



ULLADULLA - CONJOLA ST RESERVE BUSHCARE ACTION PLAN

Document Number: D15/67084 • Adopted: 08/09/2015 • Minute Number: D15/266338 • File: 26281E • Produced By: Planning & Development Services Group • Review Date: 08/09/18

CONTACT INFORMATION

Group Name:	Ulladulla – North Head
Contact:	Peter Lloyd
Address:	57 Leo Drive, Narrawallee
Telephone:	(02) 4454 2082
Reserve Name:	Conjola St
Reserve Number:	SUL941
Land Tenure:	Crown Land CCM
Community Land Type:	Park/Natural Area

1. BUSHCARE GROUP GOALS

The goals of the Ulladulla – Conjola St Reserve Bushcare Group are as follows:

- 1. Maintain and improve the reserve's biodiversity by encouraging native forbs, herbs, grasses and other ground covers to regenerate.
- 2. Staged control/removal of invasive weed species at a rate commensurate with native vegetation regeneration and establishment.
- 3. Reduce the amount of gully and sheet erosion currently occurring in the reserve due to storm water management and cyclic maintenance regimes.
- 4. Raise awareness in the local neighbourhood of the environmental values of the reserve via direct face to face contact and production and distribution of information on the local ecology of the reserve.

2. 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
Improving biodiversity and reduce	erosion on th	ne Conjola St Reserve	
 Regeneration Actions: 1. Identify native vegetation regeneration islands that already have existing diversity of understory native vegetation in which cyclic mowing can be removed (see map) to encourage regeneration of native groundcover species and reduce sheet erosion. 2. Map these regeneration areas (see Bushcare Action Plan map page 3) and undertake regeneration in a staged 	Н	 Council staff and Bushcare Group to identify proposed regeneration islands. Council staff to map regeneration areas. 	2 to 5 years and On-going
 approach. 3. Start an initial trial of the regeneration areas 1 & 2 (as per map) and create no mow areas to encourage regeneration of native flora (see methods for details). 4. Monitor the trial regeneration sites with a view to undertaking the same actions in regeneration areas 3, 4 and 5. 		 3. Meet with Council staff to agree on regeneration areas as per map starting with areas 1 & 2: a. Removal of cyclic mowing from the area to encourage ground cover growth; b. Add thick layer of mulch around the perimeter of the regeneration area; c. Spray perimeter of 	

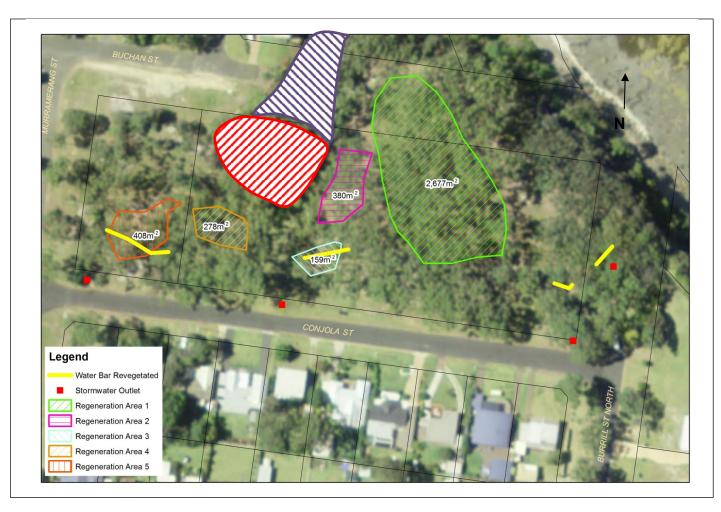
GROUP ACTION (these should relate to your project description)	PRIORITY	METHOD	TIME
		 mulch to prevent exotic grasses from colonizing; d. Install bollards at each corner of the regeneration area to give a visual indication that the area is a regeneration zone; e. Monitor and control annual weeds within the regeneration area; f. Monitor and control perennial weeds in the regeneration area. 	
 Erosion Control Actions: 1. Shoalhaven Council to widen and create a swale drainage area between regeneration areas 3 & 4 to reduce the storm water erosion 2. Council to use excess soil from drainage works to create 200mm-300mm high water bar to slow the movement of storm water across the reserve and reduce sheet erosion and loss of top soil (see plan map 	H	*See Bushcare Plan map for water bar locations and attached water bar specifications for constructions specifications * See plans suggested revegetation species list	1 to 2 years and On – going

GROUP ACTION (these should relate to your project description)	PRIORITY	METHOD	TIME
for water bar locations and appendix 1for water bar construction specifications)3. Bushcare Group to mulch and plant low growing native grasses into the water bars and maintain			
Area A (as per map) – Upper section of large storm water gully in the north – west section of the reserve - this area is heavily impacted by storm water erosion and nutrient loading. This has led to an increase in weed cover and density of weeds such as Kahili Ginger Lily, Japanese Honey Suckle, Winter Senna and Monbretia. There are still remnants of native vegetation in the core of the area with the dominant species being <i>Eucalyptus pilularis, Corymbia gummifera,</i> <i>Banksia integrifolia</i> and <i>Banksia serrata</i> . The dominant mid and understory native species is <i>Lomandra longifolia,</i> <i>Pittosporum undulatum</i> and <i>Gahnia spp</i> . The Honeysuckle is dominating the area and the Bushcare Group will undertake the following actions:	М	Area A Work from healthy less degraded areas towards more degraded targeting the following weed species:	On-going
 Bushcare Group to work from healthy areas to more degraded areas. Seek assistance from a labour market program such as "The Green Army" to remove/control Winter Senna and Kahili Ginger Lily. Bushcare Group to undertake a follow-up maintenance, 		 Hand removal of Japanese Honeysuckle using paint and scrape. Selective cut and paint of Senna/Cassia. Spot spraying of exotic 	

GROUP ACTION (these should relate to your project description)	PRIORITY	METHOD	TIME
working from healthy areas to degraded areas.		grasses using low dilution rates of glyphosate 1:200 ratio.	
 Area B (as per map) - Lower section of storm water gully adjacent to Area A in the north – west section of the reserve – this section has greater native plant diversity then Area A, particularly in the understory. The actions for Area B are as follows: 1. Control/remove Coastal Morning Glory and undertake follow up control. 2. Control/removal of Winter Senna, Asparagus Fern and Indian Hawthorn working from poor areas to good. 	L	 Area B Work from healthy less degraded areas towards more degraded targeting the following weed species: 1. Spray out larger infestations of Morning Glory and paint scrape smaller infestations with Vigilant. 2. Crown out Asparagus Fern or spot spray larger infestations with Metsulfuron Methyl. 3. Cut and paint Senna/Cassia. 4. Cut and paint Indian Hawthorn. 	On - going
Bushcare Group to undertake weed control of smaller vegetation island at the bases of larger Eucalypts as follows: 1. Remove/control weeds.		 Spray vegetation island edges with 1:200 glyphosate to reduce competition from exotic grasses. Hand removal of weeds where practical. 	On-going

GROUP ACTION (these should relate to your project description)	PRIORITY	METHOD	TIME
Public awareness raising of r	eserve enviro	onmental values	
 Actions: 1. Door knock and invite local residents to join the Bushcare Group. 2. Door knock and distribute brochure/factsheet on the ecology of the reserve. 	М	 Council to assist with the production of information for distribution to residents. Bushcare Group to door knock and distribute information. 	1 year

3. BUSHCARE GROUP ACTION PLAN MAP



Storm Water Gully – Area A

Storm Water Gully – Area B



4. BUSHCARE GROUP WHS & EQUIPMENT REQUIREMENTS

Type of Activity	Yes	SWMS name included
Manual weed control (cut and paint, scrape and paint etc.)	\checkmark	SWMSNR030
Chemical control (spraying of herbicides)	\checkmark	SWMSNR030
Planting		SWMSNR040
Minor construction (walking track,		
fencing, outdoor furniture)		
Propagation & seed collection	\checkmark	SWMSNR040
Education (school groups, field days etc.)		
Other		

5. COUNCIL SUPPORT

Council to provide the following support:

- Supply of mulch and plants
- Drainage works
- Installation of bollards
- Technical advice and assistance
- Provision of mulch
- Tools and equipment
- Grant application and management support
- Printing
- One Bushcare Support Trainer to assist the group on site for 4 hours per month
- Herbicide

6. HAS A SITE HAZARD AND RISK ASSESSMENT BEEN COMPLETED FOR THE BUSHCARE SITE?

Yes \sqrt{NO}

7. LIST THE PERSONAL PROTECTION EQUIPMENT REQUIRED FOR VOLUNTEERS WHILST WORKING ON THE SITE

PPE Equipment Required	Date issued
First Aid Kit	Nov 2014
Gloves	Nov 2014
Sunscreen	Nov 2014
Insect repellent	Nov 2014

8. POSSIBLE FUTURE FUNDING

Project	Funding source
N/A	N/A

9. PLAN WILL BE REVIEWED EVERY THREE YEARS

Next review due:

8 September 2018

10. PLEASE LIST OTHER LOCAL OR REGIONAL MANAGEMENT PLANS OR STRATEGIES THAT THIS PLAN RELATES TO

Name of document	Year it was produced	Produced by
Foreshores Reserve Policy	2005	Shoalhaven City Council
Generic Community Land PoM - Parks	2001	Shoalhaven City Council
Coastal Zone Plan of Management	2012	Shoalhaven City Council

11. BUSHCARE SITE RECOMMENDED PLANTING/REVEGETATION SPECIES LIST

UNDERSTOREY (grasses, herbs, climbers)		
Botanical	Common	
Dianella caerulea	Native Flax Lily	
Gahnia sp	Sword Grass	
Hardenbergia violacea	Happy Wonderer	
Hibbertia aspera	Rough Guinea Flower	
Hibbertia scandens	Native Guinea Flower	
Kennedia prostrata	Running Postman	
Kennedia rubicunda	Dusky Coral Pea	
Lomandra longifolia	Spiny Matt Rush	
Themeda triandra	Kangaroo Grass	

12. BUSHCARE SITE WEED LIST (The following weeds have been recorded on the site)

Noxious	Environmental
Blackberry	
	Coastal Morning
	Glory
	Cassia
	Honeysuckle
	Formosan Lily
	Ginger Lily
	Agapanthus
	Montbretia
	Indian Hawthorn
	Asparagus Fern
	Giant Paspalum
	Buffalo Grass

13. BUSHCARE SITE SPECIES LIST (The following species have been recorded on the site)

OVERSTOREY TREES	
Botanical	Common
Banksia integrifolia	Coastal Banksia
Banksia serrata	Old Man Banksia
Corymbia gummifera	Bloodwood

Eucalyptus Pilularis	Blackbutt
Syncarpia glomulifera	Turpentine
SHRUBS	
Botanical	Common
Acacia longifolia	Sydney Golden Wattle
Acacia myrtifolia	Myrtle Wattle
Acacia suaveolens	Sweet Scented Wattle
Acacia ulicifolia	Prickly Mosses
Allocasuarina littoralis	Black She Oak
Banksia spinulosa	Hairpin Banksia
Breynia oblongifolia	Native Privet
Dodonaea triquetra	Native Hops
Persoonia levis	Geebung
Pittosporum undulatum	Sweet pittosporum
Platysace lanceolata	Shrubby Platysace
Podolobium ilicifolium	Prickly Shaggy Pea
Pultenaea daphnoides	Large Bush Pea
Ziera smithii	Sandfly Zieria
UNDERSTOREY (grasses,	herbs, orchids)
Botanical	Common
Dianella caerulea	Native Blue Flax Lily
Dipodium punctatum	Hyacinth Orchid
Entolasia stricta	Wiry Panic Grass
Eragrostis brownii	Browns Love Grass
	DIOWIIS LOVE GLASS
Gahnia sp	Sword Grass
Gahnia sp Imperata cylindrica	
	Sword Grass
Imperata cylindrica	Sword Grass Blady Grass
Imperata cylindrica Lomandra longifolia	Sword Grass Blady Grass Spiny Matt Rush
Imperata cylindrica Lomandra longifolia Pteridium esculentum	Sword Grass Blady Grass Spiny Matt Rush Common Bracken Kangaroo Grass
Imperata cylindrica Lomandra longifolia Pteridium esculentum Themeda triandra	Sword Grass Blady Grass Spiny Matt Rush Common Bracken Kangaroo Grass
Imperata cylindrica Lomandra longifolia Pteridium esculentum Themeda triandra UNDERSTOREY (vines	Sword Grass Blady Grass Spiny Matt Rush Common Bracken Kangaroo Grass & climbers)
Imperata cylindrica Lomandra longifolia Pteridium esculentum Themeda triandra UNDERSTOREY (vines Botanical	Sword Grass Blady Grass Spiny Matt Rush Common Bracken Kangaroo Grass & climbers) Common
Imperata cylindrica Lomandra longifolia Pteridium esculentum Themeda triandra UNDERSTOREY (vines Botanical Billardiera scandens	Sword GrassBlady GrassSpiny Matt RushCommon BrackenKangaroo Grass & climbers)CommonApple Dumpling
Imperata cylindrica Lomandra longifolia Pteridium esculentum Themeda triandra UNDERSTOREY (vines Botanical Billardiera scandens Eustrephus latifolius	Sword Grass Blady Grass Spiny Matt Rush Common Bracken Kangaroo Grass & climbers) Common Apple Dumpling Wombat Berry
Imperata cylindrica Lomandra longifolia Pteridium esculentum Themeda triandra UNDERSTOREY (vines Botanical Billardiera scandens Eustrephus latifolius Hardenbergia violacea	Sword Grass Blady Grass Spiny Matt Rush Common Bracken Kangaroo Grass & climbers) Common Apple Dumpling Wombat Berry Happy Wonderer
Imperata cylindrica Lomandra longifolia Pteridium esculentum Themeda triandra UNDERSTOREY (vines Botanical Billardiera scandens Eustrephus latifolius Hardenbergia violacea Hibbertia aspera	Sword Grass Blady Grass Spiny Matt Rush Common Bracken Kangaroo Grass & climbers) Common Apple Dumpling Wombat Berry Happy Wonderer Rough Guinea Flower
Imperata cylindrica Lomandra longifolia Pteridium esculentum Themeda triandra UNDERSTOREY (vines Botanical Billardiera scandens Eustrephus latifolius Hardenbergia violacea Hibbertia aspera Hibbertia scandens	Sword GrassBlady GrassSpiny Matt RushCommon BrackenKangaroo Grass & climbers) CommonApple DumplingWombat BerryHappy WondererRough Guinea FlowerNative Guinea Flower

Bushc	are Group Name:	
Coordi	nator Name:	
Signat	ure:	
Date:		

