)	Н	Manual weed control or herbicide use as per product labels or APVMA permits.	Ongoing



Area 4: Gannet Beach to Murramarang Beach

GROUP ACTION	PRIORITY	METHOD	TIMEFRAME
3. Monitor <i>Juncus acutus</i> (spiny rush) in the creekline near North Haven Avenue and alert Bushcare Coordinator of further outbreaks	Н	Council Bush regenerator crew or contractor to control <i>Juncus</i> acutus when plant is actively growing	Seasonally
Plant out areas where weeds have been removed with a variety of native species to protect soils and stabilise areas.	M	Source local provenance stock: Understorey (see Section 10) species are to be used, except potentially within areas of Endangered Ecological Communities where taller vegetation already stands (Appendix 1).	As required

5. BUSHCARE GROUP WORKPLACE HEALTH AND SAFETY

New volunteers must be inducted in Shoalhaven City Council's corporate induction process and volunteers must complete a safety induction (Volunteer" Your Duty of Care Responsibilities). https://www.shoalhaven.nsw.gov.au/Services/Volunteering

Based on the activities included in this action plan, a new site hazard and risk assessment will be completed. Volunteers are to be inducted on this revised risk assessment with the adoption of this plan. The 'site hazard and risk assessment' is to be revised as need be, for example, upon the identification of a new hazard, or of a new control measure for an existing hazard.

6. COUNCIL SUPPORT

- Supply tools, herbicide and materials within the constraints of budget
- Training and technical advice
- Administration support
- Assistance with grant applications, administration and management.
- Assistance with events
- Assistance from Council's Bush Regenerator staff as resources allow, as described in the tables above

7. POSSIBLE FUTURE FUNDING

The following projects will be considered as funding opportunities become available:

Project

Funding to be sought opportunistically to assist with weed control and community engagement as outlined in the activities of this plan.

Funding assistance would be particularly useful to undertake the control of coastal morning glory (*Ipomoea cairica*) and mother of millions (*Bryophyllum delagoense*) around south Gannet Beach and Bawley Point.

8. REVIEW

This plan will be reviewed six years from its adoption but can be reviewed sooner if agreed.

9. REGIONAL MANAGEMENT PLANS OR STRATEGIES

Name of document	Year it was produced	Produced by
Bushcare/Parkcare Policy	2018	Shoalhaven City Council
Generic Community Land Plan of Management - Natural Areas	Revised 2016	Shoalhaven City Council
South East Local Strategic Plan 2016-2021	2016	South East Local Land Services
Foreshore Reserves Policy	2005	Shoalhaven City Council
Plan of Management, Gannet Beach Reserve, Bawley Point	1996	Shoalhaven City Council

10. RECOMMENDED REVEGETATION SPECIES

OVERSTOREY (trees)			
Botanical	Common		
Allocasuarina littoralis	Black she-oak		
Allocasuarina distyla	Scrub she-oak		
Banksia integrifolia	Coastal Banksia		
Banksia serrata	Old Man Banksia		
Casuarina glauca	Swamp she-oak		
MID-STOREY (sm	all trees, shrubs, etc)		
Botanical	Common		
Acacia longifolia spp sophorae	Coastal wattle		
Acacia longifolia spp. longifolia	Sydney golden wattle		
Acacia mearnsii	Black wattle		
Acacia Suaveolens	Sweet wattle		
Atriplex cinerea	Grey saltbush		
Correa alba	White Correa		
Glochidion ferdinandi	Cheese tree		
Hakea teretifolia	Dagger Hakea		
Kunzea ambigua	Tick bush		
Leptospermum laevigatum	Coastal tea tree		
Leptospermum polygalifolium	Tantoon		
Melaleuca armillaris	Bracelet honey myrtle		
Melaleuca ericifolia	Swamp paperbark		
Melaleuca hypericifolia	Hillock bush		
Melaleuca linariifolia	Flax-leaved paperbark		
Melaleuca squarrosa	Scented paperbark		
Myoporum acuminatum	Boobialla		
Myoporum boninense	Boobialla		
Pittosporum revolutum	Rough Pittosporum		

Rhagodia candolleana	Seaberry saltbush
Synoum glandulosum	Bastard rosewood
Westringia fruticosa	Coastal rosemary

UNDERSTOREY (grasses, herbs, climbers)

Botanical	Common
Billardiera scandens	Hairy apple berry
Carpobrotus glaucescens	Pigface
Clematis aristata	Old man's beard
Dianella caerula	Blue flax lily
Eustrephus latifolius	Wombat vine
Ficinia nodosa	Knobbly club-rush
Gahnia melanocarpa	Black-fruit saw-sedge
Gahnia sieberiana	Red-fruit saw sedge
Goodenia ovata	Native hops
Hibbertia scandens	Climbing Guinea flower
Juncus kraussii	Club rush
Juncus usitatus	Common rush
Lomandra longifolia	Mat rush
Microlaena stipoides	Weeping grass
Pandorea pandorana	Wonga wonga vine
Poa labillardieri	Tussock grass
Themeda triandra	Kangaroo grass
Viola hederacea	Native violet

11. BUSHCARE SITE WEED LIST

The following weeds have been recorded on the site

Botanical	Common
Acetosa sagittata	Turkey rhubarb
Agapanthus praecox	Agapanthus
Aloe spp.	Aloe
Anredera cordifolia	Madiera vine
Asparagus aethiopicus	Asparagus fern
Asparagus asparagoides	Bridal veil creeper
Asparagus scandens	Climbing asparagus fern
Aristea ecklonii	Blue stars
Agave americana	Century plant
Acacia saligna	Golden wreath wattle
Bidens ssp.	Cobblers pegs
Bryophyllum delagoense	Mother of millions
Canna indica	Canna lily
Chrythanthemoides monilifera subsp monilifera	Boneseed
Chrythanthemoides monilifera subsprotundata	Bitou bush
Crassula sarmentosa	Crassula
Crassula multicava	Shade Crassula
Crocosmia x crocosmiiflora	Montbretia
Chlorophytum comosum	Spider plant
Conyza albida	Fleabane
Coprosma repens	Mirror bush
Delairea odorata	Cape ivy
Dipogon lignosus	Dolichos pea
Euphorbia paralias	Sea spurge
Gazania rigens	Gazania, treasure flower
Hakea salicifolia	Willow-leafed Hakea

Botanical	Common
Hedera helix	English ivy
Ipomoea cairica	Coastal morning glory
Lagunaria patersoniae	Norfolk Island hibiscus
Lilium formosanum	Formosan lily
Lonicera japonica	Honeysuckle
Juncus acutus	Spiny rush
Jasminum polyanthum	White jasmine
Nephrolepis cordifolia	Fishbone fern
Nerium oleander	Oleander
Ochna serrulate	Micky mouse plant
Osteospermum fruticosum	Sailor boy daisy
Oxalis pes-caprae	Oxalis
Olea europaea subsp. Africana	African olive
Passiflora caerulea	Blue passion flower
Passiflora edulis	Passionfruit
Pelargonium quercifolium	South African Geranium
Pennisetum clandestinum	Kikuyu
Plectranthus verticillatus	Creeping Charlie
Paspalum dilatum	Paspalum
Polygala myrtifolia	Myrtle leaf milkwart
Phytolacca octandra	Inkweed
Physalis peruviana	Cape gooseberry
Phoenix canariensis seedlings	Canary Islands date palm
Rubus fruticosus	Blackberry
Senna multiglandulosa	Downy Senna
Senna pendula var: glabrata	Easter Senna
Senna x floribunda,	Senna
Stenotaphrum secundatum	Buffalo grass
Senecio macroglossus	Natal ivy

Botanical	Common
Senecio angulatus	Creeping groundsel
Solanum mauritianum	Tobacco bush
Senecio madagascariensis	Fireweed
Thunbergia alata	Black eyed Susan
Tradescantia fluminescens	Wandering trad
Vinca major	Periwinkle
Zantedeschia stricta	Arum lily

12. BUSHCARE SITE SPECIES LIST

The following endemic plant species have been recorded on the sites

Scientific Name	Common Name
Acacia longifolia subsp. longifolia	Sydney golden wattle
Acacia longifolia subsp. sophorae	Coast wattle
Acacia mearnsii	Black wattle
Allocasuarina littoralis	Black she-oak
Banksia integrifolia subsp. integrifolia	Coast banksia
Baumea articulata	Jointed twig-rush
Billarderia scandens	Apple dumpling
Breynia oblongifolia	Coffee bush
Carex appressa	Tall sedge
Carex breviculmis	Short-stem sedge
Carpobrotus glaucescens	Pigface
Casuarina glauca	Swamp she-oak
Clerodendrum tomentosum	Hairy Clerodendrum
Commelina cyanea	Scurvy weed
Correa alba	White Correa
Corymbia maculata	Spotted gum
Clematis glycinoides	Old man's beard
Cryptostylis erecta	Bonnet orchid
Desmodium varians	Slender tick-trefoil
Dianella caerulea	Blue flax lily
Dichondra repens	Kidney weed
Dipodium punctatum	Hyacinth orchid
Entolasia marginata	Bordered panic
Entolasia stricta	Wiry panic
Eucalyptus botryoides	Bangalay
Eucalyptus globoidea	White stringybark
Eustrephus latifolious	Wombat berry
Exocarpus cupressiformis	Cherry ballard
Ficina nodosa	Knobby club rush
Gahnia clarkei	Tall saw-sedge
Gahnia sieberiana	Red-fruit saw-sedge
Geranium homeanum	Northern cranesbill
Glochidion ferdinandi var. ferdinandi	Cheese tree
Glycine microphylla	Small-leaf Glycine
Glycine tabacina	Purple glycine
Hardenbergia violacae	Happy wanderer
Hibbertia linearis	Showy guinea flower
Hibbertia scandens	Climbing Guinea flower
Homalanthus populifolius	Bleeding heart
Hydrocotyle laxiflora	Stinking pennywort
Imperata cylindrica	Blady grass
Juncus continuus	a rush

Scientific Name	Common Name
Juncus homalocaulis	Wiry rush
Juncus kraussii subsp. australiensis	Sea rush
Juncus vaginatus	Clustered rush
Lachnagrostis filiformis	Blown grass
Landoltia punctata	a duckweed
Leptospernum laevigatum	Coastal tea tree
Leucopogon juniperinus	Long flower beard-heath
Leucopogon parviflorus	Coast beard-heath
Lobelia purpurascens	Whiteroot
Lomandra longifolia	Spinyhead matrush
Melaleuca armillaris subsp. armillaris	Giant honey-myrtle
Melaleuca ericifolia	Swamp paperbark
Microlaena stipoides var. stipoides	Weeping grass
Microtis parviflora	Slender mignonette orchid
Monotoca elliptica	Tree broom-heath
Myoporum acuminatum	Boobialla
Myoporum boninense	Boobialla
Myriophyllum simulans	Water milfoil
Notealea longifolia	Mock olive
Oplismenus aemulus	Basket grass, wavy beard grass
Oplismenus imbecillis	Creeping beard grass
Ornduffia reniformis	Running marsh-flower
Oxalis perennans	Native sorrel
Oxalis rubens	Oxalis
Ozothamnus argophyllus	Spicy everlasting
Ozothamnus diosmifolius	White dogwood
Panicum effusum	Branched panic
Parsonsia straminea	Common silkpod
Paspalidium distans	Spreading panic grass
Pimelea linifolia	Slender rice flower
Pittosporum undulatum	Sweet Pittosporum
Pittosporum revolutum	Rough fruited Pittosporum
Plantago hispida	Hairy plantain
Plectranthus parviflorus	Cockspur flower
Poa cheelii	A grass
Pteridium esculentum	Bracken fern, bracken
Sarcopetalum harveyanum	Pearl vine
Scaevola calendulacea	Dune fan flower
Schelhammera undulatum	Lilac lily
Selliera radicans	Shiny swamp-mat
Senecio linearifolius	Fireweed groundsel
Sphaeromorphaea australis	Spreading nut-heads
Spinifex sericeus	Beach Spinifex
Sporobolus virginicus	Coastal rat-tail Grass
Stephania japonica var. discolor	Snake vine

Scientific Name	Common Name
Syncarpia glomulifera subsp. glomulifera	Turpentine
Tetragonia tetragonioides	Warrigal green
Themeda triandra	Kangaroo grass
Tricoryne elatior	Yellow rush-lily
Tylophora barbarta	Forest bindweed
Viola hederacea	lvy-leaf violet
Westringia fruticosa	Native rosemary
Xanthorrhoea sp.	a grass tree

Appendix 1 – Ecologically Endangered Community mapping, Bawley Point, 2012, Shoalhaven City Council

