



## MOLLYMOOK BUSHCARE GROUP ACTION PLAN – REVIEW 2016

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### CONTACT INFORMATION

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<b>Reserve Name:</b>	Mitchell Parade Reserve
<b>Reserve Number:</b>	SMM808 & SMM809
<b>Land Tenure:</b>	SCC & Crown Land
<b>Comm. Land Type:</b>	Natural Area – Bushland & Foreshore

### 1. BUSHCARE GROUP GOALS

The goals of the Mollymook Bushcare Group are as follows:

1. Work with Shoalhaven City Council to protect and regenerate the Bannister Head SEPP 26 Littoral rainforest in and around the northern parts of Mollymook Beach.
2. Raise awareness of local residents regarding the biodiversity values of the remnant patch of littoral rainforest.
3. Work with Shoalhaven City Council to let local householders know how they can help look after the Littoral Rainforest by minimising negative impacts such as garden waste dumping and growing known invasive/ 'garden escape' plants.
4. Continue to seek further funding from local, state and federal governments to employ contractors to control weeds on steep slopes that are too dangerous for volunteers.

**2. BUSHCARE GROUP ACHEIVEMENTS TO DATE – (What successes has your Bushcare Group achieved in relation to your achieving the goals and actions in your current Bushcare Group Action Plan and what lessons or new skills/knowledge have you learnt from these achievements?)**

<b>Successes/Goals/Actions achieved to date</b>	<b>Lessons learnt</b>
Restoration of 7,353 square metres of Littoral Rainforest on Bannister Headland that is listed in NSW State Environmental Planning Policy 26.	The importance of follow up maintenance weed control is vital in reducing the risk of re-infestation or new outbreaks of weeds.
On-going weed control around Bannister Headland public reserve.	As above
Restoration of 3,216 square metres of Littoral Coastal Vine Thickets of Eastern Australia that is listed as an Endangered Ecological Community under the Australian Environmental Protection and Biodiversity Conservation Act 1999 at the northern end of Mollymook Beach.	The area is very steep with erodible coastal cliffs. Due to safety concerns following landslips the Bushcare Group have withdrawn from this area.
Planting of 500 trees, shrubs and ground covers around and in the vegetation remnants to protect and act as a buffer.	Only plant in Autumn and Winter.
On-going face to face awareness raising activities with the local community which includes delivery of education materials on the ecological significance of the rainforest.	The face to face contact has been the most valuable and effective form of environmental education.
Talking to other interested organisations.	

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
<p><b>AREA 1 Jones Beach (see map 4)</b></p> <p><i>NOTE: Bushcare group to only work on moderate slopes.</i></p> <p><b>CURRENT AND EXISTING ACTIONS</b></p> <ol style="list-style-type: none"> <li>1. Periodic monitoring by group for control of noxious and environmental weeds on moderate slopes.</li> <li>2. Report noxious and environmental weed infestations to Council on steeper slopes in the following priority species:               <ol style="list-style-type: none"> <li>a. <i>Lantana camara</i> (Lantana)</li> <li>b. <i>Chrysanthemoides monilifera ssp monilifera</i> (Boneseed)</li> <li>c. <i>Chrysanthemoides monilifera ssp rotunda</i> (Bitou Bush)</li> </ol> </li> </ol>	<ol style="list-style-type: none"> <li>1. M</li> <li>2. M</li> </ol>	<ol style="list-style-type: none"> <li>1. Bushcare Group to monitor and undertake manual and chemical control of weeds as per best management control techniques for each weed species.</li> <li>2. Bushcare Group to monitor and report to Council.</li> </ol>	<ol style="list-style-type: none"> <li>1. Ongoing</li> <li>2. Ongoing</li> </ol>

GROUP ACTION (these should relate to your project description)	PRIORITY	METHOD	TIME
<p><b>AREA 2 Bannister Headland – Littoral Rainforest (see map 5)</b>  <i>NOTE: Bushcare group to only work on moderate slopes.</i></p> <p><b>CURRENT AND EXISTING ACTIONS</b></p> <ol style="list-style-type: none"> <li>1. On-going control of environmental and noxious weeds throughout the SEPP 26 Littoral Rainforest targeting the following weed species:               <ol style="list-style-type: none"> <li>a. <i>Lantana camara</i> (Lantana)</li> <li>b. <i>Chrysanthemoides monilifera ssp monilifera</i> (Boneseed)</li> <li>c. <i>Chrysanthemoides monilifera ssp rotunda</i> (Bitou Bush)</li> <li>d. <i>Asparagus aethiopicus</i> (Asparagus Fern)</li> <li>e. <i>Acetosa sagittata</i> (Turkey Rhubarb)</li> <li>f. <i>Tradescantia fluminensis</i> (Wandering Jew)</li> <li>g. <i>Ochna serrulata</i> (Micky Mouse Plant)</li> <li>h. <i>Delairea odorata</i> (Cape Ivy)</li> <li>i. <i>Ehrharta stricta</i> (Panic Veldt Grass)</li> </ol> </li> <li>2. Supplementary and replacement planting in and around the Littoral Rainforest, particularly where weeds have been sprayed, using plant species from the revegetation list in section 15.</li> <li>3. Monitor and assist Council with reserve access track maintenance.</li> <li>4. Removal of rubbish.</li> </ol> <p><b>NEW ACTIONS</b></p> <ol style="list-style-type: none"> <li>1. Seek funding assistance to design and produce interpretive signage on the SEPP 26 Littoral Rainforest.</li> </ol>	<ol style="list-style-type: none"> <li>1. H</li> <li>2. H</li> <li>3. M</li> <li>4. L</li> </ol>	<ol style="list-style-type: none"> <li>1. Combination of manual and chemical control as per best practice management control for each species.</li> <li>2. Planting as required using species from revegetation species list.</li> <li>3. Report damage or maintenance requirements to walking track to Council.</li> <li>4. As required.</li> </ol> <p><b>NEW ACTIONS</b></p> <ol style="list-style-type: none"> <li>1. Council and Bushcare Group to seek additional funding for signage.</li> </ol>	<ol style="list-style-type: none"> <li>1. Ongoing</li> <li>2. As required</li> <li>3. As required</li> <li>4. As required</li> <li>1. 2016/17</li> </ol>

GROUP ACTION (these should relate to your project description)	PRIORITY	METHOD	TIME
<p><b>AREA 3 – Mollymook Beach Littoral Vine Thicket Forest (map 6)</b></p> <p><b>NOTE: Following recent landslips the Bushcare group are not to work in this area until such time that Council declares it safe.</b></p>			
<p><b>CURRENT AND EXISTING ACTIONS</b></p> <ol style="list-style-type: none"> <li>1. On-going control of environmental and noxious weeds targeting the following weed species: <ol style="list-style-type: none"> <li>a. <i>Lantana camara</i> (Lantana)</li> <li>b. <i>Chrysanthemoides monilifera ssp monilifera</i> (Boneseed)</li> <li>c. <i>Chrysanthemoides monilifera ssp rotunda</i> (Bitou Bush)</li> <li>d. <i>Asparagus aethiopicus</i> (Asparagus Fern)</li> <li>e. <i>Acetosa sagittata</i> (Turkey Rhubarb)</li> <li>f. <i>Delairea odorata</i> (Cape Ivy)</li> </ol> </li> <li>2. Identifying and flagging <i>Rubus fruticosus</i> (Blackberry) infestations for Council to treat.</li> <li>3. Identify weed species that are occurring on dangerous and steep slopes and notify Council for control by suitably qualified personnel.</li> <li>4. On-going supplementary/enrichment planting to act as a buffer for salt laden winds and prevent the public trampling through the Littoral Vine Thicket Forest.</li> <li>5. Culling of <i>Lagunaria patersonia</i> (Norfolk Island Hibiscus).</li> </ol>	<ol style="list-style-type: none"> <li>1. H</li> <li>2. H</li> <li>3. M</li> <li>4. M</li> <li>5. H</li> </ol>	<ol style="list-style-type: none"> <li>1. Combination of manual and chemical control as per best practice management control for each species.</li> <li>2. Bushcare Group to flag Blackberry and report to Council for control.</li> <li>3. Bushcare Group to identify weeds and report to Council for control.</li> <li>4. Planting using revegetation species list. Cut and paint smaller plants, larger plants need to be drilled and injected with Glyphosate360, insure that larger plants will not pose a public risk once dead.</li> </ol>	<ol style="list-style-type: none"> <li>1. Ongoing</li> <li>2. Ongoing</li> <li>3. Ongoing</li> <li>4. As required</li> <li>5. Ongoing</li> </ol>

<b>GROUP ACTION (these should relate to your project description)</b>	<b>PRIORITY</b>	<b>METHOD</b>	<b>TIME</b>
<p><b>AREA 3 (cont.) – Mollymook Beach Littoral Vine Thicket Forest</b></p> <p><b>NEW ACTIONS</b></p> <p>1. Seek funding to upgrade the interpretive signage near the toilet block to raise the public awareness of ecological values of the Littoral Vine Thicket Forest and how they can assist Council to look after it.</p>	<p>1. M</p>	<p>1. Council staff and volunteers to apply for external funding to design sign and produce.</p>	<p>1. 2016/17</p>
<p><b>AREA 4 – Small dune at Beach Rd adjacent to picnic shelter and toilet block (see map 6 and appendix 2 &amp; 3 for details)</b></p> <p><b>NEW ACTIONS</b></p> <p>1. Patch spray sections of Kikuyu grass on slope.</p> <p>2. Lay and pin Jutemat® to stabilize the bank prior to planting.</p> <p>3. Plant sections of the bank from small existing remnant of Coastal Banksias down to picnic shelter using plant species selected from section 15 revegetation list.</p>	<p>1. M</p> <p>2. M</p> <p>3. M</p>	<p>1. Spray Kikuyu with 1:200 glyphosate360:water.</p> <p>2. Council to supply Jutemat® and Bushcare Group to lay.</p> <p>3. Council to supply plants with Bushcare Group to plant.</p>	<p>1. Autumn/Winter 2016</p> <p>2. Winter 2016</p> <p>3. Winter 2016</p>
		<p><b>NEW ACTIONS</b></p>	

GROUP ACTION (these should relate to your project description)	PRIORITY	METHOD	TIME
<p><b>AREA 5 – Mollymook Beach dunes North of Blackwater Creek entrance (see map 7 for details and appendix 4)</b></p> <p><b>NEW ACTIONS</b></p> <ol style="list-style-type: none"> <li>1. Assist Council with fore-dune revegetation/stabilisation of sand placed on dunes from dredging works at LakeConjola entrance (see appendix 4 for locations details of location of sand placement).</li> <li>2. Assist Council with on-going weed management of fore-dune area.</li> </ol>	<ol style="list-style-type: none"> <li>1. M</li> <li>2. M</li> </ol>	<ol style="list-style-type: none"> <li>1. Planting of fore-dune primary colonising plant species along with staff, Green Army and school groups.</li> <li>2. Manual and chemical control.</li> </ol>	<ol style="list-style-type: none"> <li>1. 2016/17</li> <li>2. Ongoing</li> </ol>
<p><b>CURRENT AND EXISTING ACTIONS</b></p> <ol style="list-style-type: none"> <li>1. Continue with letter box dropping and face to face communication with local residents to raise awareness of Bushcare work and coastal biodiversity conservation at Mollymook Beach and Bannister Headland</li> </ol>	<ol style="list-style-type: none"> <li>1. H</li> </ol>	<ol style="list-style-type: none"> <li>1. Bushcare Group to door knock local residents and Council to supply brochures/flyers.</li> </ol>	<ol style="list-style-type: none"> <li>1. As required</li> </ol>
<p><b>EDUCATION AND PUBLIC AWARENESS RAISING</b></p> <p><b>CURRENT AND EXISTING ACTIONS</b></p> <ol style="list-style-type: none"> <li>1. Continue to undertake periodic neighbourly door knocks to introduce the Bushcare Group and what they do and distribute awareness raising material such as “Being A Bush Friendly Neighbour”, Weeds of The NSW South Coast &amp; “Grow Me Instead”.</li> </ol> <p><b>NEW ACTIONS</b></p> <ol style="list-style-type: none"> <li>1. Council to install signage at the northern end of Beach St advertising that the Bushcare Group are working on the beach and headland reserve.</li> </ol>	<ol style="list-style-type: none"> <li>1. H</li> <li>1. H</li> </ol>	<ol style="list-style-type: none"> <li>1. Bushcare Group to door knock local residents and Council to supply brochures/flyers.</li> <li>1. Council to install signage</li> </ol>	<ol style="list-style-type: none"> <li>1. As required</li> <li>2. 2016</li> </ol>

#### 4. MOLLYMOOK BUSHCARE GROUP ACTION PLAN AREA 1 - JONES BEACH MAP





5. MOLLYMOOK BUSHARE GROUP ACTION PLAN AREA 2 BANNISTER HEAD LITTORAL RAINFOREST MAP



6. MOLLYMOOK BUSHCARE GROUP ACTION PLAN AREA 2 BANNISTER HEAD LITTORAL RAINFOREST MAP



7. MOLLYMOOK BUSHCARE GROUP ACTION PLAN AREA 5 MOLLYMOOK BEACH DUNES MAP



## 8. BUSHCARE GROUP WHS & EQUIPMENT REQUIREMENTS

Type of Activity	Yes	SWMS name included
Manual weed control (cut & paint, scrape and paint etc)	√	SWMS1276
Chemical control (spraying of herbicides)	√	SWMS1276
Planting	√	SWMS1265
Minor construction (walking track, fencing, outdoor furniture)	√	SWMS01751
Propagation & seed collection	√	SWMS1265

## 9. COUNCIL SUPPORT

Council will provide support in the following areas:

1. Assistance with control of environmental and noxious weeds on steeper dangerous slopes and cliff areas within budgetary limits
2. Graphic design and printing services
3. Supply of materials, equipment within budgetary limits
4. Supply of a qualified bush regenerator to assist the group with bush regeneration skills and knowledge and WHS requirements for 3 hours per month over 11 months of the year
5. Production and installation of a Bushcare sign on site
6. Technical assistance
7. Grant application and management assistance
8. Public liability and personal accident insurance cover for all registered Bushcare volunteers
9. Assistance with dune revegetation/stabilisation with the sand placed on Mollymook Beach from the dredging at Lake Conjola.

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

Yes      √      No     

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

PPE Equipment Required	Date issued
First Aid Kit	2015
Gloves	2015
Sunscreen	2015
Insect repellent	2015

**12. POSSIBLE FUTURE FUNDING**

<b>Project</b>	<b>Funding source</b>
Support with noxious and environmental weed control on steep/dangerous slopes and cliff around the headland	Various
Design and production of 2 x interpretive signs on the SEPP 26 Littoral Rainforest on Bannister Headland and the Littoral Vine Thicket Forest at the Northern end of Mollymook Beach	Various

**13. PLAN WILL BE REVIEWED EVERY THREE YEARS**

**Next review due:**

**October 2016**

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

<b>Name of document</b>	<b>Year it was produced</b>	<b>Produced by</b>
Community Generic Plan of Management - Natural Areas	2001	Shoalhaven City
Foreshore Reserve Policy	2005	Shoalhaven City

**15. BUSHCARE SITE RECOMMENDED PLANTING/REVEGETATION SPECIES LIST**

<b>OVERSTOREY TREES</b>	
<b>Botanical</b>	<b>Common</b>
<i>Banksia integrifolia</i>	Coast Banksia
<i>Casuarina glauca</i>	Swamp oak
<i>Acmena smithii</i>	Lilly Pilly
<i>Cassine australis</i>	Red Fruited Olive Plumb
<i>Leptospermum laevigatum</i>	
<b>SHRUBS</b>	
<b>Botanical</b>	<b>Common</b>
<i>Pittosporum revolutum</i>	Rough Fruit Pittosporum
<i>Acacia longifolia ssp. longifolia</i>	Sydney Golden Wattle
<i>Rhagodia candolleana</i>	Sea Berry Saltbush
<i>Leucopogon parviflorus</i>	Coastal Heath
<i>Acacia longifolia spp. sophorae</i>	Coastal Wattle
<i>Correa alba</i>	White Correa
<i>Myoporum acuminatum</i>	Boobialla
<i>Myoporum boninense</i>	Boobialla
<b>UNDERSTOREY (grasses, herbs, climbers)</b>	
<b>Botanical</b>	<b>Common</b>
<i>Homalanthus populifolius</i>	Bleeding Heart
<i>Imperata cylindrica</i>	Blady Grass
<i>Lomandra longifolia</i>	Spiny Matt Rush
<i>Oplismenus aemulus</i>	Basket Grass
<i>Kennedia rubicunda</i>	Dusky Coral Pea
<i>Hardenbergia violacea</i>	Purple Coral Pea
<i>Dianella caerulea</i>	Blue Flax Lily
<i>Dianella revoluta</i>	Blueberry Lily
<i>Hibbertia dentata</i>	Guinea Flower
<i>Hibbertia scandens</i>	Guinea Flower
<i>Ficinia nodosa</i>	Club Rush
<i>Pelargonium australe</i>	Native Storksbill
<i>Carpobrotus glaucescens</i>	Pig Face
<i>Spinifex sericeus</i>	Coastal Spinifex
<i>Calystegia soldanella</i>	Beach Morning Glory
<i>Themeda australis</i>	Kangaroo Grass
<i>Atriplex australasica</i>	Salt Bush

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

<b>Noxious</b>	<b>Environmental</b>	<b>Control Method</b>
<i>Lantana camara</i> (Lantana)		Manual and Chemical control
<i>Chrysanthemoides monilifera ssp monilifera</i> (Boneseed)		Manual and Chemical control
<i>Chrysanthemoides monilifera ssp rotunda</i> (Bitou Bush) Asparagus aethiopicus (Asparagus Fern)		Manual and Chemical control
	<i>Acetosa sagittata</i> (Turkey Rhubarb)	Manual and Chemical control
	<i>Tradescantia fluminensis</i> (Wandering Jew)	Manual and Chemical control
	<i>Ochna serrulata</i> (Micky Mouse Plant)	Cut and paint
	<i>Delairea odorata</i> (Cape Ivy)	Chemical control
	<i>Ehrharta stricta</i> (Panic Velt Grass)	Chemical control
	<i>Lagunaria patersonia</i> (Norfolk Island Hibiscus)	Drill and inject larger trees and cut and paint smaller

17. **JONES BEACH BUSHCARE SITE SPECIES LIST (The following species have been recorded on the Jones beach site using a 50 metre transect see appendix for location details)**

<b>OVERSTOREY TREES</b>	
<b>Botanical</b>	<b>Common</b>
<i>Banksia integrifolia</i>	Coast Banksia
<i>Eucalyptus botryoides</i>	Bangalay
<b>SHRUBS</b>	
<b>Botanical</b>	<b>Common</b>
<i>Acacia implexa</i>	Hickory Wattle
<i>Acacia mearnsii</i>	Black Wattle
<i>Breynia oblongifolia</i>	Coffee Bush
<i>Cassine australis</i>	Red Fruited Olive Plumb
<i>Casuarina glauca</i>	Swamp oak
<i>Glochidion ferdinandi</i>	Cheese Tree
<i>Pittosporum revolutum</i>	Rough Fruit Pittosporum
<i>Pittosporum undulatum</i>	Native Daphne
<b>UNDERSTOREY (grasses, herbs, orchids)</b>	
<b>Botanical</b>	<b>Common</b>
<i>Centella asiatica</i>	Centella
<i>Eupomatia laurina</i>	Bolwarra
<i>Gahnia clarkei</i>	Sword Sedge
<i>Geranium homeanum</i>	Cutleaf Geranium
<i>Homalanthus populifolius</i>	Bleeding Heart
<i>Imperata cylindrica</i>	Blady Grass
<i>Lomandra longifolia</i>	Spiny Matt Rush
<i>Oplismenus aemulus</i>	Basket Grass
<i>Plectranthus parviflorus</i>	Cockspur Flower
<i>Pteridium esculentum</i>	Bracken Fern
<i>Rubus parvifolius</i>	Native Raspberry
<i>Senecio linearifolius</i>	Native Fireweed
<i>Sigesbeckia orientalis</i>	Indian Weed
<b>UNDERSTOREY (vines &amp; climbers)</b>	
<b>Botanical</b>	<b>Common</b>
<i>Stephania japonica</i>	Snake Vine
<i>Calystegia marginata</i>	Forest Bindweed
<i>Kennedia rubicunda</i>	Dusky Coral Pea
<i>Tylophora barbata</i>	Bearded Tylophora
<i>Cissus hypoglauca</i>	Water Vine
<i>Hardenbergia violacea</i>	Purple Coral Pea



18. **BANNISTER HEADLAND BUSHCARE SITE SPECIES LIST (The following species have been recorded on the site using a 50 metre transect see appendix for location details)**

<b>OVERSTOREY TREES</b>	
<b>Botanical</b>	<b>Common</b>
<i>Acmena smithii</i>	Lilly Pilly
<i>Cassine australis</i>	Red Fruited Olive Plumb
<i>Casuarina glauca</i>	Swamp Oak
<i>Eucalyptus botryoides</i>	Bangalay
<i>Ficus macrophylla</i>	Moreton Bay Fig
<i>Pittosporum undulatum</i>	Native Daphne
<b>SHRUBS</b>	
<b>Botanical</b>	<b>Common</b>
<i>Acacia longifolia ssp. longifolia</i>	Sydney Golden Wattle
<i>Breynia oblongifolia</i>	Coffee Bush
<i>Clerodendrum tomentosum</i>	Hairy Clerodendrum
<i>Duboisia myoporoides</i>	Corkwood
<i>Myoporum acuminatum</i>	Boobiella
<i>Myoporum boninense</i>	Boobiella
<i>Notelaea longifolia</i>	Large Mock Olive
<i>Pittosporum revolutum</i>	Rough Fruit Pittosporum
<i>Pittosporum undulatum</i>	Native Daphne
<i>Rhagodia candolleana</i>	Sea Berry Saltbush
<i>Santalum obtusifolium</i>	Blunt Sandalwood
<b>UNDERSTOREY (grasses, herbs, orchids)</b>	
<b>Botanical</b>	<b>Common</b>
<i>Blechnum ambiguum</i>	Gristle Fern
<i>Carex appressa</i>	Tall Sedge
<i>Centella asiatica</i>	Indian Pennywort
<i>Dianella caerulea</i>	Blue Flax Lily
<i>Dianella revoluta</i>	Blueberry Lily
<i>Dichondra repens</i>	Kidney Weed
<i>Gymnostachys anceps</i>	Settlers Twine
<i>Lomandra longifolia</i>	Spiny Matt Rush
<i>Pittosporum multiflorum</i>	Orange Thorn
<b>UNDERSTOREY (vines &amp; climbers)</b>	
<b>Botanical</b>	<b>Common</b>
<i>Aphanopetalum resinum</i>	Gum Vine
<i>Cissus antarctica</i>	Kangaroo Grape
<i>Eustrephus latifolius</i>	Wombat Berry
<i>Hibbertia dentata</i>	Guinea Flower
<i>Parsonsia straminea</i>	Common Silkpod
<i>Stephania japonica</i>	Snake Vine
<i>Tylophora barbata</i>	Bearded Tylophora

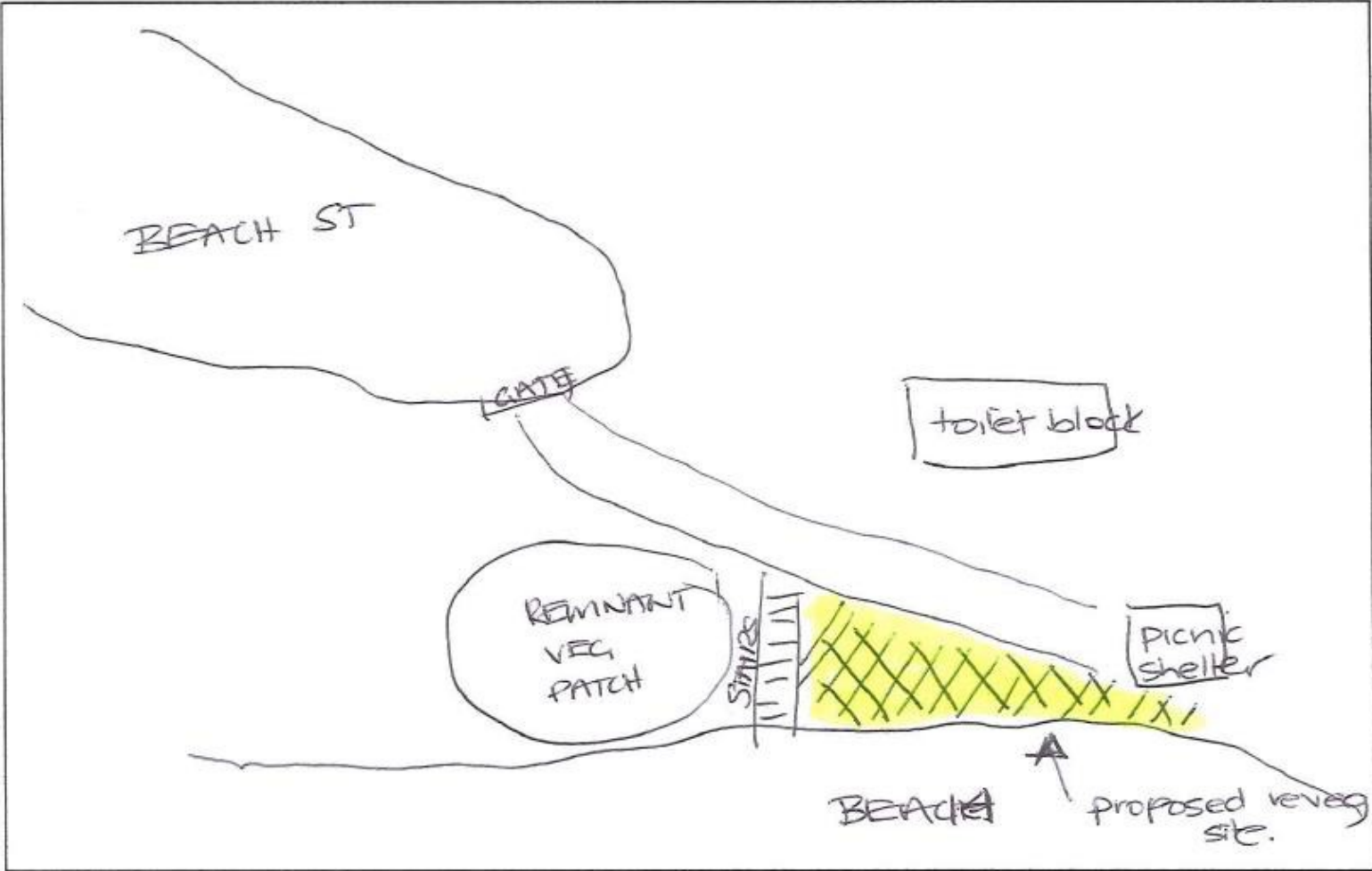
**Appendix 1 – Location of Bannister Head 50 metre vegetation recording transect**



**Appendix 2 – Photo showing location of proposed new revegetation site at the Northern end of Beach St, Mollymook.**



**Appendix 3 – Detail Map Area 4 Proposed Revegetation Site**



# Appendix 4 – Location details of sand placement at Mollymook Beach North of Blackwater Creek entrance

