



Protecting the Macquarie Perch in the Mongarlowe River

**A Threatened Species Network Project
involving community groups, government
agencies, knowledge generation and data
sharing.**

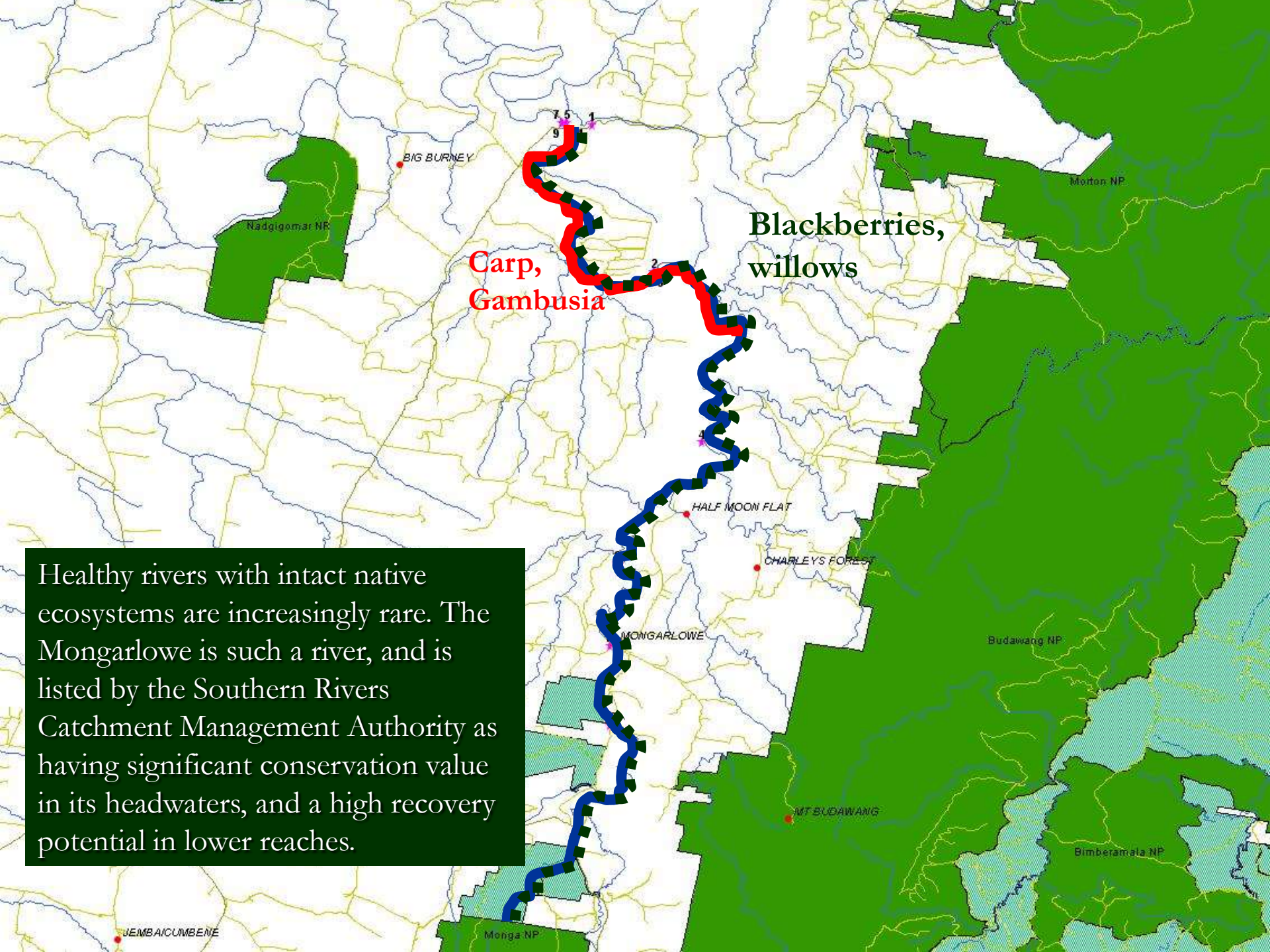
Su Wild-River, Friends of Mongarlowe River



Many Hats

- **Action research**
 - facilitating change
- **Certified Environmental Practice**
 - ethically bound
- **Land management**
 - biophysically challenged
- **Mothering**
 - leaving a legacy
- **Community membership**
 - Undertaking direct action





Healthy rivers with intact native ecosystems are increasingly rare. The Mongarlowe is such a river, and is listed by the Southern Rivers Catchment Management Authority as having significant conservation value in its headwaters, and a high recovery potential in lower reaches.



The FMR

- A diverse group of people with a passion to preserve things of great and lasting value.
- Were influential in securing Monga National Park – a highly contentious campaign
- FMR continues in conservation education – organising forest walks and occasional events.
- Will continue to help:
 - protect riparian and water quality in the Mongarlowe River and its tributaries,
 - learn about and protect the Macquarie Perch in the Mongarlowe River, and
 - inform planning to prevent ecological degradation.



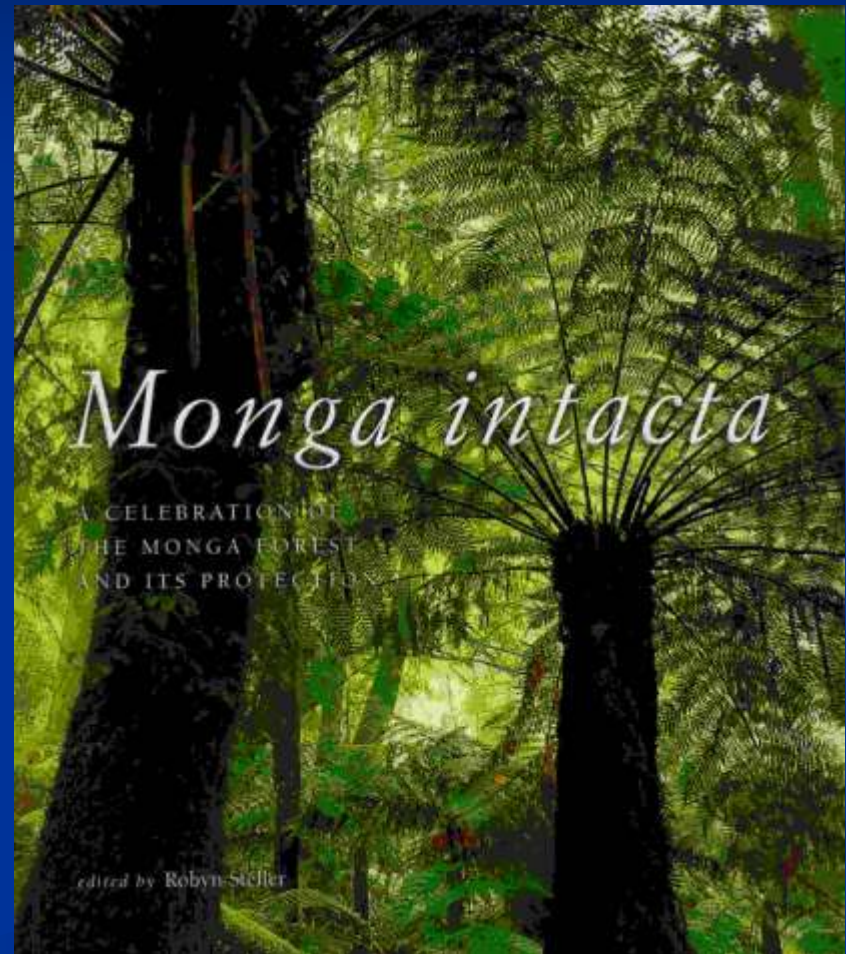


The Mongarlowe River and catchment

There is so much that is special:

- the gorgeous Mongarlowe River, with its ferny banks and reflective water;
- the waratahs that flower every November; the few giant eucalypts that have escaped the logging, which may be a thousand years old;
- the fern-fringed spring where the Mongarlowe River rises; the ancient, gnarled eucryphias, each one with its own individual personality, reminding one of Tolkien's Ents, as though Treebeard has journeyed to Monga from Middle Earth.

In March their petals fall to the ground like confetti. In the exquisite pockets of rainforest, fairy dells of treeferns drip with mosses and epiphytes. Human-created art works can be found tucked away in unexpected places, inspired by and made out of the natural vegetation.





FMR Macquarie Perch Project

Summary

The Macquarie Perch is endangered and in serious decline throughout most of its former range. This project will improve knowledge through habitat assessment and species monitoring. It will produce a Conservation Information package for the community. It will achieve targeted and general community awareness, and identify ongoing conservation needs.

Objectives

Species / Ecological Community Conservation Objectives

- Habitat identification using standardised methods,
- Species monitoring,
- Develop and distribute tailored *conservation information*.

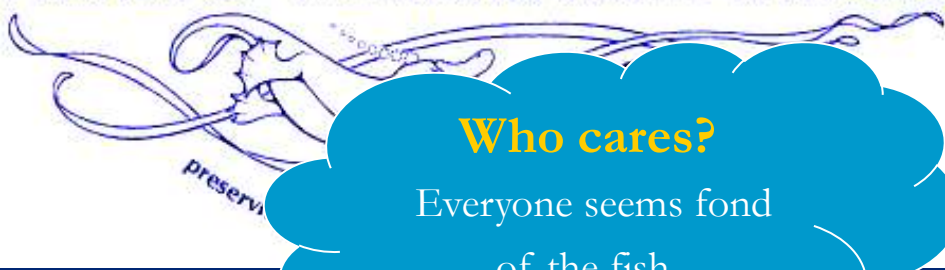
Community Capacity Building Objectives

- General and targeted community awareness raising,
- Start at least five private conservation initiatives,
- Raise fisher awareness of conservation issues through signposting.



Partners

- Southern Rivers Catchment Management Authority
- The NSW Department of Primary Industries,
- Palerang Shire Council
- Department of Environment and Conservation
- Sydney Catchment Authority
- Mongarlowe Landcare Group
- Mongarlowe Bushfire Brigade
- Braidwood Fishing Club



Mysteries of the Mongalowe Macquarie Perch

Who cares?

Everyone seems fond of the fish.

Changing climates

Movement, breeding, survival, compromised in long drought?



Bigger than you'd expect

The eastern variety only grows to 20cm, but the Murray Darling sub-species is twice as long. Like the Maccas in the Mongarlowe River

A conservation opportunity

Protect the Macquarie perch, protect other local values – like drinkable water, native vegetation, weed management etc

An ecosystem indicator

rare birds or possums may exist in remnant bush patches.... But it seems that you need a whole intact river to maintain a rare fish.



Habitat identification using standard methods

- SRCMA
 - Rapid appraisal of riparian condition;
 - River styles
- DPI
 - Water quality
 - In-stream assessment



Site name:

Site code: FMR

Date:

Collector/s:

Site details
 GPS top:
 GPS bottom:
 Approximate length:
 Average width:
 Map:
 Grid Ref:
 Land owner:
 Access:

General info – tick one box per category

Habitat	1°	2°	Water level	Flow level
Pool	<input type="checkbox"/>	<input type="checkbox"/>	Rising <input type="checkbox"/>	High <input type="checkbox"/>
Run	<input type="checkbox"/>	<input type="checkbox"/>	Steady <input type="checkbox"/>	Moderate <input type="checkbox"/>
Riffle	<input type="checkbox"/>	<input type="checkbox"/>	Falling <input type="checkbox"/>	Low <input type="checkbox"/>
Rapid	<input type="checkbox"/>	<input type="checkbox"/>	Unknown <input type="checkbox"/>	Dry <input type="checkbox"/>

River style– tick one box per category

River style	Condition
Gorge <input type="checkbox"/>	Good <input type="checkbox"/>
Confined <input type="checkbox"/>	Medium <input type="checkbox"/>
Partly conf <input type="checkbox"/>	Poor <input type="checkbox"/>
Flood plain <input type="checkbox"/>	

Macquarie Perch Fish habitat

Rock

Timber

Undercuts

Step

Bar

Deep hole

Riparian longitudinal continuity (trees along the river)
 Open <50% 51-64% 65-79% 80-95% >95% Closed

Fish Sightings

Previous Current attempt– yes

No attempts Current arrempt– no

Carp Trout

Instream habitat
 The codes on the Right are to be used in the boxes below. Fill in each box.

- A Abundant (75-100%)
- F Frequent (50-75%)
- O Occasional (25-50%)
- R Rare (1-25%)
- N None (0%)

Substrate

Bedrock

Boulder

Cobble

Gravel

Sand

Mud/silt

Clay

Unknown

Vegetation

Native trees

Exotic trees

Native shrubs

Exotic shrubs

Terrestrial grass

Rushes, sedges

Grasses

Floating macrophytes

Submerged macrophytes

Algae

Tick one or complete

Velocity

Fast (>0.5m/s)

Moderate

Slow (<0.1m/s)

Turbidity

High

Moderate

Low

Clear

Pool depth m

Temperature
 Top 20cm _____

Threatening


Grazing

Erosion

Other

Site diagram and notes (show transects, north, scale, position of snags, large water plants – submerged or floating, overhanging vegetation etc).

Scale _____ m

[-----] direction of flow 



Species Monitoring

In the FMR project, licensed expert Mark Lintermans (assisted by community volunteers, including the fishing club) set 10 Fyke nets at 6 sites to catch the 'young of the year'.

Only one fingerling was caught – in the lower reaches, where there are carp and gambusia, open riparian vegetation and higher turbidity.

Other rivers were giving similar results during the drought....

Until "Thought you might be interested to know that I netted Cotter reservoir last week and caught 626 Maccas from 16 fyke nets"



Mongarlowe Friends' search for perch

Last October the Friends of the Mongarlowe River received a Threatened Species Network Grant to fund the study of the Macquarie Perch.

The Macquarie Perch is an Australian freshwater fish that is listed endangered and in decline throughout most of its former range.

The Friends, with the help of the Braidwood Fishing Club and river riparian landowners have since been spotlighting for Perch at various sites along the river. Spotlighting will continue throughout this year.

A Riparian Assessment workshop was given by Rebecca Cole of the Southern Rivers Catchment Authority and a Water Monitoring assessment workshop given by the Fisheries.

The Mongarlowe Fire Brigade and Mongarlowe Landcare have also been active in

supporting this project.

Last week, with the help of the Braidwood Fishing Club, prime fishing spots were shown to Tui Day of the Department of Industries/Fisheries for signs to be erected. A couple of trout signs were included. The Macquarie Perch signs explain about the fish with a prominent picture for identification, prompting immediate release if caught.

It encourages live and dry fishing only.

Mark Lintermans, a Macquarie Perch expert, was recently shown sites for inspection to be the spots for Macquarie Perch catch and release. Mark has appropriate permits to undertake threatened fish species sampling and will collect samples (fin clips) for genetic analysis.

See more at www.arpdan.com.au/for



• New sign at Mongarlowe Bridge causeway: pictured L-R, Su Wildriver, Mark Lintermans, Di Bott, Paul Dann and Paul Bott

General awareness-raising



TOTALLY PROTECTED

Macquarie perch

a vulnerable species

Catching, keeping or harming is an offence.

SEVERE PENALTIES APPLY.



Macquarie perch

If you catch a Macquarie perch or are unsure, immediately release the fish unharmed.

NAME	Macquarie perch, mountain perch, black bream, silver perch or white perch
COMMON LOCAL NAMES	A long, oval-shaped fish with a dorsal fin, large eyes and rounded tail.
COLOUR	Black, olive grey, blue-grey or green brown with a pale underside. Fish from smaller catchments are tinged with grey brown. Dull and dark grey patches over the head and body.
HABITAT	Up to 60cm in the Murray Darling Basin, but usually around 20 cm in smaller catchments.
WEIGHT	2.5 kg (rarely commonly less than 1.5 kg)

NOTE: Mountain perch are not usually susceptible to sea lice and this method of worming fish is not suitable for them. You can reduce the risk of harming the perch by using a fly netting net.

Report illegal fishing activity in this area to
 NSW DPI (Fisheries) Yass Office 6226 3867
 or Fishers' Watch 1800 043 536

NSW DPI

Targeted community education

Information to be sent to 150 riparian landholders on the Mongarlowe River and its tributaries.





Conservation initiatives

At least 5 Voluntary Conservation Agreements or Conservation Covenances commenced by riparian landholders – to be available as models to other landholders in the future.





Community Connections

“The Macquarie Perch project has been great for getting across all parts of society. It helps us to liaise with a lot of people who aren’t greenies. Various people who are very down on greenies, plus the fishing club and others are all very friendly and supportive of this project.”

Di Bott, FMR President





Community-agency partnerships

\$11,400 grant plus over \$24,000 in-kind contribution.

We hope that by combining species monitoring with habitat assessments, we can identify conservation priorities for the future. These assessments are also providing valuable ground-truthing for a new CMA initiative that has used satellite images to generate information about Southern Rivers catchments.

