



## European Carp damage channel rehabilitation program

### What are European carp?

The European Carp is a migrant species, first introduced to the Latrobe River in 1962 and then later to Lake Wellington, but now established as a major pest throughout Australia.

They are known throughout the world for their rapid growth rate and ability to withstand a wide range of water qualities.

Carp feed by sucking around roots of aquatic plants in search of aquatic insects. Many plants are uprooted during the feeding process and mud and plant debris is expelled, resulting in increased water turbidity. This feeding habit has a harmful effect on Australia's freshwater systems - hence carp are a noxious species.

In the years that followed their introduction, European Carp have found their way into the irrigation infrastructure in the Macalister Irrigation District (MID). The numbers are at such plague proportions that Southern Rural Water has a program in place to manage the damage they have created, and reduce their numbers within the MID system.

### What damage do they cause?

The European Carp's feeding behaviour chips away at the channel banks. As a result, some channels have gradually spread wider towards easement boundaries, intruding onto neighbouring land. In severe cases it affects the channel structure, causing bank collapse and potentially, interruptions to irrigation supply.

The Sale area is the most badly affected, probably because of its closeness to the Gippsland Lakes and being charged from the Macalister River.

### What is Southern Rural Water doing to repair the damage?

In 2006 the SRW Board approved a five year capital works program to repair the damage created by European Carp within the MID.

When we developed the program, the district was mapped and divided into two areas:

- Priority 1, which included 11 kilometres of critically affected channels, and
- Priority 2, which included 18 kilometres of moderately affected channels.

### Priority 1 works:

Priority 1 works were completed in 2010, with Southern Rural Water rebuilding 11.4 kilometres of badly damaged channels on the Main Sale and Main Heart channels.

This part of the program cost \$1.75 million, which includes fencing, access tracks, paddock and delver reinstatements. These assets have been renovated to a good condition, extending their remaining life by 30 years.

### Priority 2 works:

Priority 2 works have begun with 4.5 kilometres currently being upgraded over the next two years. This part of the program has been budgeted to cost approximately \$700,000.

As the Priority 2 sections only include moderately affected channels, repairs are planned on a 'where needed' basis rather than continual lengths of channel.

We will import select clay, which will be placed, compacted and battered mechanically to restore banks back to their original profile. Once this is complete, they will then be protected by beaching with either recycled concrete or rock spalls.

The scope of the work will vary according to the level of disrepair in each section, and whilst fill will be imported and applied to undermined areas, other areas may only need re-shaping and beaching to prevent further decline. The reinstatement of access tracks, fences, farm delvers and paddocks will also be an important part of the project.

The program in some areas will be very challenging due to difficult or virtually no access, the lack of suitable soil close by, wet winter weather and confined work areas where banks have completely eroded away. Working space is limited in some areas, which may mean some double handling.

Quality soil will be sourced as close as possible to each job from recently constructed farm dams, close property developments and drainage reserves.

The balance of the work, at a cost of around \$2.057M, is being considered for future years.

### What are the benefits?

- Ensure that we deliver water at approved performance standards
- Decrease the risk of channel failure and have a positive impact on channel condition ratings. Channels are rated according to their condition: 1 is brand new and 6 is unserviceable or about to fail.
- Improve access for weed spraying, which gives us more efficient means of controlling weeds.

### What is Southern Rural Water doing to control the European Carp??

Fish screens were installed on the channel offtake at Maffra Weir in 2003 to reduce the numbers entering the system from the Macalister River.

### More information

For more information contact us on **1300 139 510** or visit **[www.srw.com.au](http://www.srw.com.au)**.