



























### Why are we building it?

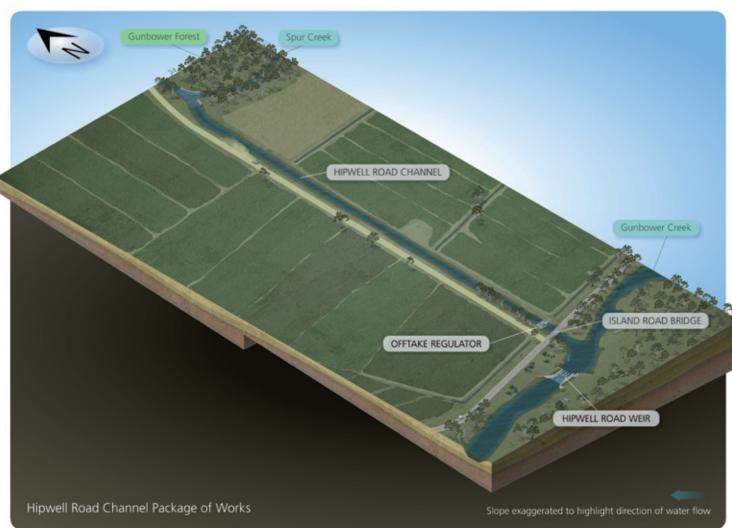
Regular floods of various sizes are required to maintain healthy and functioning ecological communities in Gunbower Forest. Reduced frequency and duration of floods due to river regulation and climate change has caused the following:

 Deterioration in the health of River Red Gum and Black Roy trees:

- Less frequent breeding opportunities for waterbirds, frogs and fish
- Contraction of wetland areas within the forest, reducing the habitat available for animals; and
- Less productive forest and wetlands and poorer quality habitat for mammals and reptiles

Without the ability to deliver large volumes of environmental water to the forest the flood-dependent ecosystem of Gunbower Forest will be irreversibly altered.

### Artist's impression of the Hipwell Road Channel Package of Works



#### Artist's impression of Offtake Regulator



#### Artist's impression of Hipwell Road Weir



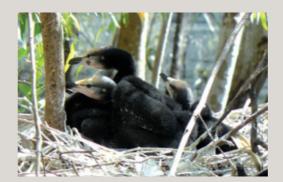
### What is being built?

The structures to be constructed include:

- A one kilometre channel along Hipwell Road to deliver environmental water from Gunbower Creek to Gunbower Forest;
- A bridge where Island Road crosses the Hipwell Road Channel;
- An offtake regulator and fish lock to control flows entering the channel; and
- A weir and fishway in Gunbower Creek to enable maximum inflow rates of 1600 ML/day to be achieved;

Other components of the project include:

- Purchase of freehold land for construction of the Hipwell Road Channel;
- Negotiated flood easements over private property adjacent to the forest boundary; and
- Decommissioning of the existing irrigation supply of an adjoining property and transfer of supply to Gunbower Creek.



# How will it be operated?

Environmental water will be delivered through the Gunbower Creek and then diverted into Gunbower Forest using the new weir, offtake regulator and channel at Hipwell Road.

The channel will be operated to shorten the gaps between natural floods. The decision to deliver water to the forest through the channel will consider a number of factors including:

- Time since last flood
- Size of last flood
- Condition of the forest eg. health of wetland vegetation, health of River Red Gums, status of native fish population
- Availability of environmental water allocations
- Watering plans of other forests and wetlands such as Bamah-Millewa Forest and Koondrook-Pericoota Forest

Operation of the channel could occur anytime between June and February, depending on what each watering event is aiming to achieve.

Smaller regulators in the lower part of the forest will also be used in tandem with the Hipwell Road Channel to use environmental water more efficiently and effectively.

# What approvals have been sought?

The project requires nine separate Commonwealth and State statutory approvals to construct the works, including:

- Environmental Effects Act Referral
- Planning approval from Gannawarra Shire
- Cultural Heritage Management Plans
- Environmental Protection and Biodiversity Conservation (EPBC) referral.

## Who is going to build it?

Goulburn-Murray Water is the construction manager for all the works.

# How long will construction take?

Construction will take approximately 12 months.

Small construction tasks will commence in late 2012, with the major construction activity commencing in early 2013. The Offtake Regulator and Hipwell Road Channel will be constructed first, followed by the Island Road Bridge and Hipwell Road Weir in Gunbower Creek. Construction is expected to be completed by late 2013.

# How much does it cost?

The total construction budget is \$13.45 million.

# Who is funding construction?

Funding for construction is provided by the Murray-Darling Basin Authority through The Living Murray program.

The Living Murray is a joint initiative funded by the New South Wales, Victorian, South Australian, Australian Capital Territory and the Commonwealth governments, coordinated by the Murray—Darling Basin Authority.

# What is North Central CMA's role?

During construction the North Central Catchment Management Authority (CMA) will be responsible for communicating the progress of construction to the community. The CMA will also provide support to Goulburn-Murray Water for the implementation of the Cultural Heritage Management Plan.

