

NATURAL HERITAGE TRUST

Project Final Report

Office Use Only
State Project No.

.....
NHT Project No.
.....

1. (a) Project Administration

Project Title
(Use the same title as
in original project
application)

Willow management and river improvement – Coal Valley

**Name Of
Organisation**

Coal Valley Landcare (Committee of Coal River Products Association Inc)

Contact Address

Dr Neville Mendham, PO Box 22, Richmond 7025

Project Manager

Mr Kevin Harding

Ph: 6226 2598

Fax: 6226 2642

Project Duration

Actual Start

Month Year

April 1998

Actual Finish

Month Year

December 2002

1. (b) Total Project Funding Details

Please provide information over the life of the project on the actual financial and in-kind contributions of the various stakeholders in the project, as set out below (in-kind employment contributions, operating costs and capital costs should be calculated according to the application guidelines that you used for your original funding application).

If you have unspent funds or retain assets these will have to be accounted for.

	Proponent Contribution (Funds & In- kind)	Other Contributor 1* (Funds & In- kind)	Other Contributor 2* (Funds & In- kind)	NHT Funds	Total Project Funds
Approved	87150			86300	173450
Received				86300	86300
Paid employment costs (a) (includes consultant)				32441	32441
Operating costs (b) (includes machinery hire)	4440			53859	58299
Capital costs (c)					
Expended (a+b+c)	4440			86300	90740
In-kind employment (includes machinery etc)	82710				82710
Unspent				0	0
TOTAL	87150			86300	173450

* Provide names of other organisations contributing. 'Other Contributors' includes State and Local Government, Sponsors and other organisations. You should only count contributions that are eligible to be matched with NHT funds.

2(a). Describe the issues or problems addressed by the project

Provide a brief summary of the issues or problems that your project tackled, what you did in your project to resolve these and how well it worked.

The Coal River was infested with crack willows along a substantial proportion of its length. The channel bed was blocked in many places, and had caused flooding and soil erosion. Other weeds and associated problems had resulted from many years of farming, and neglect of riparian zones. The Coal is also the major channel for the SE Irrigation Scheme, conveying water from the Craighourne dam. This extra summer flow has accentuated the willow problem as the river used to dry up in summer. Small sections of the river had been tackled as demonstration areas in an earlier Landcare project. Initially for this project we proposed a survey of the river, but were advised to prepare a full Rivercare Plan. This was done in 1998 before any weed removal, using Ecosynthesis (Daniel Sprod) as the consultant. The Plan involved surveying the river, dividing it into sections based mainly on vegetation type and extent of the willow infestation, and preparing management strategies. The sections to be tackled were prioritised so that the work could continue over a 5 year period.

The works were tackled in two major operations, in the winters of 1999 and 2000. The main willow removal was done by excavator, with an experienced operator. We tried small scale works using just local equipment, but it quickly became obvious that this was not cost effective, apart from dealing with scattered trees. Most of the river has now been treated, including follow-up work from this and the earlier project. Treating cut willow stumps immediately with herbicide has proven very effective, and reduces the amount of followup work required. Some smaller willow infested sections remain to be done, in later stages of the Plan implementation. Funds have been obtained in a new NHT project for this purpose (Implementation of the Coal Rivercare Plan, see separate Final Report), plus some use of devolved grant funds (also NHT) from the Pittwater Catchment Implementation Strategy.

While willow removal and followup control has been the main focus of the project, fencing and revegetation work is continuing. This has been delayed to allow thorough willow control as there is no point rushing into revegetation while willows continue to sucker or re-establish. It has become obvious that natural regeneration offers the best chance in the riparian zones wherever there are some remnants, with limited fencing and weed control as necessary.

2(b). Project Performance against objectives/milestones.

Please provide information on the overall achievements of your project against your planned objectives and milestones. Indicate important achievements you have made in addition to your planned objectives. In some cases you may have had difficulties, or were unable to meet all, or some of your objectives. This should not be regarded as a failure. Please indicate if this has occurred and give an assessment of factors contributing to the difficulties (eg climatic conditions, group dynamics, late arrival of funds, inappropriate planning, local government regulations).

ACHIEVEMENTS AND IMPEDIMENTS

What did you set out to do? (List the objectives stated on your funding application)	Comment on the extent to which your objectives were met.	How did you measure your achievements, eg photos, surveys, attendance at seminars.
Survey of River	Aerial photographs obtained. Rivercare Plan developed and approved by NHT unit. Program of river improvement prioritised in Plan, as a 5 year program.	Plan produced, and copies given to Riparian Landowners and other interested parties
Willow removal trial – small sections of river	Limited trial work, plus experience from this and other catchments (Particularly nearby Prosser River) showed that the problem of serious willow infestation can not be tackled in a cost effective manner without large machinery. With a good excavator operator willows can be removed and stacked with minimal damage to desirable vegetation. Sparse willow infestation can be treated by individual landowners by stacking and burning	Demonstrated to the satisfaction of the persons involved.

	dry wood around live trees in a gradual process.	
Remove willows from river bed and selected willows from banks.	Done with excavator and accompanying chainsaw operator in 1999 and 2000, as per Plan priorities with some modification for logistical efficiency. Some later stages remain to be done, with funding from new NHT project and devolved grant. Varying levels of cooperation and financial commitment of landowners made some sections difficult – inevitable in a river project where every riparian landowner is involved, like it or not.	Photo record kept, field days held to demonstrate progress. Observations on water table, salinity, turbidity levels in the river indicate substantial improvement since works began.
Clean up following machinery	The Project Coordinator has conducted successful campaigns using volunteer and hired labour to stack and burn debris, and control suckers and regrowth in succeeding years. Painting cut stumps with roundup has been successful in substantially reducing regrowth, provided treatment is within minutes of tree cutting. This appears to be successful almost any time of the year, including well after leaf fall (June). Spraying regrowth (leaves) has been surprisingly successful even in spring, rather than waiting until autumn. October-November appears to be the first suitable time, and then early March before leaf fall commences.	Checking and treatment of regrowth. Landowner cooperation and satisfaction with results. Field day demonstrations of willow free river sections. Photographic record.
Fencing and revegetation (originally listed separately as preliminary revegetation, protection of the areas, develop planting program, prepare areas for planting, planting trees, shrubs and grasses, maintenance)	Program delayed to ensure willow kill. Fencing still in progress, materials purchased. Grass seed sown in areas needing quick cover. Tree and shrub seed and seedlings used for suitable niches, eg after burning willow debris. Locally collected blackwood (<i>Acacia melanoxylon</i>) seed used where possible. Our experience is that many natives are re-establishing naturally if conditions are right, preferably where the river banks are fenced, but even without, provided grazing is infrequent.	Work still in progress.

3(a) On-ground Outputs (total outputs achieved since the start of the project. Use original application to supply whole of project targets)

Activity	Total outputs achieved	Project Target
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Native vegetation/habitat

1) Total area of native vegetation works (Should equal 2) + 3) + 4)	ha	ha
2) Remnant protection works (remnants in relatively good condition)	ha	ha
3) Remnant rehabilitation works (including restoring links)	ha	ha
4) Revegetation works (predominantly in cleared areas)	ha	ha
5) Number of plants (not seed) planted.	No.	No.
6) Length of direct seeding lines	km	km
7) Length of protective fencing	km	km
8) Area of voluntary management agreements established	ha	ha
9) Covenanted areas established to protect remnant native vegetation	ha	ha
10) Area of works that protect/enhance threatened species/community habitat	ha	ha
11) Area of 10) protected by agreements as in 8) or 9)	ha	ha

Waterway or water body management

12) Waterway protected by fencing (usually both sides or divide by 2).	4 km	12 km
13) Length of fenced waterway revegetated.	4 km	4 km
14) Benefits downstream of waterway physical works (bed and banks, etc).	15 km	15 km
15) Benefits downstream of in-stream habitat works.	15 km	15 km
16) Benefits of environmental flows or water provided for wetlands.	ha/km	ha/km
17) Native fish restocking – number of fingerlings.	No.	No.
18) Native fish restocking – age of fingerlings.	months	months
19) Native fish restocking – native to the area?	Yes/No	Yes/No
20) Other beneficial waterway activities Specify type: Willow removal	12 km	12 km

21) Pollution Control

Target Pollutants	Main Source	Initial Levels	Current levels	Target levels	% Improved
					%
					%
					%
					%
					%

Activity	Total outputs achieved	Project Target
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Control of Rising Watertables)

22) Target area for ground water pumping systems installed	ha	ha
23) Area drained to control rising water tables	ha	ha
24) Area of planting/establishment in recharge areas	ha	ha
25) Area of planting/establishment in recharge areas	ha	ha
26) Using deep-rooted perennial crops/pastures.	ha	ha
27) Using local native species	ha	ha
28) Using non-local native species	ha	ha
29) Using exotic species	ha	ha

Water-use efficiency improvements

On-farm efficiency? <input type="checkbox"/>	Or Off-farm efficiency? <input type="checkbox"/>
30) By recycling treated effluent	ML % ML %
31) By recycling drainage water	ML % ML %
32) By use of wastewater	ML % ML %
33) By use of stormwater	ML % ML %
34) By more efficient water management systems	ML % ML %
35) By refurbishment of water supply channels	ML % ML %

Stabilisation of wind or water erosion – soil condition

36) By revegetation (including fencing out).	ha %	ha %
37) By control of grazing pressure.	ha %	ha %
38) By use of cropping technologies.	ha %	ha %
39) Gully erosion control.	ha %	ha %
40) Other Specify:	ha %	ha %

Improving the use of land within its capability

41) Area of land assessed for capability.	ha	ha
42) Area of land to be managed according to capability.	ha	ha

Improved weed and pest management

43) Estimated area of effective weed control (including aquatic)?	ha	No.
44) Estimated area of effective vertebrate pest control	ha	ha
45) Other specify:	ha	ha

Farm Forestry for demonstration or trial purposes

46) Number of landholders expected to be involved?	No.	No.
47) Area of native species for wood production	ha	ha
48) Area of native species primarily for non-wood production:	ha	ha
49) Area of exotic species for wood production?	ha	ha
50) Area of native forest for production?	ha	ha

3(b) Other Outputs

Achievements (product or service)	Description	Quantity	
		Total outputs achieved	Project Target
Education and awareness (including adoption of best management practices)			
Type of publication (report, brochure, book) or activity (demonstration, field day) and topic/name of report	Target audience and location	Quantity (eg no. of copies, no. of field days, ...)	
Rivercare Plan	Riparian landowners, irrigators, students	60	60
Field days	As above	2 days plus tour	Not specified
Training			
Purpose and type of training activity (include name of course if applicable)	Target audience and location	Number of courses/workshops and number of people trained (and target for project)	
Planning			
Name of plan or feasibility study (including project development and marketing strategies) and area of strategy (eg. regional, catchment, subcatchment)	Purpose of plan. Indicate priority issues identified (eg groundwater management, nutrient management, river restoration, salinity, farm forestry feasibility studies etc)	Number published (ie no. of copies produced)	
Coal Rivercare Plan	Survey and prioritisation of river works	60	60
Monitoring			
What is being monitored? (eg water quality, gully erosion,...) Water quality, informally by participants and formally by DPIWE Water Quality Officers (separate NHT project "State of Rivers")	How many sites, how often? Indicate major activities undertaken (eg surveying, mapping, soil sampling) and at what stages.	Number of people who participated	
Riverbank condition, water quality, fauna, native vegetation re-establishment, willow control	Regular inspections of river work by Coordinator with landowners, as part of follow-up work, plus DPIWE project as noted.	10	15
Resource inventory			
Purpose of inventory	Indicate location. How many sites, how often? Is data to be included on Geographical Information Systems?	Area inventoried (ha)	
		No. of sites	Area covered (ha)

3(c) Employee Information and Outputs: Indicate how many salaried staff and/or contract staff were employed in your project, and the length and level of their employment. For each person, indicate the outputs they were responsible for delivering, in order of importance.

	Salaried staff		Contractors or consultants	
	Total achieved	Project Target	Total achieved	Project Target
Number, description, length of employment	Project Coordinator (K Harding) (355 hours)		Consultant to develop Plan (Ecosynthesis)(25 days) Excavator contractor (G.Jordan) (360 hours)	
Outputs (in priority order)	Supervision of river works, including fencing and revegetation		Development of Plan after survey of 20 km of river 12 km of river cleared.	Survey of river

4. Participation

How many people have been actively involved in your project (include employees and volunteers)?

50

Which stakeholder groups have been involved in the project? List major groups who contributed to the technical, practical, financial or administrative aspects of the project, eg community groups, schools, tertiary institute, research organisations, local government, State Government, business, Indigenous groups.

Category	Name of Group	Type of Involvement	Number of Participants
Riparian landowners		Involvement in development and implementation	30
Landcare members	Coal Valley Landcare (Coal R Products Assn)	Initiated and implemented project	35
Catchment committees (supported by Clarence Council)	Coal R Catchment Committee, Pittwater Catchment Implementation Committee.	Support, followup projects	15
Student groups	University of Tasmania Agricultural Science groups	Monitoring, evaluation, education	30
Government	Department of Primary Industry Water and Environment	Advice on engineering, revegetation, water quality etc	5

5. Implementing Regional, Catchment and Local Area Planning

In what way has your project contributed to the development or implementation of a regional strategy or plan?

The Coal Rivercare Plan was developed with the involvement of the Coal R Catchment Committee and its successor, the Pittwater Catchment Implementation Committee. Other streams in the catchment are being subsequently dealt with in a similar manner.

6. Use of Project Results

Has your project had any benefits for any other groups? If so, by whom and in what way. How has your project been publicised. Attach copies of media coverage or other publicity. Has acknowledgment been given to the Natural Heritage Trust? If you have a photographic record please provide copies.

The project has been a valuable teaching aid in Agricultural Science at the University of Tasmania, with student visits, discussions and participation in photographing and monitoring works and results.

Tour groups have visited the works, including the PURSL conference participants in early 2001.

The main publicity for the project has been in working with riparian landowners individually, plus two field days.

7. Program Administration

Please provide comments on administration of your project and your dealings with relevant government agencies.

Apart from the need to deal with a variety of people and agencies, no particular problems have been encountered.

8. Future Action

How is your group planning to maintain the project after funding has ceased?


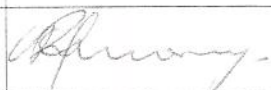
A new project, "Implementation of the Coal Rivercare Plan" has been funded, to continue the later stages of implementation. Funds from the Pittwater Catchment Implementation Committee's devolved grant are also being accessed, initially to continue works on a stretch of the river above Richmond. Individual landowners are also encouraged to apply for grants from the devolved project to complement the main implementation project. We are working with the Catchment Committee and Clarence Council to institute a plan for on-going maintenance.

Do you intend to seek further Natural Heritage Trust funding, or funding from other sources to undertake further activities?

Further funding will be required to complete the Rivercare works

9. Group Declaration:

I declare that I am an authorised representative of the recipient organisation, that the information given on this form is complete and correct and that expenditure of moneys paid under the Financial Assistance Agreement has been solely upon the project and in accordance with the terms of the Agreement and its Conditions.

Name (please print)	NJ Mendham		Name (please print)	RJ Morey	
Position in Organisation	Secretary, Coal Valley Landcare	Phone 6226 2598	Position in Organisation	Chairman, Coal Valley Landcare	Phone 6265 2484
Signature			Signature		
		Date 18/12/02			Date 18/12/02

Natural Heritage Trust

Final Audited Financial Statement

Project No.

Project Title

Willow management and river improvement – Coal Valley

Name of Organisation

Coal Valley Landcare (Committee of Coal R Products Association Inc)

Project Start Date

April 1998

Project End Date

December 2002

Financial Acquittal for the period (Dates)

_ / _ / _ to _ / _ / _

	NHT funds
Income	
A. Unspent Commonwealth funds received for project prior to NHT in 1996/97	
B. Natural Heritage Trust Funds for the period 01/07/97 to 30/06/98	9800
C. Natural Heritage Trust Funds for the period 01/07/98 to 30/06/99	40250
D. Natural Heritage Trust Funds for the period 01/07/99 to 30/06/00	36250
E. Natural Heritage Trust Funds for the period 01/07/00 to 30/06/01	
F. Natural Heritage Trust Funds for the period 01/07/01 to 30/06/02	
G. TOTAL INCOME RECEIVED (A + B + C + D +E + F)	86300
Expenditure	
EMPLOYMENT COSTS	
Salaries/wages	
Salaries/wages on-costs	
Consultants/contractors	32441
Other	
OPERATING COSTS	
Travel	
Equipment hire/lease	38335
Other	15524
CAPITAL COSTS (only items over \$5,000 - please itemise)	
H. TOTAL EXPENDITURE INCURRED	86300
UNSPENT FUNDS ON HAND (G – H)	0

AUDIT DECLARATION

I hereby certify that all funds paid under the Financial Assistance Agreement have been expended or incurred by way of expenditure solely upon the project and in accordance with the Terms of the Agreement.

Signature of Authorised auditor for the recipient organisation

(interim audit only: final to be submitted Jan 03)

Printed name

John R Cleary

Name of Auditor's Organisation

Colonial Accountancy

Contact Telephone Number

62602322

Date

20 December 2002

NOTE: Please complete one of these forms for each project receiving NHT funds

NATURAL HERITAGE TRUST

Project Final Report

Office Use Only
State Project No.

.....
NHT Project No.

1. (a) Project Administration

Project Title
(Use the same title as in original project application)

Implementation of the Coal Rivercare Plan, Tasmania.

Name Of Organisation

Coal Valley Landcare (Committee of Coal River Products Association Inc)

Contact Address

Dr Neville Mendham, PO Box 22 Richmond Tas.

Project Manager

Mr Kevin Harding

Ph: 6226 2598

Fax: 6226 2642

Project Duration

Actual Start

Month Year

March /2002

Actual Finish

Month Year

December 2002

1. (b) Total Project Funding Details

Please provide information over the life of the project on the actual financial and in-kind contributions of the various stakeholders in the project, as set out below (in-kind employment contributions, operating costs and capital costs should be calculated according to the application guidelines that you used for your original funding application).

If you have unspent funds or retain assets these will have to be accounted for.

	Proponent Contribution (Funds & In-kind)	Other Contributor 1* (Funds & In-kind)	Other Contributor 2* (Funds & In-kind)	NHT Funds	Total Project Funds
Approved	32900			33750	66650
Received				33750	33750
Paid employment costs (a)				13911	13911
Operating costs (b)	6665 landowner contributions			22301	28966
Capital costs (c)					
Expended (a+b+c)				36212	42877
In-kind employment	26235				26235
Unspent				0	
TOTAL	32900			33750+2462	69112

* Provide names of other organisations contributing. 'Other Contributors' includes State and Local Government, Sponsors and other organisations. You should only count contributions that are eligible to be matched with NHT funds.

2(a). Describe the issues or problems addressed by the project

Provide a brief summary of the issues or problems that your project tackled, what you did in your project to resolve these and well it worked.

This project was to continue implementation of the Coal Rivercare Plan, developed under a previous project "Willow management and river improvement – Coal Valley", also submitted as a final report in December 2002. The Rivercare Plan proposed a 5 year program of works to improve the ecological health of the river by gradually removing willows, fencing off some areas and either planting native species or encouraging natural regeneration. The Plan divided the river into sections based on vegetation type and severity of willow infestation. The first two years' works were conducted under the previous project, and this current project continues the work into a third year, with some of the later planned work also undertaken for logistical efficiency (while the excavator was in the area). Some of the major problem areas were tackled by a combination of excavator, chainsaw, stump treatment with herbicide and then cleanup of debris. Burning has only been possible on a limited scale so far as the winter and spring were very dry. Some smaller areas of willows remain, plus there will be on-going control of regrowth willows and revegetation works. Some riparian landowners take longer to convince of the value of river improvement than others, and these are being left to later stages of the program.

Some of the works were conducted in 2002 using supplementary funds from the devolved grant to the Pittwater Catchment Implementation Committee, as well as some of this project's funds. These works were mostly close to Richmond township on smaller area properties.

Ecological benefits to the river are being recorded, in improved water quality and greater evidence of native flora and fauna, particularly fish and platypus, in accordance with research by Martin Read, PhD 1999, on the benefits of willow removal from Coal and other rivers.

2(b). Project Performance against objectives/milestones.

Please provide information on the overall achievements of your project against your planned objectives and milestones. Indicate important achievements you have made in addition to your planned objectives. In some cases you may have had difficulties, or were unable to meet all, or some of your objectives. This should not be regarded as a failure. Please indicate if this has occurred and give an assessment of factors contributing to the difficulties (eg climatic conditions, group dynamics, late arrival of funds, inappropriate planning, local government regulations).

ACHIEVEMENTS AND IMPEDIMENTS

What did you set out to do? (List the objectives stated on your funding application)	Comment on the extent to which your objectives were met.	How did you measure your achievements, eg photos, surveys, attendance at seminars.
Selectively remove willows and other weeds from the river and banks in prioritised sections according to Rivercare Plan.	About 6.5 km of river was cleared during 2002, slightly more than anticipated, but about 3 km remain to be done in later campaigns.	Photos (see attached), records.
Clean up debris, burn heaps	Cleanup done, but too dry to burn most heaps – will be done in winter 2003.	Photos, records.
Fencing selected sections of bank.	5 km done or in progress	
Improve ecological health of river	Achieved, but an on-going process – water is clearer, cleaner, less turbidity, more platypus and fish in evidence, agreeing with M. Read's PhD research on willow removal from Coal and other rivers.	Observations by manager and landowners. Waterwatch group set up, monitoring continuing.
Followup work on willow re-	Spraying or manual removal achieved	Observation on regrowth

growth control (from previous project)	on most regrowth (from stumps or small pieces left in or on soil)	continuing by manager and landowners
Revegetation (seeding and planting)	2500 trees planted where landowners able to water, otherwise deferred until next winter due to continuing dry conditions. Encouraging natural regeneration from seed has proven to be the most satisfactory method in general, particularly where some remnant vegetation exists nearby (blackwoods, silver wattle etc). Even without this, seed from native vegetation further up the catchment and on tributaries is being brought down the river, and spread by floods	Records of establishment and survival of planted trees, and observations of regeneration

3(a) On-ground Outputs (total outputs achieved since the start of the project. Use original application to supply whole of project targets)

Activity	Total outputs achieved	Project Target
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Native vegetation/habitat

1) Total area of native vegetation works (Should equal 2) + 3) + 4)	75 ha	75 ha
2) Remnant protection works (remnants in relatively good condition)	20 ha	20 ha
3) Remnant rehabilitation works (including restoring links)	50 ha	50 ha
4) Revegetation works (predominantly in cleared areas)	2 ha	5 ha
5) Number of plants (not seed) planted.	2500	5000 No.
6) Length of direct seeding lines	km	km
7) Length of protective fencing	5 km	km
8) Area of voluntary management agreements established	ha	ha
9) Covenanted areas established to protect remnant native vegetation	ha	ha
10) Area of works that protect/enhance threatened species/community habitat	ha	ha
11) Area of 10) protected by agreements as in 8) or 9)	ha	ha

Waterway or water body management

12) Waterway protected by fencing (usually both sides or divide by 2).	5 km	4 km
13) Length of fenced waterway revegetated.	1 km	4 km
14) Benefits downstream of waterway physical works (bed and banks, etc).	km	km
15) Benefits downstream of in-stream habitat works.	16 km	16 km
16) Benefits of environmental flows or water provided for wetlands.	20 /km	20 /km
17) Native fish restocking – number of fingerlings.	No.	No.
18) Native fish restocking – age of fingerlings.	months	months
19) Native fish restocking – native to the area?	Yes/No	Yes/No
20) Other beneficial waterway activities Specify type:	km	km

21) Pollution Control

Target Pollutants	Main Source	Initial Levels	Current levels	Target levels	% Improved
					%
					%
					%
					%
					%

Activity	Total outputs achieved	Project Target
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Control of Rising Watertables)

22) Target area for ground water pumping systems installed	ha	ha
23) Area drained to control rising water tables	ha	ha
24) Area of planting/establishment in recharge areas	ha	ha
25) Area of planting/establishment in recharge areas	ha	ha
26) Using deep-rooted perennial crops/pastures.	ha	ha
27) Using local native species	ha	ha
28) Using non-local native species	ha	ha
29) Using exotic species	ha	ha

Water-use efficiency improvements

Activity	On-farm efficiency? <input type="checkbox"/>	Or Off-farm efficiency? <input type="checkbox"/>
30) By recycling treated effluent	ML %	ML %
31) By recycling drainage water	ML %	ML %
32) By use of wastewater	ML %	ML %
33) By use of stormwater	ML %	ML %
34) By more efficient water management systems	500 ML, ~10% of scheme	ML %
35) By refurbishment of water supply channels	ML %	ML %

Stabilisation of wind or water erosion – soil condition

36) By revegetation (including fencing out).	ha %	ha %
37) By control of grazing pressure.	ha %	ha %
38) By use of cropping technologies.	ha %	ha %
39) Gully erosion control.	ha %	ha %
40) Other Specify:	ha %	ha %

Improving the use of land within its capability

41) Area of land assessed for capability.	ha	ha
42) Area of land to be managed according to capability.	100 ha approx	ha

Improved weed and pest management

43) Estimated area of effective weed control (including aquatic)?	20 ha	15 ha
44) Estimated area of effective vertebrate pest control	ha	ha
45) Other specify:	ha	ha

Farm Forestry for demonstration or trial purposes

46) Number of landholders expected to be involved?	No.	No.
47) Area of native species for wood production	ha	ha
48) Area of native species primarily for non-wood production:	ha	ha
49) Area of exotic species for wood production?	ha	ha
50) Area of native forest for production?	ha	ha

3(b) Other Outputs

Achievements (product or service)	Description	Quantity	
		Total outputs achieved	Project Target
Education and awareness (including adoption of best management practices)			
Type of publication (report, brochure, book) or activity (demonstration, field day) and topic/name of report	Target audience and location	Quantity (eg no. of copies, no. of field days, ..)	
Coal Rivercare Plan (from previous project)	Riparian landowners, irrigators, local government, university students	60 copies	60
Training			
Purpose and type of training activity (include name of course if applicable)	Target audience and location	Number of courses/workshops and number of people trained (and target for project)	
Planning			
Name of plan or feasibility study (including project development and marketing strategies) and area of strategy (eg. regional, catchment, subcatchment)	Purpose of plan. Indicate priority issues identified (eg groundwater management, nutrient management, river restoration, salinity, farm forestry feasibility studies etc)	Number published (ie no. of copies produced)	
Coal Rivercare Plan (as above)	River surveyed, vegetation types identified, sections for weed control and river management prioritised	60	
Monitoring			
What is being monitored? (eg water quality, gully erosion,...)	How many sites, how often? Indicate major activities undertaken (eg surveying, mapping, soil sampling) and at what stages.	Number of people who participated	
		No. of sites	No. of people
Willow regeneration from stumps and pieces	All previous works sites (about 20 properties), at least annual check prior to control works)	20	25
Water quality via Waterwatch Group recently (2002) set up	10 sites – salinity, pH, turbidity, plus aquatic flora and fauna observations with assistance University (M Read advice and PhD thesis)	10	10
Resource inventory			
Purpose of inventory	Indicate location. How many sites, how often? Is data to be included on Geographical Information Systems?	Area inventoried (ha)	
		No. of sites	Area covered (ha)

3(c) Employee Information and Outputs: Indicate how many salaried staff and/or contract staff were employed in your project, and the length and level of their employment. For each person, indicate the outputs they were responsible for delivering, in order of importance.

	Salaried staff		Contractors or consultants	
	Total achieved	Project Target	Total achieved	Project Target
Number, description, length of employment			Project manager (K Harding) 610 hours during 2002 One casual employee 145 hours	250 hours K Harding plus 350 hours casual

Outputs (in priority order)			Supervision of excavator work, liaison with landowners, some labour on cleanup, revegetation	
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4. Participation

How many people have been actively involved in your project (include employees and volunteers)?

25

Which stakeholder groups have been involved in the project? List major groups who contributed to the technical, practical, financial or administrative aspects of the project, eg community groups, schools, tertiary institute, research organisations, local government, State Government, business, Indigenous groups.

Category	Name of Group	Type of Involvement	Number of Participants
Landcare Group	Coal Valley Landcare	Initiation, coordination, supervision	4
Catchment Group	Pittwater Catchment Implementation Committee	Support, subsidiary project	9
Local government	Clarence City Council	Support of catchment group	3
Tertiary institute	University of Tasmania	Support, value for teaching, research	5

5. Implementing Regional, Catchment and Local Area Planning

In what way has your project contributed to the development or implementation of a regional strategy or plan?

The project is a vital part of the implementation of the Coal Rivercare Plan, which in turn is a part of the Coal River Catchment strategy and Pittwater Catchment Implementation plan. Management of the waterways form a central component of both Catchment Strategies.

6. Use of Project Results

Has your project had any benefits for any other groups? If so, by whom and in what way. How has your project been publicised. Attach copies of media coverage or other publicity. Has acknowledgment been given to the Natural Heritage Trust? If you have a photographic record please provide copies.

A selection of photographs from our record is appended. One major field trip visited the project during 2002, the Pittwater Catchment tour in November. Several other groups including students inspected the ongoing river works. Signs acknowledging the NHT contribution have been erected at strategic points. Information about the works has been included in the Pittwater Catchment Newsletters.

7. Program Administration

Please provide comments on administration of your project and your dealings with relevant government agencies.

The involvement of the Pittwater catchment group, particularly the Coordinator Ursula Taylor, has made most aspects of the project much easier – coordination, publicity, support. No problems were experienced with availability of funds even though received late, as we still had some unspent funds from the previous project.

8. Future Action

How is your group planning to maintain the project after funding has ceased?



Limited funds remain with the group from proponent contributions to assist ongoing maintenance.
Discussion about involvement of local government via a rating system on riparian landowners and users of irrigation water is continuing.

Do you intend to seek further Natural Heritage Trust funding, or funding from other sources to undertake further activities?

It is hoped that further applications, either to NHT directly or via Pittwater devolved grants, will enable Any remaining work to be completed, particularly with several landowners who have not wished to be involved in work so far.

9. Group Declaration:

I declare that I am an authorised representative of the recipient organisation, that the information given on this form is complete and correct and that expenditure of moneys paid under the Financial Assistance Agreement has been solely upon the project and in accordance with the terms of the Agreement and its Conditions.

Name (please print)	N.J. Mendham		Name (please print)	R. J MOREY	
Position in Organisation	Secretary	Phone	Position in Organisation	CHAIRMAN	Phone 62652484
Signature		Date	Signature		Date 20 DEC 2002

Natural Heritage Trust

Final Audited Financial Statement

Project No.

Project Title	Implementation of the Coal Rivercare Plan - Tasmania		
Name of Organisation	Coal Valley Landcare (Committee of Coal R Products Association Inc)		
Project Start Date	March 2002	Project End Date	December 2002
Financial Acquittal for the period (Dates)	_ / _ / _ to _ / _ / _		

	NHT funds
Income	
A. Unspent Commonwealth funds received for project prior to NHT in 1996/97	
B. Natural Heritage Trust Funds for the period 01/07/97 to 30/06/98	
C. Natural Heritage Trust Funds for the period 01/07/98 to 30/06/99	
D. Natural Heritage Trust Funds for the period 01/07/99 to 30/06/00	
E. Natural Heritage Trust Funds for the period 01/07/00 to 30/06/01	
F. Natural Heritage Trust Funds for the period 01/07/01 to 30/06/02	33750
G. TOTAL INCOME RECEIVED (A + B + C + D +E + F)	33750
Expenditure	
EMPLOYMENT COSTS	
Salaries/wages	
Salaries/wages on-costs	
Consultants/contractors	13911
Other	
OPERATING COSTS	
Travel	
Equipment hire/lease	20950
Other	1351
CAPITAL COSTS (only items over \$5,000 - please itemise)	
H. TOTAL EXPENDITURE INCURRED	36212
UNSPENT FUNDS ON HAND (G – H)	0

AUDIT DECLARATION

I hereby certify that all funds paid under the Financial Assistance Agreement have been expended or incurred by way of expenditure solely upon the project and in accordance with the Terms of the Agreement.

Signature of Authorised auditor for the recipient organisation	(interim audit only: final to be submitted Jan 03)
Printed name	John R Cleary
Name of Auditor's Organisation	Colonial Accountancy
Contact Telephone Number	03 6260 2322
Date	20 December 2002

NOTE: Please complete one of these forms for each project receiving NHT funds

**“Willow management and river improvement – Coal Valley”
and “Implementation of Coal Rivercare Plan – Tasmania.”**



Willows in the upper Coal Valley – a “traditional” sight in autumn.



Dense “willow swamp”, Coalbrookdale, Campania.
River blocked, liable to flood.



Willow debris in river, showing turbid water, before clearing.



Willow clearance with excavator with crab grab (Woodland Management, G. Jordan, Liffey). Large log being removed for stacking, Eliza Farm, Campania, April 1999.



Dense willows blocking river, Eliza Farm, Campania.



About six willows all grafted together on bank of Coal River, Eliza Farm, Campania. This one was too good to remove.



Willows cleared from the river previously on left (Rosedale), compared to dense “willow swamp” on Coalbrookdale, Campania.



Willow swamp to the right of previous picture (above). River will flood easily here, covering flats beyond.



Excavator removing branches and debris from Coal River, Eliza Farm, Campania. Stumps in the river will be removed, those on the bank painted with herbicide and left for stabilisation.



Excavator stacking debris, Eliza Farm, Campania.



Willow debris stacked, with a few willows left for bank stability, or where they are not causing a problem away from river.



Burning heap of willow debris, July 1999, Eliza Farm, Campania.



Willow logs and stumps left as temporary riffle after clearing in April, collecting debris July 1999.



Willow debris shooting again, three months after clearing, July 1999.



Banks after willow clearance showing undamaged remnant blackwoods and eucalypts, with willows stacked behind. Campania House, Campania, July 1999.



Blackwoods regenerating after willow removal, near bridge at Campania House, December 2002.



The large blackwood tree had been suffering from competition with willows, but after removal, is now thriving. Rushes and other vegetation have colonised banks. Rosedale, Campania, December 2002.



Coal River two years after clearing , showing tea tree regenerating naturally in centre, and eucalypts and blackwoods planted on banks. Mallow, Campania, December 2002.



Coal River from the bridge at Mallow two years after clearing, showing clear water, willow stumps holding banks, also colonised by rushes, grasses and shrubs, with remnant eucalypts behind.



Coal River at Barton Vale, December 2002. Clear water with frequently observed fish and platypus, bank colonised by rushes and held by willow stumps.



Coal River at Barton Vale, December 2002. Willow stumps, rushes, remnant blackwood. Cumbungi growing in river on the right of the picture needs to be controlled.



Blackwood on bank at Barton Vale. This was successfully transplanted from the bed of the river after clearing willows.