

The Native Fish Recovery Plan – Gunbower and Lower Loddon  
*Creating a World Class Murray Cod trophy fishery in Victoria's  
Gunbower and lower Loddon system.*

Making  
every drop  
count...twice!



**NORTH CENTRAL**  
Catchment Management Authority  
*Connecting Rivers, Landscapes, People*

**Representing  
Victorian  
Recreational  
Fishers**



# Recreational fishing is the lifeblood of regional communities in the Murray-Darling Basin.

Fishers spend over \$1.3 billion each year whilst fishing in the Basin, supporting approximately 10,950 jobs. The lure of Australia's largest freshwater species, Murray Cod, is particularly strong; over 44% of all inland fishers target this iconic species.

Healthy waterways are vital to support healthy fisheries, and the social and economic benefits that they provide our communities. However, unfortunately much of the Murray-Darling Basin is now quite degraded, and so too are our fish stocks. In fact, an assessment of river health throughout the Basin showed that native fish populations in twenty of twenty-three river valleys across the Basin are in 'poor' to 'very poor' condition.

As the Australian community becomes more aware of the state of our rivers and fish stocks there are increasing calls for more restrictive bag and size limits, and area closures, despite fishing not being a primary cause. Our recreational fishing community need to take a leading role in restoring the health of our waterways, cementing their reputation as environmental stewards in the minds of the general public, and preventing continued erosion of the quality of fishing experiences and access.

For the Gunbower and lower Loddon region the opportunity also exists to go beyond merely preserving what we have, and create a world-class trophy Murray Cod fishery, establishing the region as the "jewel in the fishing crown" of the Murray-Darling Basin.



## THE AREA

The Gunbower and lower Loddon region includes an amazing network of streams, lagoons, Ramsar wetlands and floodplain habitats (see map). It also encompasses most of the Torrumbarry Irrigation District, which grows over \$130 million of produce a year. Irrigation in the Murray-Darling Basin started in the region during the 1880s and it is now one of the most modern irrigation systems in the Basin. The 190km of

streams that snake through the region are currently wholly managed for water delivery through a system of weirs and channels. Whilst this network of waterways once provided ideal habitat for Murray Cod and a range of other native fish species - and could do again - at present the streams have little or no flow in winter when there is no irrigation demand.

There are also a number of other factors impacting on native fish populations in the Gunbower - lower Loddon system:

#### CONNECTIVITY

- Weirs prevent fish from entering or leaving the system to recolonise from the River Murray, or complete spawning migrations.
- Irrigation diversions remove fish from the river and creeks.



#### FLOW

- Low/absent winter flow provides very poor habitat at times when species such as Murray Cod need flows to build condition for spawning and to enable juveniles from the previous year to survive winter.
- The network of streams that were once a complex maze of fast and slow-flowing reaches (which Murray Cod love) is now reduced to a series of weirpools, with little flow at all in winter.
- Wetlands that once offered important habitat for small threatened species have been lost.



#### HABITAT

- Once abundant with snags, the system has been largely cleared, removing important fish habitat.
- Cattle graze the river bank, causing erosion and reducing water quality.

Because of these factors native fish populations in the area are in extremely low numbers. The iconic Murray Cod, which was once prolific through this area, has become a rare sight. Of the other 21 native fish species predicted to occur in the area, 18 have declined or become locally extinct and, of these, six are threatened species. Some smaller fish species are now locally extinct.



#### THE SOLUTION

All of these major issues can be fixed using existing knowledge and technology. We have effective fishway designs that can restore fish migration. We have self-cleaning screens that can prevent fish from being lost into irrigation channels. We can efficiently and effectively restore habitat in and along the river, re-introducing snags, re-creating deep holes, re-vegetating riverbanks and providing livestock with off-stream watering points. And of course, we can restore the all-important flow.

This is where the Gunbower and lower Loddon system - and this plan - provide a unique opportunity. Because the waterways in this region are an anabranch system, water can be used to restore river health and fishery productivity, and then be returned to the River Murray, to be delivered to downstream water users.

Water doesn't have to be just for human use or the environment. It can be for both.



## WHAT WILL BE DONE:

- Build fishways on the last five of eleven weirs in the area, reconnecting passage for fish.
- Optimise existing fishways to maximise effectiveness.
- Assess level of fish entrainment into four main irrigation channels, and install irrigation screens to prevent fish extraction.
- Provide flows that are more suitable for fish, while meeting irrigation requirements.
- Assess populations of pest species such as Carp, and implement control measures to reduce populations.
- Provide flow to small permanent wetlands and billabongs within the forest.
- Re-plant indigenous plant species.
- Re-establish populations of locally-extinct Olive Perchlet, Southern Pygmy Perch, and Flatheaded Galaxias and Southern-Purple-Spotted Gudgeon.
- Determine the ideal snag density and install snags to improve habitat.
- Investigate options to re-create deep holes.
- Fence-off riverbanks and install off-stream watering points for livestock.
- Undertake robust monitoring to inform actions required, and track recovery.
- Undertake extensive communication and engagement activities to communicate progress to the broader community.
- Significant funding is being sought to implement this ambitious plan; providing a letter of support from your association or community group will assist with this.

## EVERYONE WINS

Everyone wins from this plan. The recreational fishing community will benefit through establishment of a trophy Murray Cod fishery, and being seen by the non-fishing community as leading one of the largest fish habitat rehabilitation projects in Australia. Water allocation to the region's valuable and innovative irrigation industry will remain. Populations of locally extinct species will be re-established along the 190km network of creeks, lagoons, wetlands and floodplains. Ecosystems will thrive and this in turn, will help generate increased eco-tourism to the area, and so the local economy will thrive too.

## WHAT WE NEED

*We need your help!*

If you want to see the Gunbower/lower Loddon region restored to the world-class fishery it once was, you can help by:

- getting your fishing club or peak body to provide a letter of support.
- telling your local member how important this plan is to you.
- registering your interest to keep up to date with progress, and get involved with a range of on-ground project activities (e.g. fish monitoring, re-planting).
- sharing this information with as many people as you can!





## FOR MORE INFORMATION:

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Images courtesy of Jamin Forbes, Dean Norbiato, Aaron Hill and Rory Benn-Clibborn



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