Lake Macdonald Dam Improvement Project

FACT SHEET - ECOLOGICAL MANAGEMENT

The Lake Macdonald Dam Improvement Project is part of Seqwater's Dam Improvement Program. The project will involve building an upstream cofferdam, a new spillway, and reconstructing the existing earth embankments. Seqwater is proud to partner with John Holland as the major construction contractor to this essential project. The enhancements will not only improve water supply reliability but also bolster the dam's ability to manage extreme weather conditions, ensuring regulatory compliance now and in the future.

Ecological Management

Seqwater and John Holland have undertaken extensive environmental investigations to identify and record plant and animal habitats in and around Lake Macdonald.

The investigations include field surveys focusing on protected plants, important habitats for plants and animals, aquatic environments and significant local species. It also included reviewing past and present reports and databases.

Fish Survey

Approximately 26 native fish species are known or likely to be in Lake Macdonald and Six Mile Creek downstream. Of these species, several have been stocked in Lake Macdonald (e.g. saratoga, yellow belly, Mary River Cod).

Some conservation significant fauna species are thought to be in the project area including the Mary River Cod, Australian lungfish, Mary River turtle, white throated snapping turtle and Giant Barred frog. Surveys have indicated a high probability of Mary River Cod and Giant Barred frog habituating in Six Mile Creek downstream of the dam wall. There's a moderate probability of Australian lungfish and a low probability of Mary River turtle and white throated snapping turtle.

Platypus is also known to live in the suitable habitat areas present in the upstream tributaries of Six Mile Creek.

To minimise impacts to aquatic fauna that may be impacted by the lake drawdown, the project team are working with specialists to manage or salvage and relocate aquatic fauna to ensure the carrying capacity of the lake's ecosystem is not put at risk.

The project team engaged a specialist fish biologist to conduct fauna surveys in Lake Macdonald using electrofishing and fyke netting techniques, both of which are ethically suitable. This survey is used to determine the quantity of large body fish that may need to be relocated.

An Adaptive Management Plan has been developed, specifying salvage and relocation targets that align with various levels of lake drawdown. It also outlines specific water quality and habitat monitoring requirements within the lake and downstream sections of Six Mile Creek. A range of suitable relocation sites have been assessed by fish biologists which include Cooloolabin Dam, four sites within the Mary River and two sites within Yabba Creek. The carrying capacity of each site will be continually assessed prior to relocation.

Vegetation Clearing

The project team will ensure only the minimum area of vegetation is cleared to enable the project to proceed safely. Terrestrial fauna will be managed by a suitably qualified ecologist and fauna spotter catcher operating under the appropriate permits. Both Seqwater and John Holland will continue caring for flora and fauna and are committed to the responsible management of the environment. The project team will continue to comply with the relevant legislation and environmental requirements.

Keeping in touch

For more information, contact the project team.

Project hotline: 07 5472 1565 (24/7)

Email: projectinfo@seqwater.com.au

Website: www.seqwater.com.au/project/lake-macdonald-dam-improvement-project

Mary River Turtle

Australian Lungfish

Platypus

White Throated Snapping Turtle

Mary River Cod