

# Key Threats TO Native Fish



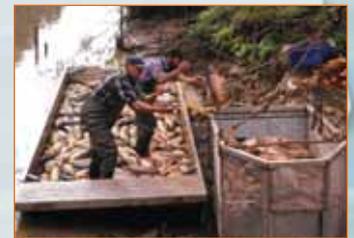
Habitat destruction is considered to be the major threat to native fish.



Dams provide a barrier for fish movement and in some cases release cold water from the bottom of the dam creating conditions unsuitable for native fish.

The health of populations and communities of native fish species in the Murray-Darling Basin is an indicator of the overall health of the Basin and its rivers. If there is a decline in the native fish communities, this provides a 'canary in the coal mine' warning that the natural ecological functioning of the rivers is at risk.

Eight key threats to the management of the native fish within the Basin have been recognised. It is important to note that often many of these key threats occur at the same time, for example habitat degradation, poor water quality and barriers which impede fish movement. There are measures we can take now that will address these threats and hence improve native fish populations, e.g. resnagging, building fishways and carp management. Already the MDBC has observed large numbers of a variety of native fish utilising the new fishways at Locks 8 and 15.



Harvesting of carp, River Murray - In some regions of the Basin the European carp make up 80% of the total fish biomass.

## Key threats to native fish management in the Basin

Threat	Threatening process
Flow regulation	Loss of water to other uses, critical low flows, loss of flow variation, loss of flow seasonality, loss of low to medium floods, permanent flooding and high water, increased periods of no flow.
Habitat degradation	Damage to riparian zones, removal of in-stream habitats, sedimentation.
Lowered water quality	Increased nutrients, turbidity, sedimentation, salinity, artificial changes in water temperature, pesticides, and other contaminants.
Barriers	Impediments to fish passage resulting from the construction and operation of dams, weirs, levees, culverts, etc., and non-physical barriers such as increased velocities, reduced habitats, water quality and thermal pollution (changes in water temperature).
Alien species	Competition with and/or predation by carp, gambusia, oriental weatherloach, redfin perch and trout.
Exploitation	Recreational and commercial fishing pressure on depleted stocks, illegal fishing.
Diseases	Outbreak and spread of EHNV (Epizootic Haematopoietic Necrosis Virus) and other viruses, diseases and parasites.
Translocation and stocking	The loss of genetic integrity and fitness caused by inappropriate translocation and stocking of native species.