

# Assessment of the effectiveness of the fishways on the Broken Creek

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**Abstract:** In the lower Broken Creek in the area between the township of Nathalia and the Murray River there are a series of seven weirs over a relatively short distance of about 60km. Given that these weirs act as barriers to fish movement between 1997 and 2002 fish ladders were constructed on all of these weirs. In 2000 fish surveys were conducted in each of the weirs pools and this was again repeated in 2006. The results of these surveys indicate that the fish communities in the upstream weir pools have changed as result of the fish ladder installation with increases in the abundance of Murray cod and Murray Darling rainbowfish.

**Project Aim:** To assess changes in the fish community following the Broken Creek fish ladder installation program.

**Methods:** Boat electrofishing was used to sample each weir pool between the Murray River and the township of Nathalia twice in 2000 and again in 2006. Each weir pool was sampled in the mid section to avoid sampling congregations of fish immediately upstream or downstream of weirs. At each site 10 samples consisting of 180 electrofishing seconds was conducted. Captured fish were weighed, measured, tagged and released at the completion of each sample.

**Preliminary Results:** increases in the abundance of Murray cod and Murray Darling rainbowfish in the upstream weir pool between the 2000 and 2006 samples.

**Application to Management/works to be undertaken** Recent installation of PIT tag readers on some key fishways in the lower creek will allow us to monitor fish movements into and out of Broken Creek as well as assess the dynamics of fish movements within Broken Creek itself.

## Project Photographs



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