

STATE NRM PROGRAM 2010-11**Community Grants****PROJECT APPLICATION**

Applicant Details: Shire of Denmark – Revegetation of priority sites on Shire of Denmark Wilson Inlet Foreshore Reserves – plant installation

Contact

Name/group name:	Shire of Denmark		
Postal address	PO Box 183 Denmark WA 6333		
Project contact person:	Yvette Caruso		
Position on organisation:	Natural Resource Management Officer		
Telephone:	(08) 9848 0300	Mobile:	
Email:	nrm@denmark.wa.gov.au		

Registration

Question	Response
Is your Group incorporated?	Yes
Is your group registered for GST?	Yes
Does your group have an ABN (Australian Business Number)?	Yes

****Please note:**

If your organisation is not incorporated you will need a sponsoring organisation to submit on your behalf.

If your organisation does not have an ABN and/or is not GST registered you will be required to provide the name of a suitably qualified sponsor who is prepared to manage the funds on your behalf.

Sponsor Organisation

Name/group name:	NA		
Postal address			
Contact person:			
Position on organisation:			
Telephone:		Mobile:	
Email:			

Partnerships

(a) Is this a partnership project?

Yes

(b) If so, with whom?

- Department of Water
- Wilson Inlet Catchment Committee
- Great Southern Institute of Technology – TAFE Denmark Campus
- Green Skills

The following person/s from partner organisations has been consulted during the preparation of this application and can be contacted to verify their support.

Organisation:	Department of Water	Wilson Inlet Catchment Committee
Contact person:	Kirsty Alexander	Elissa Stewart
Position	Waterways Program Manager – South Coast Region	Wilson Inlet Catchment Committee Project Officer
Telephone:	(08) 9842 5760 (08) 9841 0130	(08) 9848 2955
Mobile:		0408 862 246
Nature of relationship to the project:	Assistance with on site identification of priority sites for revegetation along Shire of Denmark Wilson Inlet Foreshore Reserves. Provided funds towards stage one of the revegetation project – production of local provenance plant materials. Department of Water representative co-ordinating Wilson Inlet Management Advisory Group (advisory group to Council) supporting revegetation project on foreshore reserves.	Local Catchment stakeholder group providing local knowledge advice and assistance to identification of priority sites for revegetation along Shire of Denmark Wilson Inlet Foreshore Reserves as well as assisting with photo-point monitoring of revegetated sites along the inlet foreshore.
Letter of support is attached	Yes	Yes

Organisation:	Great Southern Institute of Technology – TAFE Denmark	Green Skills
Contact person:	Mark Parre	Craig Carter
Position	Conservation and Land Management Lecturer and Green Jobs Corp Co-ordinator and Team Leader and Revegetation Officer	Community Engagement Officer
Telephone:	(08) 9848 0300	(08) 9848 1019

Mobile:	0431 713 709	0421 486 541
Nature of relationship to the project:	Supervisor to TAFE Conservation and Land Management students and Green Jobs Corps students undertaking plant installation and revegetation works on priority sites along Wilson Inlet foreshore reserves.	Local not-for-profit community organisation providing assistance to identification of priority sites for revegetation along Shire of Denmark Wilson Inlet Foreshore Reserves as well as assisting with photo-point monitoring of revegetated sites along the inlet foreshore.
Letter of support is attached	Yes	Yes

- (c) How have all of the relevant partners/participants been engaged/consulted in the planning of the project? How will they be involved in the delivery?

The sites along the Wilson Inlet foreshore reserves that were identified as high priority areas for revegetation activities was conducted via field assessments as a collaborative effort between Shire of Denmark and Department of Water representatives.

The Shire is currently conducting the first phase of the revegetation project which involves production of plant materials – including seed collection of local provenance seed and plant propagation activities incorporating local indigenous community members and work teams. An additional component of the project is for photo-point monitoring to take place on revegetated sites along the foreshore of which the Wilson Inlet Catchment Committee and Green Skills are providing in-kind assistance.

This project is the second phase of the revegetation project which will involve plant installation of the prepared local provenance plant material. This is to be facilitated by the Shire of Denmark and undertaken by TAFE students and Green Job Corps students.

This project is additionally supported by Department of Water (DoW) who are the management agency responsible for the overall health of the Wilson Inlet itself. The revegetation project is also supported by the Wilson Inlet Management Advisory Group (WIMAG), a DoW committee which acts as an advisory group to Council and is comprised of members from various government agencies, local governments, Councillors, and community members.

Other Projects

Please name all other projects that your organisation is currently involved in, either directly managing or delivering components for another organisation.

Project	Project proponent	Resources and source	Commencement date	Completion date
Biodiversity Surveys – Fungi and Fauna of Mount Hallowell and Wilson Inlet Foreshore Reserves	Shire of Denmark	Fungi and Fauna technical expertise Funding – Council and Lotterywest	June 2010	30 th June 2011
Coastal Management Plan review and update	Shire of Denmark	Land Insights Funding – DPI Coastal Management Plan Assistance Program	July 2010	February 2011
High Conservation Roadside Vegetation Mapping and Surveying Project	Shire of Denmark Roadside Conservation Committee	Shire of Denmark Roadside Conservation Committee Volunteers	October 2010	June 2011

Project Details:

Title: (maximum 15 words)

Revegetation of priority sites on Shire of Denmark Wilson Inlet Foreshore Reserves – plant installation

Description

(a) Write a general description (150 words or less) of the project. *If the project application is successful, this summary will be used to promote the project.*

This project is the second stage of a revegetation project to conduct planting activities along identified priority sites along Shire of Denmark Wilson Inlet Foreshore Reserves. The Shire is currently conducting the first phase of the project which involves production of plant materials including collection of local provenance seed involving local indigenous community members and work teams, and propagation of native plant species (*Melaleuca cuticularis* and *Ficinia nodosa*) to tube-stock size for planting along priority sites along the foreshore.

The Wilson Inlet foreshore vegetation provides valuable habitat and reduces nutrient and pollutants into the inlet by acting as a bio-filter. Revegetation activities on the Wilson Inlet foreshore reserves will assist in forming a natural vegetation buffer for the Wilson Inlet assisting with biofiltration as well as providing a valuable habitat for waterbirds and other fauna. Identified priority sites for revegetation include: Prawn Rock Channel, Ocean Beach Rd bike path shoulders, Poddyshot (south) end of Campbell Rd, Yacht Club Reserve, and the ruppia bund that is situated around the foreshore edge.

The project is directly aligned with the *Shire of Denmark Wilson Inlet Foreshore Reserves Management Plan 2008* (endorsed by Council in November 2008), Recommendation 2.3.9 which states: “*Determine priority areas for revegetation and develop and implement a Foreshore Reserves Revegetation works program*”. The project is also aligned with objectives outlined in the Wilson Inlet Nutrient Reduction Action Plan (WINRAP) and is commensurate with Wilson Inlet Catchment Committee activities – planting will allow for nutrient reduction in the inlet.

(b) How much grant money are you applying for? *Exclude GST. Note: minimum is \$10,000 and maximum is \$50,000.*

Requested grant funding for plant installation component of the revegetation project is **\$8010 (ex GST)** to be put towards installation of plants in the next financial year (2011-2012).

Council will commit to \$2160 in-kind assistance from the NRM Office towards co-ordination and facilitation of the project and \$200 towards site preparation activities. Department of Water has contributed \$5000 (ex GST) cash contribution towards revegetation related activities on Wilson Inlet Foreshore Reserves. Wilson Inlet Catchment Committee, Green Skills and TAFE Lecturer and students will all be providing up to a total of \$1600 in-kind assistance with plant installation activities.

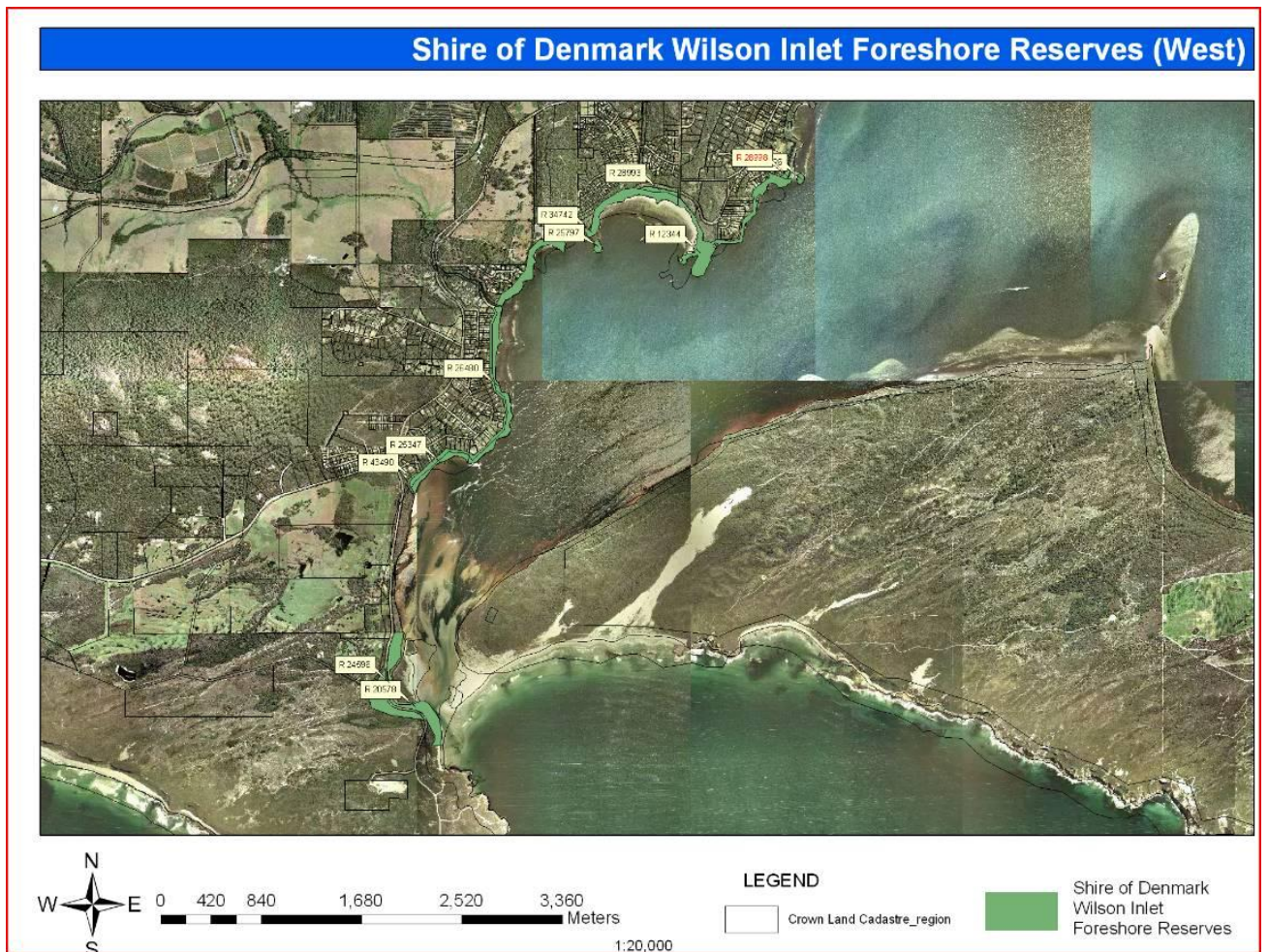
Funds contributed towards phase 1 of the project (production of plant materials) includes \$12,480 from DEC Environmental Community Grant funds as well as Council contributions through co-ordination and facilitation of the project via NRM Officer time.

- (c) Identify the location and the asset that you intend working on in the project. E.g Lake Chinocup 15km north west of Pingrup. **NOTE: If you are applying for funding for a project involving on-ground works, please provide a map or aerial photograph identifying the project area.**

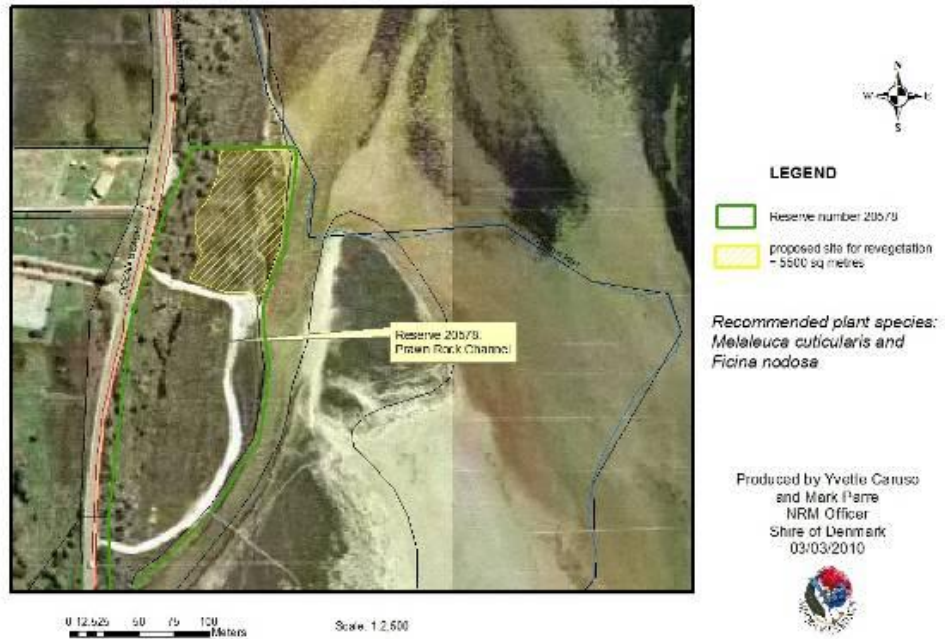
The revegetation activities are to be conducted on Shire of Denmark vested Wilson Inlet Foreshore Reserves west of the Denmark Rivermouth.
Sites include:

SITE NUMBER	RESERVE NUMBER	SITE NAME	AREA SIZE	PLANTS
Site No. 1	Res 20578	Prawn Rock Channel	5500 sq m	<i>Melaleuca cuticularis</i>
Site No. 2	Res 20578	Ocean Beach bike path (shoulders)	200 sq m	<i>Ficinia nodosa</i>
Site No. 3	Res 25347	Poddyshot (south)	7110 sq m	<i>Melaleuca cuticularis</i>
Site No. 4	Res 34742	End of Campbell Rd	250 sq m	<i>Melaleuca cuticularis</i>
Site No. 5	Res 36714	Yacht Club Reserve	650 sq m	<i>Melaleuca cuticularis</i>
Site No. 6	NA	Ruppia bund (from Prawn Rock Channel to Denmark Rivermouth)		<i>Melaleuca cuticularis</i>

(Please refer to maps and pictures attached).



Prawn Rock Channel - priority sites for revegetation



Prawn Rock Channel (looking south) – priority site for revegetation of overstorey species (*Melaleuca cuticularis*)

PRIORITY SITES 1 & 2: RESERVE 20578 - PRAWN ROCK CHANNEL (ADJACENT) and OCEAN BEACH BICYCLE PATH

Area: 5500 square metres and 200 square metres

History: area of accumulated sand along foreshore. Some dredging and sand removal has occurred adjacent to this site in the past. No planting has previously occurred here however nearby sites of similar elevation, soil type and hydrology have had *Melaleuca cuticularis* installed.

Recommendations: install *Melaleuca cuticularis* in the low area on the inlet side of the walk track. 1380 plants at 1 per 4 metres squared. Install *Ficinia nodosa* on shoulders of bicycle track 200 square metres = 1800 plants at 9 per m2. No site preparation is required for *Melaleuca*'s.

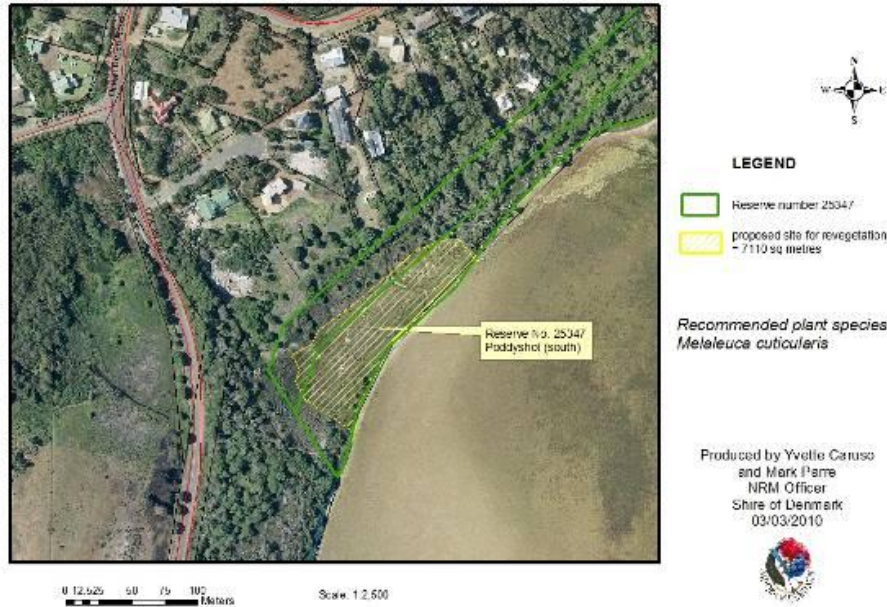
Site preparation for bicycle path – spot spray shoulders of bicycle path to remove weed species prior to planting sedges.*Care must be taken with spot spraying so as to not harm existing native vegetation and sedges already existing on site*.

Plants: *M.cuticularis* = 23 hours + overheads (1 plant per minute) = \$1035

F.nodosa = 4 hours + overheads (8 plants per minute) = \$180

Total cost = \$1215

Poddyshot (south) - priority sites for revegetation



Poddyshot – priority site for revegetation of overstorey species (*Melaleuca cuticularis*)

PRIORITY SITE 3: RESERVE 25347 - PODDYSHOT (SOUTH)

The area of foreshore south of Poddyshot boat ramp to the inlet mouth has many areas which could use some infill planting. Natural replacement of *Melaleuca cuticularis* is not occurring due to the thick layer of introduced weed species that stop germination. The Shire of Denmark has previously grown seedlings on to tubestock size and planted these amongst the weeds in the past and this has had a high survival success rate.

Area: 7110 square metres

History: Burnt in 1960's, trees bulldozed left in heaps. Lacks overstorey vegetation. No recruitment due to thick rushes, grasses and weeds. A small area in the southern section has been successfully re-established using 0.5m tubestock of *Melaleuca cuticularis*.

Recommendation: Planting with tubestock at 1 plant per 4 square metres. Total number of tubestock = 1800 installed at 2m apart using putti-putkis (1 plant per minute). Works include breaking out, transport, running out, installation, clean up). No site preparation is required.

Consultation – avoid blocking landowners views from adjacent properties (exist higher in the landscape). Liaise with Community Fire Manager for input.

Cost = 30 hours in total (minimum 2 people for 2 x 7.5 days) = \$1350

Cambell Rd - priority sites for revegetation



Cambell Rd - priority site for revegetation of overstorey species (*Melaleuca cuticularis*)

PRIORITY SITE 4: RESERVE 34742 (END OF CAMPBELL RD)

Area: 250 m² (Reserve 34742)

No site preparation required.

Recommendations: install at 1 per 4 m² = 68 x *Melaleuca cuticularis* plants.

Cost: 1 hour to install + overheads = \$45

Yacht Club Reserve - priority sites for revegetation



LEGEND

- Reserve number: 36714
- proposed site for revegetation = 650 sq metres.

Recommended plant species:
Melaleuca cuticularis and
Ficinia nodosa

Produced by Yvette Caruso
 NRM Officer
 Shire of Denmark
 03/03/2010

0 12.5 25 50 75 100 Meters Scale: 1:1500



Yacht Club Reserve – priority site for revegetation of overstorey species (*Melaleuca cuticularis*)

PRIORITY SITE 5: RESERVE 36714 - YACHT CLUB RESERVE
Area: 650 m²
 No site preparation required.
Plants: Plants 163 x *Melaleuca cuticularis*
Total cost: 3 hours to install + overheads = \$135

PRIORITY SITE 6: BUND AROUND FORESHORE EDGE

There is a bund of accumulated dead *Ruppia megacarpa* and couch grass right around the Wilson Inlet foreshore which could be planted with *Melaleuca cuticularis*. This would suppress weed growth, provide more diverse habitat and help with nutrient reduction. Planting of inlet foreshore bund composed of couch grass growing through washed up *Ruppia megacarpa*.

History: Phosphate laden sediments have deposited on the inlet bottom. *Ruppia megacarpa* grows on this, breaks off in winter and washes onto the foreshore. When the sandbar is artificially breached and opens the introduced couch grass rapidly re-establishes on the new nutrient source creating a bund of material which excludes most other species.

Recommendations: plant in established (0.5m+) tubestock of *Melaleuca cuticularis* to re-create a more natural shore line and remove nutrients from the cycle.

Plants: 5500 x *Melaleuca cuticularis*
Total cost: 117 hours to install + overheads = \$5265

- (d) Who owns the asset? Will the project benefit (either directly or in-directly) a public asset? If so, describe how this will occur. **E.g. A-Class Reserve State Government Managed**

The revegetation project is to occur on Shire of Denmark tenure on various Wilson Inlet Foreshore Reserves. The project is directly commensurate with recommendations outlined within the Council endorsed *Shire of Denmark Wilson Inlet Foreshore Reserves Management Plan 2008* in regards development of a revegetation works program for the Reserves.

- (e) What activity do you intend undertaking in the project. Please identify what problem you are trying to address? **E.g. Revegetate 20 ha with species local to the area, to connect two areas of remnant vegetation on the lake foreshore. Fire has destroyed 50% of the remnant vegetation surrounding the lake.**

The project involves revegetation and site preparation of priority sites along Wilson Inlet Foreshore Reserves:

- Site preparation
- Spot-spraying of weeds where required (minimal)
- Planting installation with local TAFE and Green Job Corps students
- Follow up maintenance
- Photo point monitoring established at 10 m intervals along Wilson Inlet foreshore

This phase of the revegetation project is for plant installation of local provenance native plant species at tubestock size: 8911 x *Melaleuca cuticularis* and 1800 x *Ficinia nodosa* plants which will be ready for installation by June 2011.

- (f) Explain why this project is important to you. **E.g. Lake Chinocup is an important lake for migratory birds during the breeding season and the group wishes to ensure that the birds continue to come and use the lake as a breeding site. It is a great bird watching site for all bird enthusiasts.**

The Wilson Inlet foreshore vegetation provides valuable habitat and reduces nutrient and pollutants into the inlet by acting as a bio-filter. The condition of vegetation along the foreshore is variable dependent upon proximity to recreational nodes; but is largely very good condition native vegetation but with some weed encroachment and *Ruppia* build-up. By planting local provenance native plant species at tube-stock size this will enable native plants to outcompete the kikuyu and couch grass and other environmental weeds that occur along the Wilson Inlet foreshore.

- (g) Why have you chosen to undertake the activity described rather than some other activity? **E.g. Local vegetation species are more likely to survive than non-indigenous species. They will attract the migratory birds and local birds whereas non-local species may not.**

Wilson Inlet is a lagoonal system with relatively small estuarine reaches of its tributaries: Hay, Denmark, Sleeman and Little Rivers. There has been a decline in water quality due to clearing, and many ecological, socio-cultural and economic sectors are dependent upon its ongoing health. Revegetation of the Wilson Inlet foreshore can contribute to improvement of the health of the inlet by reducing nutrient and pollutant build-up, prevention of weed encroachment, as well as providing a habitat for fauna and endangered migratory shorebirds that rely on Wilson Inlet.

- (h) What is the long-term aim for the asset and how will this project contribute to this? **E.g. Local vegetation species are more likely to survive. They will attract the migratory birds and local birds whereas non-local species may not. The long-term aim is to revegetate all of the burnt areas so that the lake surrounds return to pre-burnt condition. This project will revegetate 10% of the burnt area.**

The Wilson Inlet is listed on the Register of National Estate and is one of 118 international wetlands of importance for resident and migratory shorebirds. The Wilson Inlet Foreshore Reserves contain sites of ecological, historical and cultural significance and also support a variety of recreational activities. The Wilson Inlet Foreshore Reserves form a natural vegetation buffer for the Wilson Inlet. Foreshore vegetation plays an important role in the natural function of waterways, providing valuable habitat for waterbirds and other fauna. Foreshore vegetation also reduces nutrients and pollutants draining from surrounding land, and may help to minimise erosion by stabilising the waterway's banks.

Project Plan

Activities

(a) Describe the major activities you will do in your project and when you will complete them.

Description of key activities	Timeframe for completion
Site preparation of Ocean Beach bicycle path – spot spray shoulders of bicycle track to remove weed species prior to planting sedges.	July-August 2011
Plants will be ready for planting by June 2011 (however planting is to occur in spring 2011 due to Wilson Inlet inundation alleviated after artificial breach of sandbar to open and flush inlet.)	June 2011
Planting of 8911 x <i>Melaleuca cuticularis</i> and 1800 x <i>Ficinia nodosa</i> plants is to occur in spring due to Wilson Inlet inundation after artificial breach of sandbar to open and flush inlet. Plants to be planted should be via tubestock rather than seedlings or seed, as plants will have less chance of survival with weed competition from couch grass or from native <i>Rhagodia baccata</i> understorey.	September/October 2011 (after artificial breach of sandbar)
Follow up maintenance and monitoring of all revegetation sites – check mortality rates, and take photo records of each site.	January 2012 March 2012

Milestones and outputs

(a) Name all activities you intend achieving (**ie milestones**); identify what you will do to achieve this (**ie output**); how you will measure these (**ie output measure**) and the expected number.

Milestone	Due Date	Output	Output Measure	Expected Number
Site preparation of Ocean Beach bicycle path – weed eradication spot spraying	July-August 2011	Site prepared, weeds eradicated and site ready for planting	Site prepared	1 site
Propagated plants ready for installation	June 2011	Final report, inventory, methodology, and maps to be supplied in hard copy triplicate as well as electronic copies of each in editable format (preferably M.Word) as well as PDF	8911 x <i>M.cuticularis</i> plants 1800 x <i>Ficinia nodosa</i> plants	8911 + 1800
Plant installation	September/October 2011	Survey results and inventory data provided classified by family, with attached spatial documentation in relation to survey results	Plants installed	6 sites
Mortality rates evaluated and photo records conducted	March 2012	Mortality rates of plants at each of the six priority sites evaluated	High level of survival amongst plants	80%

Measurement of Results

- (a) Explain how you will determine whether you have addressed the problem.

All propagated plants will have been installed at all six priority revegetation sites along the Wilson Inlet foreshore. Survival rates of plants at all sites will be at least 75% or above in the first year. Plant installation will have been conducted with community members such as TAFE Conservation Land Management students as well as Green Job Corps members to empower a sense of ownership and appreciation through an educational activity of our foreshore reserve areas.

- (b) How will you maintain the benefits gained from the project in the future?

Advice and advocacy regarding the project is and will be obtained from Wilson Inlet Management Advisory Group (WIMAG) – a Department of Water committee which acts as advisory group to Council and is comprised of members from various government agencies (state and local), Councillors, and community members.

The revegetation sites post-plant installation will be monitored on an ongoing basis and will continue to be maintained as sites located within the Wilson Inlet Foreshore Reserves vested with the Shire of Denmark. Revegetation programs and maintenance of foreshore fringing vegetation will be ongoing through Shire operations.

Promotion and publicity – (how will you promote your groups project and the contribution of the funders?)

- (a) Outline any public relations activities associated with the project.

Planned events eg tree planting, weeding, monitoring	
Date	Location / special feature / activity
June 2011	Media release – local newspaper(s) and media outlets, as well as WALGA Eco-news
September/October 2011	Media article and photos regarding on-site in the field plant installation activities with TAFE Conservation and Land Management students and Green Job Corps members
May 2012	Media release – local newspaper(s) and media outlets as well as WALGA Eco-news

- (b) How and/or when will local or regional media be involved in your project?

Local and regional media such as newspapers and media outlets, as well as WALGA Eco-newsletters will be contacted at the beginning and at the cessation of the project. A media release and photographs will be produced for circulation to all relevant media outlets.

An interim media release and photographs will also be undertaken in spring focusing on site in the field the plant installation activities being undertaken on the priority revegetation sites with Shire staff working with TAFE Conservation and Land Management students and Green Job Corps members.

Financial Requirements

Please list all cash and in-kind contributions; all activities and costings including the source of all funds whether they are program funds requested or resources that you have secured. It may include such items as:

- Administration, project management, insurance and audit costs (no more than 10% of the total grant requested can be spent on this item),
- Materials including fencing, trees etc,
- Hire of specialist equipment,
- Provision of expert/professional services,
- Labour (voluntary and paid) and
- Travel.

Please use GST exclusive figures

Major area of proposal activity (please describe)	Proponent/ partner <i>in-kind</i> contributions (please name the contributions individually)	Proponent/ partner <i>cash</i> contributions (please name the contributions individually)	State NRM funds Required	Budget Breakdown		
				Employment costs	Capital costs	Operating costs
1. Co-ordination and facilitation of the project	\$2,160 – Shire of Denmark			\$2160		
2. Site preparation – spot-spraying	\$200 – Shire of Denmark					\$200
3. Plant installation activities	\$800 TAFE students and Green Job Corps members		\$8010 (estimated no. of hours 178 at \$45/hr)			\$8,810
4. Monitoring of survival rates and photographic records	\$400 - WICC \$400 - Green Skills	\$5000 – Department of Water				\$5,800
TOTAL FUNDS	\$3,960	\$5,000	\$8010	\$2,160		\$14,810

Please refer to Budget Breakdown attached:

WILSON INLET FORESHORE RESERVES REVEGETATION BUDGET BREAKDOWN									
PRIORITY SITE FOR REVEGETATION	<i>M.cuticularis</i> (no. of plants)	(\$1.80 per plant)	Labour hours (\$45/hr)	Plant installation cost	<i>F.nodosa</i> (no. of plants)	(\$0.80c per plant)	Labour hours (\$45/hr)	Plant installation cost	TOTAL COST
SITE 1 & 2: R 20578 Prawn Rock Channel Ocean Beach Bike path	1380	\$ 2,484	23	\$1,035	1800	\$ 1,440	4	\$ 180	\$ 5,139
SITE 3: R 25347 Poddyslot (south)	1800	\$ 3,240	30	\$1,350					\$ 4,590
SITE 4: R 34742 Campbell Rd (end)	68	\$ 122	1	\$ 45					\$ 167
SITE 5: R 36714 Yacht Club Reserve	163	\$ 293	3	\$ 135					\$ 428
SITE 6: Bund around Foreshore Edge	5500	\$ 9,900	117	\$5,265					\$15,165
TOTALS	8911	\$ 16,040	174	\$7,830	1800	\$ 1,440	4	\$ 180	\$25,490