SHOALHAVEN BUSHCARE GROUP ACTION PLAN

CONTACT INFORMATION

Group Name: Culburra Beach Bushcare Groups **(CB Progress Assoc, Penguin Hd, Sunshine St, No 69 & 71 The Marina, Allerton Ave, Farant St, Lake Wollumboola, Parsons, Mia way, The Marina)** **Contact: C/o Alasdair Stratton on behalf of CB B/care coordinators** **Address:** **Tel: 44293592 Email: stratton@shoalhaven.nsw.gov.au**

1. **BUSHCARE GROUP GOALS - Please provide a brief description of your Group's proposed project**

Weed removal and revegetation of degraded sites along the coastal reserves of Culbura Beach. Rubbish removal at sites where necessary. *Refer to Lake Wollumboola and Orient Pt Wetland Bushcare Action Plans for further specific information on these group actions.

2. **BUSHCARE SITE MAP**

Show on the site/mud map what short to long term actions you would like to achieve (choose from activities below or include others to show on your site map with list and descriptions where required)

Bush regeneration/revegetation • **Areas for regeneration, revegetation/planting** • **Areas of weed control (include species and stages of weed control)**	**Infrastructure** • **Walking tracks, paths** • **Fencing, bollards** • **Viewing platform** • **Signage**

3. SHOALHAVEN BUSHCARE GROUP ACTIVITIES TABLE (to be in conjunction with attached site map)
NOTE: Priority should be rated as H = High (within 12 months); M = Medium (1-3 years); L = Low

GROUP ACTION (these should relate to your project description)	**PRIORITY**	**METHOD**	**TIME**
Removal of noxious weeds at the site **Removal of other environmental weeds at the site**	**H** **M**	**Hand control techniques**	**Continuous**
Planting of endemic, but preferable provenance plant stock at sites that are unstable and in poor ecological condition such that the planting of tubestock is deemed necessary to assist the rehabilitation processes of the site.	**H**	**Hand planting**	**1-5 years minimum**
Removal of rubbish at the site that impedes the natural and implemented regeneration processes.	**L**	**Hand collect & bag or truck from the site if necessary**	**Continuous**

4. BUSHCARE GROUP ACTION PLAN MAP - *See attached maps

5. BUSHCARE GROUP OH&S & EQUIPMENT REQUIREMENTS

a) Tick the activities that the group volunteers are likely to be doing as part of the action plan and attach the relevant Safe Work Method Statements, see Bushcare Coordinator for copies of these)

Type of Activity	Yes	SWMS name included
Manual weed control (cut & paint, scrape and paint etc)	X	
Chemical control (spraying of herbicides)	X	
Planting	X	
Minor construction (walking track, fencing, outdoor furniture)		
Propagation & seed collection	X	
Education (school groups, field days etc)	X	
Other		

b) Has a site hazard and risk assessment been completed for the Bushcare site?

Yes X **No** ☐

Attach a copy of the site/s risk assessment to the plan.

c) List the Personal Protection Equipment required for volunteers whilst working on the site

PPE Equipment Required	Date issued
First Aid Kit	
Gloves	
Sunscreen	

Insect repellent	
Sturdy footwear	**own**
Hats	**own**
Face masks (Box)	
Insect repellent	

6. COUNCIL SUPPORT
What activities/actions will Council assist with? (list the activities/actions council will do).

Provision of plants when required, inc guards stakes
Provision of truck to remove large piles of rubbish when required.

7. Possible Future Funding

Project	**Funding source**

8. Plan will be reviewed yearly – next review due:

……20…./……2……../…2009…….

The group should review a summary of the Bushcare Policy & Procedures at the time of each annual review

8. Please list other local or regional management plans or strategies that this plan relates to

Name of document	Year it was produced	Produced by
NCNR Management Plan	2006	Dept. Environment and Conservation
Foreshore Reserve Policy	2005	Shoalhaven City Council
Generic Community Land Plan of Management, Natural Areas	2001	Shoalhaven City Council

9. Group support and skill development needs. This information helps to identify gaps that may exist between what the group require to function effectively and what the group has available. **This focuses on the group, *overall,* not individual members.**

Tick one box only	**We are absolute beginners – don't know a great deal**	**We know a bit – enough to get by most of the time**	**We know quite a lot – and we know when to seek help**	**There's probably not much more we can learn on this**	**Comments**
OH&S – develop and follow risk assessment					
Develop and/ or monitor Action Plan					
Plant identification – local native plants					
Weed identification & control methods					
Bush regeneration methods					
Seed collection & propagation					
Group planning and decision making					
Managing neighbour relations					
Community education – schools, neighbours etc					
Volunteer/ group member recruitment					
Preparing grant applications					

List below the 10 most common plants that are indigenous to the area.		List below the 10 most common plants that are *not* indigenous to the area.	
Banksia integrifolia	Lomandra longifolia	Bitou Bush	Prickly Asparagus fern
Leptospermum laevigatum	Clematis glycenioides	Climbing Asparagus fern	Acacia saligna
Casuarina glauca	Rhagodia candolleana	Kikuyu grass	Garden escapes
Carpobrotus glaucescens	Acacia l. spohorae	Lantana	Buffalo grass
Leucopogon parviflorus	Spinifex sericeus	Marram grass	Turkey Rhubarb
Can all of the group regular volunteers identify these? ***YES*** ***NO*** circle one		Can all of the group regular volunteers identify these? ***YES*** ***NO*** circle one	

Bushcare Group Name …….……..... **Coordinator Name** ……..…… **Signature** …….. **Date** …./…./….

Culburra Beach Revegetation Plan 2008

Ten Council Bushcare groups work consistently along the coastal zone of Culburra Beach and Lake Wollumboola. These groups each work within a localised area, but, at times also contribute to dune stabilisation works in other areas along the beach where no group exists to complete the works. All Bushcare works are complimentary to the overall rehabilitation of the much damaged fore dune along Culburra Beach. It is for this reason that rehabilitation works plan for individual groups within the Culburra Beach area is presented as an holistic plan of revegetation works for the Culburra Beach foredune.

The following plan outlines weeds to be controlled at Bushcare sites along the foredune and the required revegetation works over the next year. Weed species targeted and control methods are listed and basic environmental characteristics are described for each site. The reason for the necessity of revegetation works and the plantings that are required to ensure stabilisation and rehabilitation to the site are fulfilled.

All control methods are in accordance with the Australian Pest & Veterinary Medicines Authority (APVMA) permits issued for the control of environmental weeds: pin particular PER 9158 and PER5206.

Works are determined by the availability of volunteers to conduct weeding and planting, the availability of plants and availability of funding to support the revegetation works.

TARGET WEEDS

WEED SPECIES TARGETED	CONTROL METHODS UTILISED	CHEMICAL USED
Bitou Bush	Cut & Paint Spot Spray Hand pull	water : glyphosate 3:1 water : glyphosate 100:1
Prickly Asparagus	Cut & Paint Spot Spray Hand pull	glyphosate undiluted. Mix of glypsosate+metsulpheron methyl+ “Pulse” surfactant
Bridal Creeper	Biological control	Fungal Rust release
Lantana	Cut & Paint Spot Spray Hand pull	water : glyphosate 3:1 Various as per permit
Cassia	Cut & Paint Spot Spray	water : glyphosate 3:1 water : glyphosate 50:1

Cassia cont…	Hand pull	Mix of glypsosate+metsulpheron methyl+ “Pulse” surfactant Bag seeds
Moth vine	Cut & Paint Spot Spray Hand pull	water : glyphosate 3:1 water : glyphosate 75:1 + “Pulse” surfactant Bag seeds
Kikuyu	Spot Spray Hand pull	water : glyphosate 100:1
Garden Escapes	Cut & Paint Spot Spray Hand pull	As per species water : glyphosate &/or metsulpheron methyl + “Pulse” surfactant Bag seeds/stolons/tubers
Turkey Rhubarb	Cut & Paint Spot Spray Hand pull	water : glyphosate 3:1 water : glyphosate 75:1 + “Pulse” surfactant Bag seeds
African Boxthorn	Spot Spray Stem Injection/drill	water : glyphosate 10:1 + “Pulse” surfactant water : glyphosate 1.5:1 or alternative options as described in APVMA Licence

1. PARK ROW

BUSHCARE GROUP
Parsons

SITE CHARACTERISTICS
Wide, low sand dune with residential blocks behind. Localised destabilised sites throughout of site. Reserve adjacent to beach access between residential blocks weed infested and destabilised also.

REASON FOR PLANTING
Weed infestation degraded natural vegetation. In front of residential land human use has negatively impacted health of dune causing denudation, slippage and erosion.

Weed infestation increasing on reserve land adjacent to beach access track.

Dune requires plants for stabilisation of the dunal sands.

Recommended Species	Plant Habit	No. of Plants	Issues
Lomandra longifolia	Tufted grass	100	Low growing habit
Rhagodia candolleana	herb	40	Low growing habit
Acacia sophorae	shrub	40	Low growing habit
Hibertia scandens	creeper	20	Low growing habit
Kennedia rubicunda	creeper	20	Low growing habit
Leptospermum laevigatum Banksia integrifolia	Small tree Medium tree	80 40	Species present in large numbers at site. Trees to be planted on reserve between residential blocks dune without any view restrictions.

2. VIVIAN WAY TO THE STRAND

BUSHCARE GROUP
Sunshine St

SITE CHARACTERISTICS
Wide, high sand dune with residential blocks behind. High, unstable dunes throughout of site.

REASON FOR PLANTING
Weed infestation degraded natural vegetation. In front of residential land human use has negatively impacted health of dune causing denudation, slippage and erosion.

Dune requires plants for stabilisation of the dunal sands.

Recommended Species	Plant Habit	No. of Plants	Issues
Lomandra longifolia	Tufted grass	300	Low growing habit
Rhagodia candolleana	herb	120	Low growing habit
Acacia sophorae	shrub	300	Low growing habit
Hibertia scandens	creeper	50	Low growing habit
Kennedia rubicunda	creeper	20	Low growing habit
Crinum pedunculatum	shrub	10	Low growing habit
Myoporum boninense	shrub	40	Medium growing habit
Leptospermum laevigatum Banksia integrifolia	Small tree Medium tree	80 40	Present in large numbers at site. Height of dune allows trees to be planted on lower dune without any view restrictions.

3. MIA WAY/BELGRAVE ST

BUSHCARE GROUP
Mia Way

SITE CHARACTERISTICS
Wide, low, rising sand dune with residential blocks behind. High, unstable dune to north of site fronting Belgrave St eastern end.

REASON FOR PLANTING
Weed infestation degraded natural vegetation. In front of residential land human use has negatively impacted health of dune causing denudation, slippage and erosion.

Dune requires plants for stabilisation of the dunal sands.

Recommended Species	Plant Habit	No. of Plants	Issues
Lomandra longifolia	Tufted grass	100	Low growing habit
Rhagodia candolleana	herb	30	Low growing habit
Acacia sophorae	shrub	100	Low growing habit
Hibertia scandens	creeper	20	Low growing habit
Leptospermum laevigatum	Small tree	20 20	Present in large numbers at site. Will not be planted where height may block views.

4. MOWBRAY ST BEACH ACCESS + THE MALL

BUSHCARE GROUP
The Marina

SITE CHARACTERISTICS
Mowbray St - Short, steep rising sand dune with residential blocks behind. Northern portion of site (backing The Bowery beach access track) is remnant rainforest pocket.

The Mall – Steep dune with deep trough behind lower foredune. Residential blocks behind.

REASON FOR PLANTING
Weed infestation degraded natural vegetation. In front of residential land human use has negatively impacted health of dune causing denudation, slippage and erosion.

Lower, top and hind portion of the dune require plants for stabilisation of the dunal sands.

Recommended Species	Plant Habit	No. of Plants	Issues
Lomandra longifolia	Tufted grass	200	Low growing habit
Rhagodia candolleana	herb	40	Low growing habit
Tetragonia tetragonoides	creeper	30	Low growing habit
Hibbertia scandens	creeper	30	Low growing habit
Crinum pedunculatum	shrub	10	Low growing habit
Acacia sophorae	shrub	200	Low growing habit
Hibertia scandens	creeper	20	Low growing habit
Cissus antarctica	creeper	20	Low growing habit
Cissus hypoglauca	creeper	20	Low growing habit
Acmena smithii (Relic r'forest species)	Small tree	10	Relic rainforest site at The Bowery. No views will be obstructed as these species currently exist on reserve in gully between fore dunes - neighbouring resident planting this species themselves at this location.
Leptospermum laevigatum Banksia integrifolia	Small tree Medium tree	40 20	Existing specimens exist in reserve adjacent but not in front of residential blocks. Residents appreciate the wind break these trees create and wish to replace senescing plants.

5. WOODLAND ST/MARINA LN

BUSHCARE GROUP
No 69 & 71 The Marina Bushcare group

SITE CHARACTERISTICS
Short, steep rising sand dune with residential blocks behind.

REASON FOR PLANTING
Weed infestation degraded natural vegetation. In front of residential land human use has negatively impacted health of dune causing denudation, slippage and erosion.

Top and hind portion of the dune require plants for stabilisation of the dunal sands.

Recommended Species	Plant Habit	No. of Plants	Issues
Lomandra longifolia	Tufted grass	100	Low growing habit
Rhagodia candolleana	herb	30	Low growing habit
Acacia sophorae	shrub	100	Low growing habit
Hibertia scandens	creeper	20	Low growing habit
Cissus antarctica	creeper	20	Low growing habit
Cissus hypoglauca	creeper	20	Low growing habit
Casuarina glauca Acmena smithii	Medium tree Medium tree	20 20	Occurs naturally at site. No views will be obstructed as these species currently exist on reserve down side of residential block and beach access track.

6. NORTH ST/MARINA LN

BUSHCARE GROUP
Allerton Ave

SITE CHARACTERISTICS
Gentle rising sand dune with residential blocks behind.

REASON FOR PLANTING
Weed infestation degraded natural vegetation. In front of residential land human use has negatively impacted health of dune causing denudation and erosion.

Various locations across the dune require plants for stabilisation of the dunal sands.

Recommended Species	Plant Habit	No. of Plants	Issues
Lomandra longifolia	Tufted grass	40	Low growing habit
Rhagodia candolleana	herb	20	Low growing habit
Acacia sophorae	shrub	40	Low growing habit
Leptospermum laevigatum	Small tree	10	Occurs naturally at site. No views will be obstructed as these species currently exist where dune is backed by reserve land.

7. OCEAN ST CARPARK SITE

BUSHCARE GROUP
Non

SITE CHARACTERISTICS
Gentle rising sand dune with car parking and residential blocks behind.

REASON FOR PLANTING
Weed infestation degraded natural vegetation. In front of residential land human use has negatively impacted health of dune causing denudation, slippage and erosion.

Various locations across the dune require plants for stabilisation of the dunal sands.

Recommended Species	Plant Habit	No. of Plants	Issues
Lomandra longifolia	Tufted grass	40	Low growing habit
Rhagodia candolleana	herb	20	Low growing habit
Acacia sophorae	shrub	40	Low growing habit
Leptospermum laevigatum Banksia integrifolia	Small tree Medium tree	20 20	Occurs naturally at site. No views will be obstructed as these species currently exist where dune is backed by reserve land.

8. HAVEN ST

BUSHCARE GROUP
Penguin Head

SITE CHARACTERISTICS
Steep sand dune with car parking and residential blocks above.

REASON FOR PLANTING
Drainage pipe scoured out extensive area of dune. Weed infestation degraded natural vegetation. In front of residential land human use has negatively impacted health of dune causing denudation, slippage and erosion.

Various locations across the steep dune require plants for stabilisation of the dunal sands.

Recommended Species	Plant Habit	No. of Plants	Issues
Tetragonia tetragonoides	creeper	30	Low growing habit
Hibbertia scandens	creeper	30	Low growing habit
Kennedia rubicunda	creeper	40	Low growing habit
Lomandra longifolia	Tufted grass	300	Low growing habit
Rhagodia candolleana	herb	30	Low growing habit
Acacia sophorae	shrub	100	Low growing habit

9. TILBURY COVE

BUSHCARE GROUP
Culburra Beach Progress Association

SITE CHARACTERISTICS
Steep embankment (10m) backed by residential development and parkland reserve. Upper slopes are clay with sand dunes on the lower foot of the embankment.

REASON FOR PLANTING
Slippage occurring from poor drainage from grassed reserve and residential blocks located along Penguin Hd Rd, and from weed infestation degrading the natural vegetation at the site.

Various locations across the steep embankment and on the lower dunes require plants for stabilisation of the embankment clays and lower dunal sands.

Recommended Species	Plant Habit	No. of Plants	Issues
Tetragonia tetragonoides	creeper	30	Low growing habit
Hibbertia scandens	creeper	30	Low growing habit
Hardenbergia violacea	creeper	30	Low growing habit
Kennedia rubicunda	creeper	40	Low growing habit
Lomandra longifolia	Tufted grass	100	Low growing habit
Rhagodia candolleana	herb	30	Low growing habit
Crinum pedunculatum	shrub	10	Low growing habit
Acacia sophorae	shrub	40	Low growing habit
Westringia fruiticosa	shrub	20	Low growing habit
Myoporum bobinense	shrub	20	Low growing habit
Myoporum acuminatum Casuarina glauca Banksia integrifolia	Small tree Medium tree Medium tree	20 20 20	Existing tree species present. Roots will ensure long-term stabilisation. Steep embankment permits tree growth with no obstruction of views to residents with lower slope plantings.

10. PENGUIN HEAD

BUSHCARE GROUP
Culburra Beach Progress Association

SITE CHARACTERISTICS
Gentle rising sand dune with car parking and residential blocks behind.

REASON FOR PLANTING
Erosion occurring from vegetation removal due to development, and from weed infestation degrading the natural vegetation at the site.

Various locations on the cliff top for stabilisation of the clay substrate amongst the existing vegetation.

Recommended Species	Plant Habit	No. of Plants	Issues
Tetragonia tetragonoides	creeper	30	Low growing habit
Hibbertia scandens	creeper	30	Low growing habit
Kennedia rubicunda	creeper	40	Low growing habit
Lomandra longifolia	Tufted grass	100	Low growing habit
Rhagodia candolleana	herb	30	Low growing habit
Westringia fruiticosa	shrub	40	Low growing habit
Acacia sophorae	shrub	20	Low growing habit

11. SURF CLUB

BUSHCARE GROUP
Culburra Beach Progress Association

SITE CHARACTERISTICS
Gentle rising sand dune with car parking and residential blocks behind.

REASON FOR PLANTING

Weed infestation degraded natural vegetation. Human use has negatively impacted health of dune causing denudation and erosion. Various locations across the dune require plants for stabilisation of the dunal sands.

Recommended Species	Plant Habit	No. of Plants	Issues
Tetragonia tetragonoides	creeper	20	Low growing habit
Hibbertia scandens	creeper	10	Low growing habit
Lomandra longifolia	Tufted grass	100	Low growing habit
Rhagodia candolleana	herb	30	Low growing habit
Crinum pedunculatum	shrub	10	Low growing habit
Acacia sophorae	shrub	80	Low growing habit
Myoporum acuminatum Casuarina glauca Banksia integrifolia Acmena smithii (Relic r'forest sp)	Small tree Medium tree Medium tree Medium tree	20 20 20 20	Existing tree species present. Relic rainforest site. Steep dune permits tree growth with no obstruction of views to residents.

12. FARRANT ST

BUSHCARE GROUP
Farrant St

SITE CHARACTERISTICS
High sand dune with lower undulating dunes with residential blocks behind.

REASON FOR PLANTING
Weed infestation degraded natural vegetation. In front of residential land human use has negatively impacted health of dune causing denudation, slippage and erosion.

Various locations on the high dune for stabilisation of the sands amongst the existing vegetation.

Recommended Species	Plant Habit	No. of Plants	Issues
Tetragonia tetragonoides	creeper	30	Low growing habit
Hibbertia scandens	creeper	30	Low growing habit
Kennedia rubicunda	creeper	40	Low growing habit
Lomandra longifolia	Tufted grass	100	Low growing habit
Dianella caerulea	herb	20	Low growing habit
Rhagodia candolleana	herb	30	Low growing habit
Acacia sophorae	shrub	80	Low growing habit

13. LAKESIDE PARK DUNES

BUSHCARE GROUP
Lake Wollumboola

SITE CHARACTERISTICS
Low sand dune backed by recreational reserve.

REASON FOR PLANTING
Poor habitat existing from weed infestation degrading the natural vegetation at the site. Human use has negatively impacted health of dune causing denudation

Various locations dune for stabilisation amongst the existing vegetation.

Recommended Species	Plant Habit	No. of Plants	Issues
Tetragonia tetragonoides	creeper	30	Low growing habit
Hibbertia scandens	creeper	40	Low growing habit
Lomandra longifolia	Tufted grass	100	Low growing habit
Dianella caerulea	herb	20	Low growing habit
Rhagodia candolleana	herb	40	Low growing habit
Acacia l. sophorae	shrub	80	Low growing habit

14. LAKE WOLLUMBOOLA

BUSHCARE GROUP
Lake Wollumboola

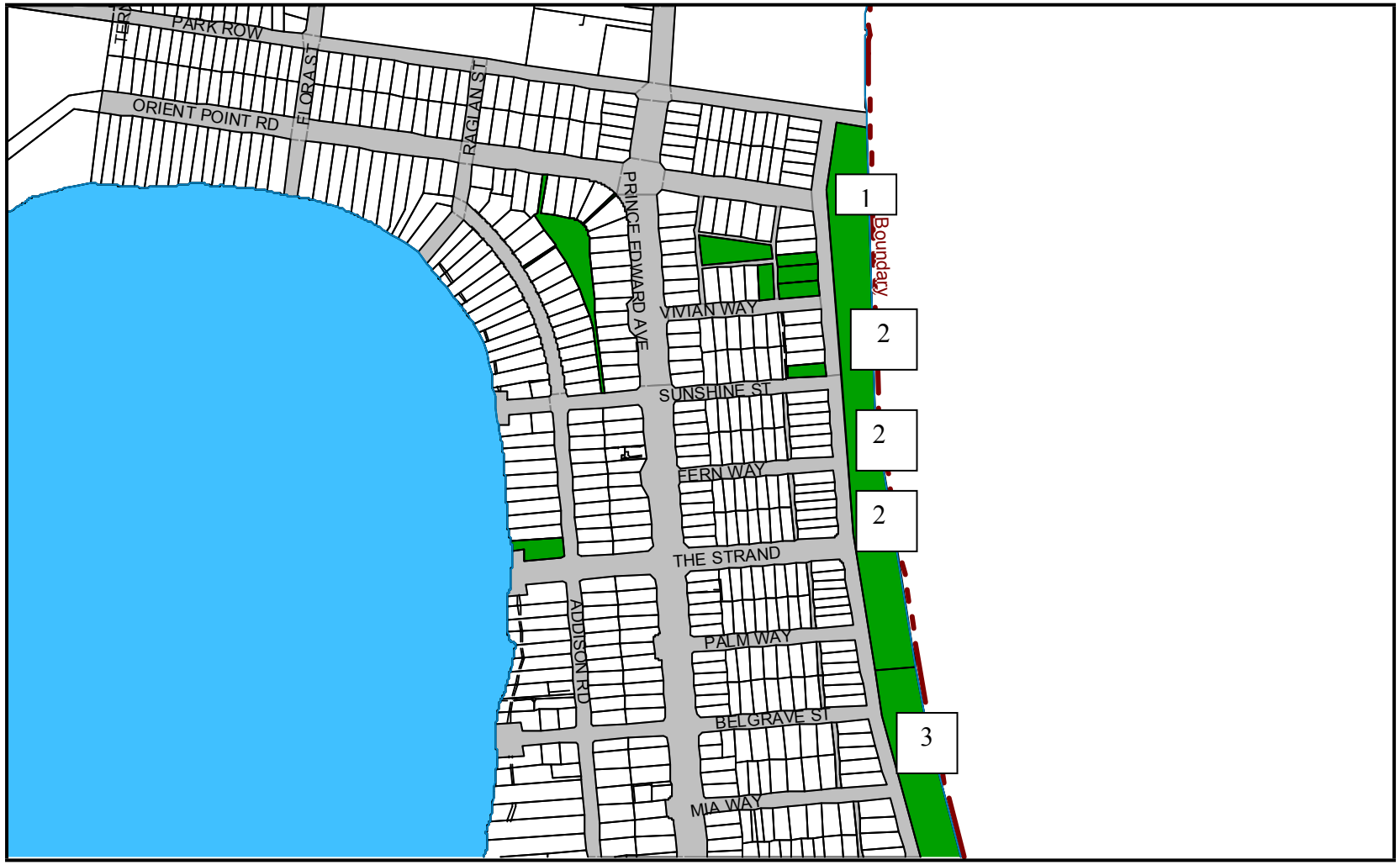
SITE CHARACTERISTICS
SEPP 14 wetland along lake foreshore. Lake foreshore vegetation backed by woodland.

REASON FOR PLANTING
Poor habitat existing from weed infestation degrading the natural vegetation at the site. Human use has negatively impacted health of foreshore system causing localised weed infestation and native vegetation denudation.

Various locations at site for stabilisation and rehabilitation amongst the existing vegetation.

Recommended Species	Plant Habit	No. of Plants	Issues
Tetragonia tetragonoides	creeper	30	Low growing habit
Hibbertia scandens	creeper	40	Low growing habit
Rubus parviflora	Creeper	30	Low growing habit
Juncus kraussii	Tufted rush	100	Low growing habit
Lomandra l sophorae	Tufted grass	200	Low growing habit
Scaevola albida	shrub	120	Low growing habit
Dianella cerulea	Herb	40	Low growing habit
Viola hederacea	herb	40	Low growing habit
Dichondra repens	herb	40	Low growing habit
Acacia longifolia var. sophorae Hakea salicifolia Kunzea ambigua Myoporum boninense Melaleuca hypericifolia	Shrubs	20 of each	Existing shrub specimens present in reserves
Banksia integrifolia Casuarina glauca Melaleuca ericifolia Leptospermum laevigatum	Medium trees	40 40 40	Existing tree specimens present in reserves
Banksia serrata Eucalyptus botryoides	Tall Trees	20 20	Existing tree specimens present in reserve

Culburra Beach (Northern Zone) Bushcare Planting Sites.
**Refer to Revegetion Plan in Bushcare Plan for explanation of Site References.*

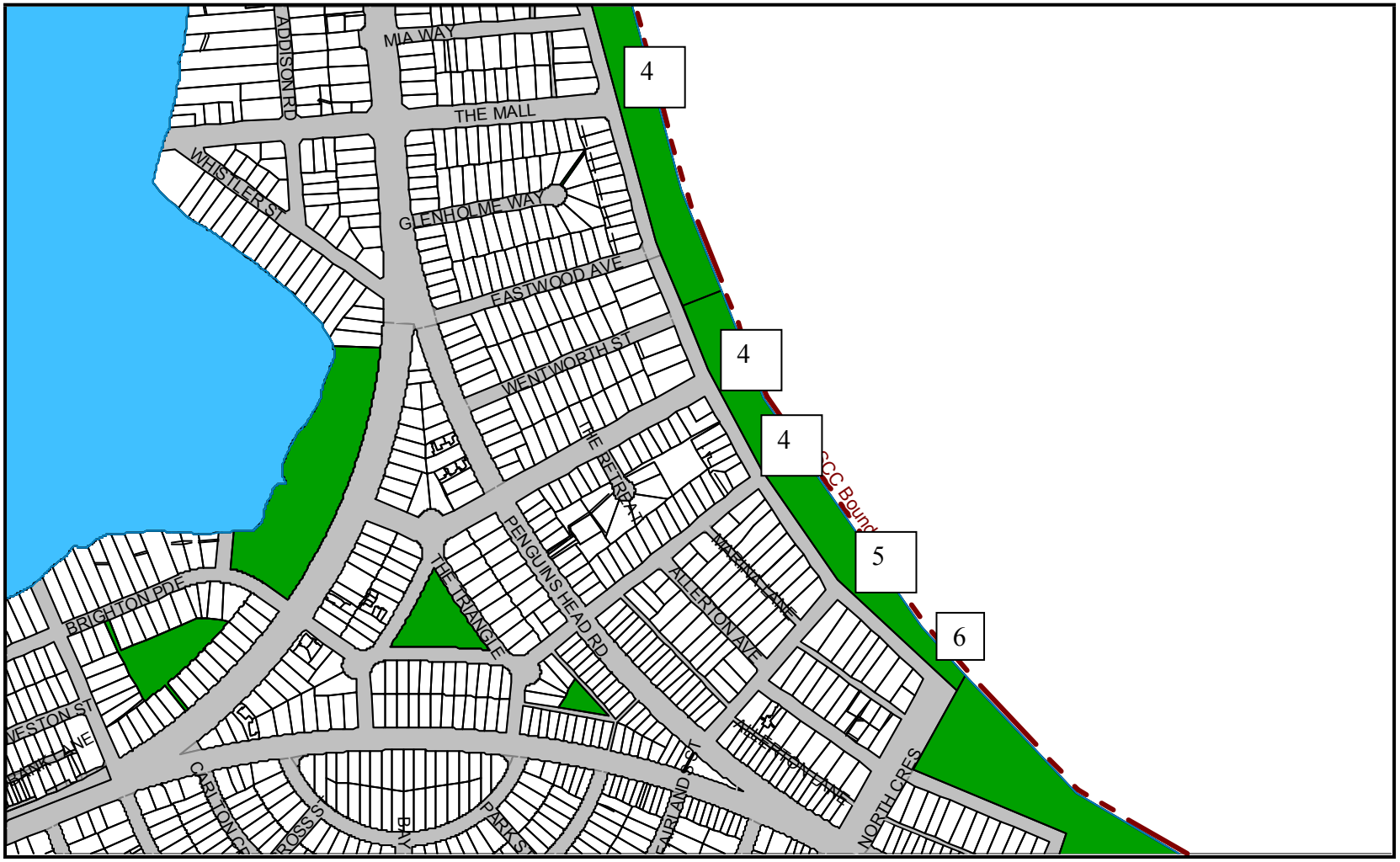


1 = Parsons BC

2 = Sunshine St BC

3 = Mia Way BC

Culburra Beach (Central Zone) Bushcare Planting Sites
**Refer to Revegetion Plan in Bushcare Plan for explanation of Site References.*



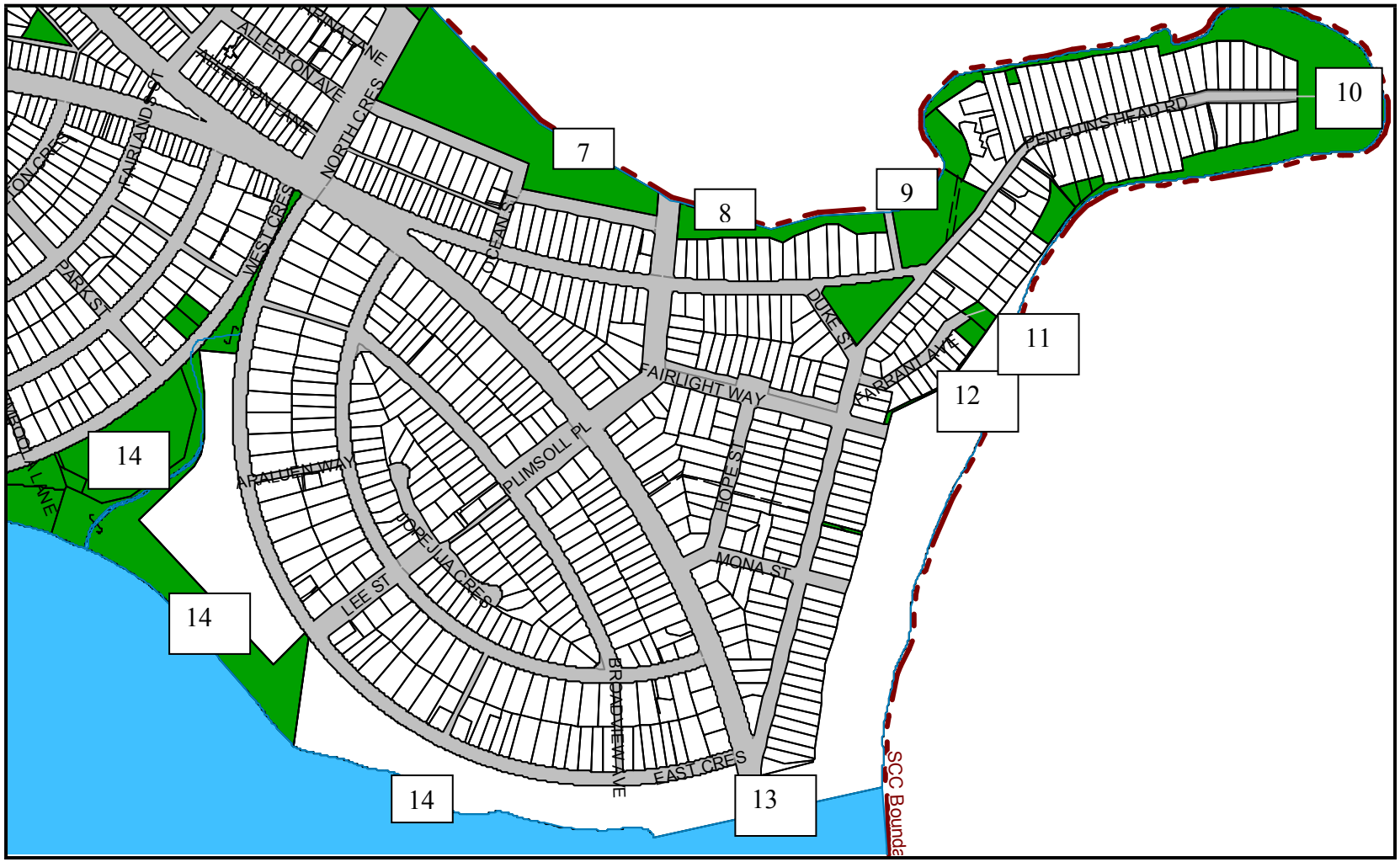
4 = The Marina BC

5 = 69 & 71 The Marina BC

6 = Allerton St BC

Culburra Beach (Southern Zone) Bushcare Planting Sites

**Refer to Revegetion Plan in Bushcare Plan for explanation of Site References.*



7 = No BC

8 = Penguin Head BC

9 = CBPAssn BC

10 = CBPAssn BC

11 = CBPAssn BC

12 = Farrant St BC

13 = Lk Wollumboola BC

14 = Lk Wollumboola BC

15 = Lk Wollumboola BC