

Returning native fish to the Barwon-Darling River

– the Brewarrina to Bourke Demonstration Reach

Olive perchlet



Freshwater catfish



River snail



Silver perch



Habitat degradation places significant pressure on native aquatic species. Silver perch, the western populations of the olive perchlet, purple-spotted gudgeon and the river snail are all now listed as threatened species. Some fish, like the freshwater catfish, were once common but are now rarely seen.

The Western CMA and NSW DPI are working together to restore aquatic habitat and bring back the fish in the Barwon-Darling between Brewarrina and Bourke.

In the Brewarrina to Bourke Demonstration Reach we are:

- **showcasing techniques** to restore habitat and encourage native fish back to the river, and
- **modifying barriers** so that fish can move freely along this section of the river.

Fish need habitat

If we want native fish back in the river, we need to restore the habitat within the river and along its banks. The techniques used to do this include:

- Re-introducing snags (large woody habitat) into the water.
- Restoring deep holes in the river bed.
- Planting & protecting local native vegetation on the river banks (riparian vegetation).
- Repairing eroding gullies that contribute to sediment entering the river.
- Controlling pest fish species.
- Removing or modifying the barriers that prevent native fish from moving freely along the river system.

All of these techniques will be used in the Brewarrina to Bourke Demonstration Reach.

A demonstration reach is a section of waterway that demonstrates techniques that landholders and community groups can use to restore and protect aquatic and riparian habitat.

Bourke weir is currently a barrier to fish passage.

Fish need to move

Fish need to move both upstream and downstream to find food and shelter and to breed. Weirs, like those at Bourke and Brewarrina, prevent native fish from moving freely. As a result, there are less fish.

Within the Brewarrina to Bourke Demonstration Reach, it is recommended that fishways be constructed at Bourke and Brewarrina weirs. The fishways will help native fish move past the weir and give them access to more of the river.

Fish need plants

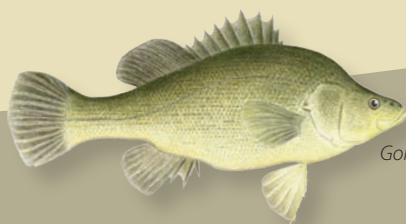
Healthy, native riparian vegetation provides:

- snags, which provide essential shelter for fish,
- aquatic and terrestrial food and habitat,
- a more stable riverbank,
- cooler temperatures through shading,
- a filter to reduce sediment flowing into the river.

Many parts of the Barwon-Darling have been cleared of vegetation and the snags removed. With your help, riverbanks within the Brewarrina to Bourke Demonstration Reach can be protected or planted with local native species and snags can be replaced in sections of the river. This will provide essential habitat for native fish.



Purple-spotted gudgeon



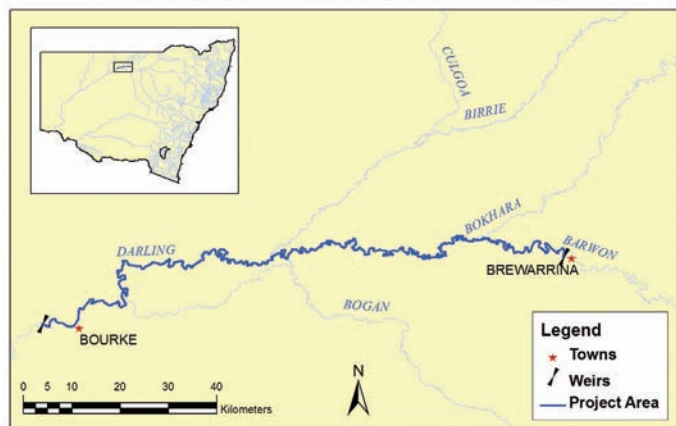
Golden perch

Noogoora Burr is a problem weed on sections of the Barwon-Darling River.



Fish need snags.

Brewarrina to Bourke Demonstration Reach



This project will be carried out by NSW DPI on behalf of the Western CMA and is funded by the National Action Plan for Salinity and Water Quality. Over \$2.5 million will be invested in improving aquatic habitat as part of the initiative.

For more information about aquatic habitat rehabilitation please visit www.dpi.nsw.gov.au/fisheries/habitats or subscribe to Newstreams, the free NSW DPI bi-monthly e-newsletter by emailing the editor at Rebecca.lines-kelly@dpi.nsw.gov.au.

It's your river! Have a look at what the Western CMA, NSW DPI and the local community are doing to restore fish habitat and bring back the fish. These might be things that you can do too.

To get involved in improving the Barwon-Darling River or express your interest in the Brewarrina to Bourke Demonstration Reach, contact David Cordina, Conservation Manager, on (02) 6881 1277.