



National Green Jobs Corps 2010

Lower Obi Obi Creek Land & Water Restoration Project – Final Report

A project to enhance habitat, improve water quality, enhance vegetation linkages, reduce invasive weed species, reduce erosion and enhancement of the Baroon Pocket Dam cultural heritage area.

This Final Report has been prepared by:

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Introduction

The project over a twenty-six week period provided ten young people through the National Green Jobs Corps (NGJC) program with the opportunity to participate in natural environment restoration at strategic locations within the Lake Baroon Catchment learn new skills and work together as part of a team towards a common goal, increasing community and employment connectivity.

The program was designed to assist those landholders who would normally fall outside Lake Baroon Catchment Care Group's (LBCCG) funding priorities. Sites selected were based on their conservation status – predominantly Nature Refuges and protected areas.

Not only does such a program provide invaluable support to committed landholders, the participants get access to some amazing places and meet motivated and passionate individuals who have incredible vision and dedication.

Background

The Maleny area (and wider Sunshine Coast) is a hotspot for environmental awareness and activities. Environmental organisations, private contractors and local Council employ significant numbers of people in environmental management positions. Skilled employees are highly regarded, and sought. Employment opportunities for enthusiastic and passionate people are numerous – particularly into the future.

Many of the current employees of local environmental organisations and contractors received their first opportunities through the various Green Corps type programs.

Works Performed

National Green Jobs Corps participants worked on eleven different sites. Accordingly, the work performed was relatively varied, although weed management was the one constant activity on the majority of properties. As most of the properties are old agricultural properties and have sparse regrowth, lantana is the single biggest issue. Although a relatively easy weed to kill and remove, it nevertheless requires a high labour input to manage and reduce to a level where access and revegetation (or regeneration) can occur.

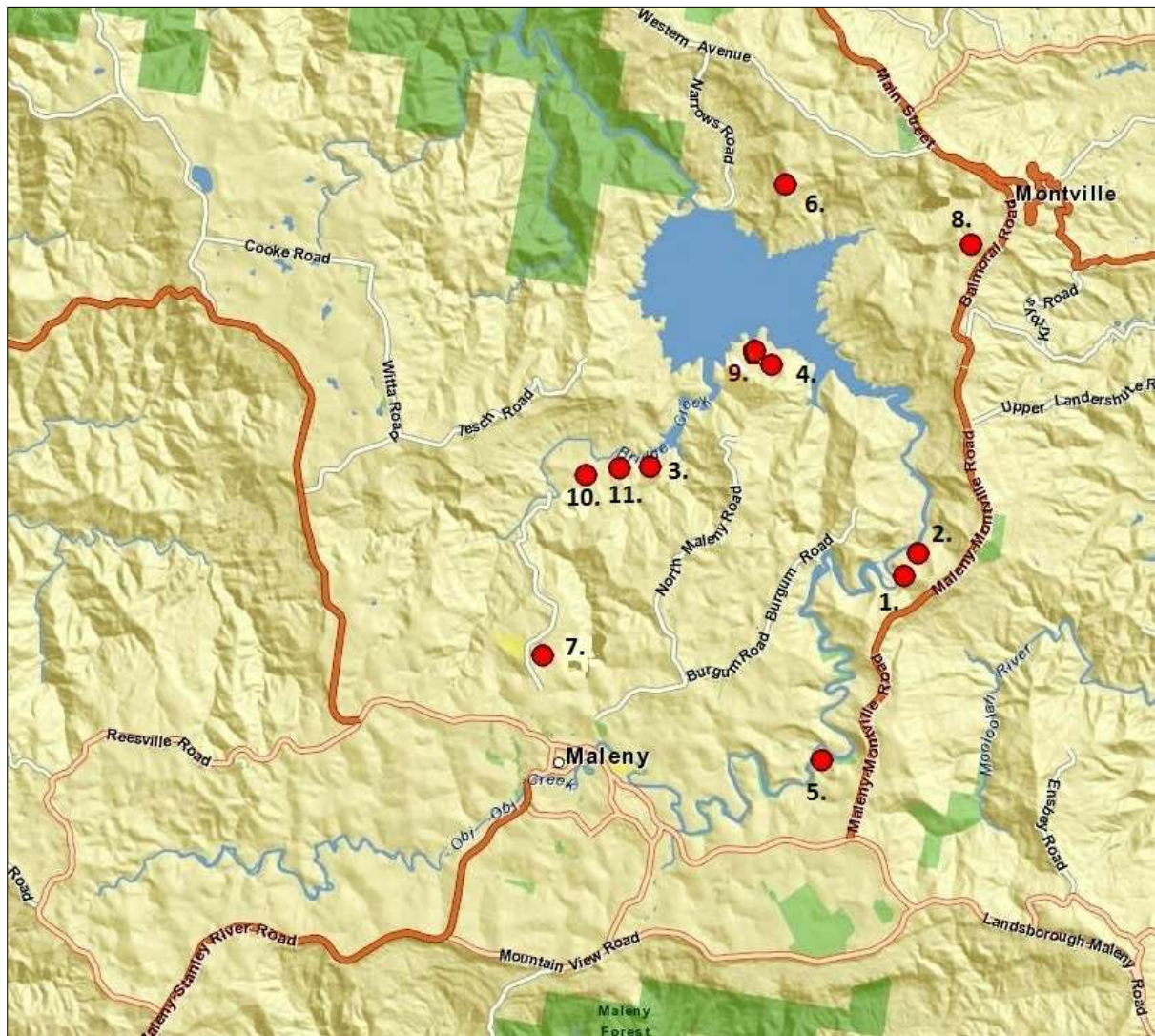
Revegetation activities were carried out on all properties with a range of different methods and rationales for doing so. Approximately 2,200 plants were contributed by LBCCG with further plants supplied by the landholders.

As part of the participants training on endangered species, twenty Birdwing Butterfly Vines were planted amongst remnant vegetation in the Bridge Creek catchment.

There was some minor track construction and maintenance carried out on properties but far less than originally planned. It became clear early on in the program that the participants did not find this a rewarding activity and therefore was an inefficient exercise.

General natural area restoration activities were undertaken. This involved rapid assessments of regrowth and remnant vegetation sites and developing a targeted approach to activities.

Property/Site Locations



Properties

1. Dilkusha Nature Refuge
2. Bariya Nature Refuge
3. Manduka Nature Refuge
4. Lake Baroon Cultural Heritage Area
5. Beechwood Community
6. Egerton Nature Refuge
7. Malter Covenant
8. Upper Smalls Creek LBCCG Project
9. Baroon Pocket Dam Landscaping
10. Bridge Creek Landslip Remediation
11. Bridge Creek Rehabilitation

1. Dilkusha Nature Refuge



The Dilkusha Nature Refuge is located on the lower Obi Obi Creek along the Maleny – Montville Road.

The property is a cooperative community with seven freehold blocks within the 30 hectares of the property.

The property was previously used for dairying but was largely unsuitable for agriculture due to the steepness of the property and unstable nature of the slopes.

Before restoration commenced several years ago lantana, privet and other environmental weeds predominantly covered the property. The landholders have been very active in clearing large areas of weeds, revegetating and practicing bush regeneration.

There are several areas of remnant vegetation on the property – particularly an area in the north western corner and smaller areas that provide a seed source for significant natural regeneration.

Obi Obi Creek winds through the property with Dilkusha having almost 1 kilometre of frontage (shared with a neighbouring property).

In all the NGJC team spent approximately 18 days on the property clearing lantana, weeding revegetation and regeneration areas, access track maintenance and revegetation activities.

LBCCG supplied approximately 300 tube-stock with Dilkusha contributing approximately 300 more. This included Lomandra used for erosion control and access track stabilisation and delineation.

2. Bariya Nature Refuge



Bariya Nature Refuge is located on the lower Obi Obi Creek along the Maleny – Montville Road. It is approximately 100 metres downstream of Dilkusha Nature Refuge.

The property is 10 hectares in size however, it is particularly steep and rugged. Previously used for dairying the property was infested with lantana, with privet and other environmental weeds common. The property also suffers from a significant infestation of Madiera Vine however it appears confined to the lower floodplain adjacent to Obi Obi Creek.

The property has approximately 200 metres of frontage to the Obi and generally has little remnant vegetation. Despite this natural regeneration is excellent – due to the proximity of remnant vegetation on neighbouring properties.

Access to the Obi Obi Creek (and project site) is via a steep track from the Maleny Montville Road. The track is susceptible to severe erosion and has been cut in the past by landslips.

The NGJC team spent approximately 7 days on the property clearing lantana, weeding revegetation and regeneration areas, access track maintenance and revegetation activities. The priority was a small watercourse that had had some minor weed management work in the past and had good natural regeneration occurring despite the heavy weed cover.

LBCCG supplied approximately 100 tube-stock with Bariya contributing a further 100.

Unfortunately, wet weather limited the access to the property during the program limiting work (GJC trailer was stranded on site following heavy rainfall and a landslip).

3. Manduka Nature Refuge



Manduka is one of the oldest community cooperatives on the Maleny plateau and one of the largest at 63 hectares. Situated on the eastern bank of Bridge Creek and the full supply level of Baroon Pocket Dam, this property is adjacent to Seqwater land on the north and east and regrowth bush on the south. Whardjin Creek flows through the property.

Although the property was largely cleared for dairy farming, natural regeneration (and some revegetation) since the 1970s has created several areas of high quality habitat.

The NGJC team spent several days revegetating a section of Whardjin Creek (approximately 160 plants) and targeting isolated lantana under wet sclerophyll forest.



4. Lake Baroon Cultural Heritage Area



The Lake Baroon Cultural Heritage Area is on Seqwater owned and managed land at Baroon Pocket Dam. Located on the shores of Lake Baroon adjacent to the southern recreational area.

A walking track from the recreational area winds in a loop past the site.

Created by local indigenous identity, Bev hand, the site is used annually as part of the Bunya Dreaming celebration. The site has a small dance ground and has been planted with bush-use plants – a place that can be used for education and awareness.

The NGJC team spent approximately 5 days on site weeding previous revegetation, and planting 430 trees, shrubs and grasses.

Furthermore, Bev Hand addressed the team twice on local indigenous history, the significance of Baroon Pocket to the aboriginal people, the Bunya Dreaming event and bush foods.

5. Beechwood Community



Beechwood is located on the mid to lower Obi Obi Creek along the Maleny Montville Road. Similar to other ‘communities’ on the Maleny plateau, several freehold properties operate cooperatively on a larger community-owned parcel of land. Although much smaller than many of the other ‘communities’, Beechwood has approximately 750 metres of Obi frontage.

The property has small areas of remnant vegetation and is adjacent to Sunshine Coast Council ‘esplanade’.

The site chosen for restoration was an island on the Obi that had a small stand of remnant on one end, a previous revegetation site on the upstream end and an open area in the centre of the island dominated by thick lantana.

By removing the lantana and revegetating the area with a diverse range of rainforest species (combined with the expected natural regeneration) the whole island will become a haven for wildlife.

6. Egerton Nature Refuge



The Egerton Nature Refuge is located to the north of Baroon Pocket Dam. The property is 42 hectares in size with steep slopes of a westerly aspect. Predominantly regrowth forest it suffers from the common issue of dense lantana growth, which restricts access and regeneration. Nevertheless, the property retains large Red Cedars, White Beech and other important timber species. The property also has a small farm forestry plot.

Works on the property in the recent past have been primarily to open tracks throughout the forest to facilitate access for regeneration activities.

The NGJC team spent several days on track construction, weed management (lantana) and enhancement revegetation activities.

7. Malter Covenant



The Malter property is approximately 20 hectares in size and is more or less equally split between farm forestry plantation and land set aside for conservation purposes. The farm forestry species are predominantly *Elaeocarpus grandis* (Blue Quandong). There is a small remnant on the property – along a steep ridgeline that would have had little grazing value if cleared.

The NGJC Team, as part of their training (endangered species) planted 20 Richmond Birdwing Vines in a covenanted area.

8. Upper Smalls Creek LBCCG Project



The Upper Smalls Creek project commenced in 2008 on Seqwater owned land at Montville. The project on an ephemeral watercourse the project was designed to demonstrate waterway restoration on a large scale. The environmental weed, Madiera Vine was present on the revegetation site during revegetation and has spread downstream. The NGJC team spent a day carefully removing the vine from the area.

9. Baroon Pocket Dam Landscaping



The southern recreational area at Baroon Pocket Dam is a popular day-use area with many passive recreational facilities.

The NGJC team planted Lomandra on a recently mulched garden bed during a wet weather period that limited access onto designated sites.

10. Bridge Creek Landslip Remediation



The Bridge Creek Landslip Remediation project site is located in the lower Bridge Creek catchment. A landslip in 2009 was selected as an excellent demonstration site for trialling innovative management techniques.

Following extensive sub-surface drainage and profiling works the site was planted by the NGJC team in November 2010. Approximately 1,200 tube-stock were planted in three days (including the placement of mulch mats and guards).

11. Bridge Creek Rehabilitation



This LBCCG project is a Commonwealth funded revegetation project that suffered from the flooding experienced in January 2011. Fencing was damaged and approximately 100-planted trees were washed out, covered with debris or died.

The NGJC team spent two days on site installing a temporary electric fence (until the permanent fencing can be re-established) and removing guards from the debris.

Other Activities

Fencing Workshop



A fencing workshop was held to demonstrate to NGJC participants fencing techniques.

Erosion Workshop



Two erosion workshops were held where participants looked at various erosion sites in the lower Bridge Creek catchment – including a visit to the location where Bridge Creek enters Baroon Pocket Dam showing the impact catchment erosion has on the storage.

Team Graduation



The NGJC team graduation was held on the 15th February 2011.

Activities

Site	Approx. man hours	Activity				
		Hand weed	Stem treatment	Foliar spray	Stems planted	Other
Dilkusha Nature Refuge	91	1,600 m ² (lantana)	-	-	300	-
Beechwood Community	96	1,000 m ² (lantana)	-	-	150	-
Bariya Nature Refuge	68	900 m ² (annuals)	400 (various woody weeds)	-	200	-
Manduka Nature Refuge	68	80 m ² (lantana) 850 m ² (annuals)	60 (various woody weeds)	-	160	-
Lake Baroon Cultural Heritage & recreation areas	136	350 m ² (annuals)	-	600 m ² (molasses grass)	430	100 m ² brush-cutting
Egertons Nature Refuge	92	600 m ² (lantana) 50 m ² (annuals)	320 (various woody weeds)	-	210	-
Upper Smalls Creek project	16	-	300 (privet) 50 (madeira vine)	-	-	-
Bridge Creek Landslip & Rehabilitation projects	40	-	-	-	1,200	200 m fence repairs 100 guard reclamation
Malter Covenant	40	-	-	-	20 (Richmond Birdwing vine)	-
TOTALS	647 hours	5,540 m²	1,130 stems	600 m²	2,670 stems	-

Evaluation

National Green Jobs Corps is an Australian Government youth development and environmental training program for young people aged between 17 and 20 years. Green Jobs Corps provides young people with the opportunity to volunteer their time and effort to conserve, preserve and restore Australia's natural environment and cultural heritage. Furthermore participants work towards gaining a Certificate in Conservation and Land Management

The aims of National Green Jobs Corps are to:

- provide high quality, genuine environmental outcomes, which aid in the conservation, protection and restoration of Australia's natural environment and cultural heritage
- provide youth development opportunities for young Australians, including improved employment and educational outcomes
- promote connections between young Australians and their communities.

It is Lake Baroon Catchment Care Group's belief that the project has been invaluable. In addition to the considerable environmental outcomes, the participants themselves have gained great benefits that will stand them in great stead in the future.

Other benefits are:

- a. Improving communication and social skills;
- b. Gaining a sense of ownership, pride and achievement of their project within their own community;
- c. Establishing a work ethic which includes being part of a team and understanding the 'team ethic';
- d. Respect and tolerance for difference whether it is based on culture, background or the right to express a contrary opinion;
- e. A belief in themselves to achieve;
- f. Work skills and attributes such as reliability, punctuality and responsibility;
- g. Development of leadership skills through the allocation of various roles within the team and project;
- h. Further development of practical knowledge and understanding of the history of the area;
- i. Life skills through networking, communication and social interaction;
- j. Personal development and assistance with the formulation of a Post Green Corps
- k. Plan to ensure that the momentum stays with the participant; and
- l. An understanding of and experience involvement in community groups.

The project was built around empowering young people to participate at their own level of skill and experience. The team provided an environment for an experiential model of learning where skills and experiences can be learnt and shared - focusing on each of the participant's strengths.

Specific tasks included:

1. Weed removal (including manual methods such as hand pulling, brush-cutting, cut and stump poisoning, and herbicide spraying);
2. Pruning and clearing;

3. Revegetation works (planting, watering, mulching);
4. Fencing;
5. Training in bush regeneration techniques:
 - a. Weed identification;
 - b. Indigenous species identification;
6. Walking trails repaired and constructed;
7. General landscaping and maintenance of public areas and amenities.

The activities by the participants directly contributed to improvement in water quality and the health of waterways within the Lake Baroon catchment. These activities support both the Lake Baroon Catchment Management Strategy (LBCMS) (1997; currently being reviewed) and the Burnett Mary Region's, Country to Coast, *A Healthy Sustainable Future* (C2C) (2005).

Project Value

Item	NGJC/CVA \$	Landholders \$	LBCCG \$	Total \$
NGJC Program	80,000	10,800	1,500	92,300
Resource trailer			1,800	1,800
Tools			1,000	1,000
Brush-cutter			800	800
Plants		495	3,510	4,005
Other (consumables)		100	1,000	1,100
Totals	80,000	11,395	9,610	101,005



Lake Baroon Catchment Care Group purchased a 'Resource Trailer' to store and transport tools and equipment during the National Green Jobs Corps program. This trailer is available for community groups to use when undertaking environmental activities.