



# Black Box

Saving our floodplain icons

**Black Box trees stand astute like wise warriors on the Murray River floodplain. These trees can live to be hundreds of years old and most of the time they look just fine... until they are not.**

Our wise warriors are weary now from standing guard with longer periods between replenishing drinks. It's getting harder to keep them alive.

They live in pretty rugged terrain, on the outer edge of the floodplain where it's higher and drier, where floods visit less and less often. Their bark is gnarly and their leaves a light grey/green.

The problem is that Black Box trees need occasional flooding to survive.

Without floods, Black Box trees suffer.

Tree growth slows.

Flowering declines.

Mature trees die.

Seedlings fail.

Without healthy Black Box trees, all the fauna that depends on them is put at risk.

Before the Murray River became a working river with managed flows, water would occasionally spill out over the banks, right up onto the floodplain to the roots of our sturdy Black Box warriors. The Black Box flourished and could continue for several years with only rainfall to quench its thirst. Today, our river can't do this anymore.

***River regulation, reduced inflows and climate change have interfered with nature's capacity to deliver big floods and our wise warriors of the floodplain are fading.***



**VICTORIAN MURRAY FLOODPLAIN  
RESTORATION PROJECT**

HEALTHY LANDSCAPES, STRONG COMMUNITIES





## There is a way to keep our wise warriors of the floodplain alive – and to encourage new generations to grow. And better yet, there's living examples that show us there is hope.

Hattah Lakes is a living example, where pumps and regulators have helped return water to 1,255 ha of Black Box trees, when they need it. This watering doesn't impact on other river users.

Since the first watering in 2014, the growth, flowering and seed production of trees at watered sites demonstrated a marked improvement in comparison to trees at unwatered sites. Flooding has prompted the trees to produce more flowers, which are a source of nectar for birds and insects. They in turn become food sources for other animals, keeping the food web alive.

Black Box trees at the watered sites also had more seedlings and saplings than at unwatered sites, which means new trees grow and replace old ones as they die.

**Bush birds like parrots, honeyeaters, and wrens have also benefited from the Black Box trees getting a drink.** The total numbers of bush birds were 60% higher for up to 3 years after a flood event, which shows the lasting effects of watering on tree health and the food resources they provide.



What does all this mean? Research shows that without flooding, we will lose these important trees and everything they support on the floodplain.

Is the answer returning the Murray River to natural flows? No, because the Murray River is a working river that sustains more than two million people.

To get water back on the floodplain, we would need floods that would put some public and private infrastructure such as some roads, caravan parks, pumps and farm land used for stock underwater for weeks and months at a time, and fairly frequently. People's livelihoods may be affected, and there would be substantial inconvenience as some roads may also be affected. Recovering enough environmental water to re-create these floods would certainly have a substantial impact on livelihoods.

Is the answer the Basin Plan? In part.

**Increased river flows expected to be delivered by the Basin Plan won't be enough to reach the higher parts of the floodplain where the Black Box grows.**

Infrastructure built through funding from the Basin Plan can help make this possible. Infrastructure such as pumps, regulators and containment banks can get environmental water onto the floodplain and hold it there so it can reach and nurture the Black Box, without flooding upstream regional communities.

The Black Box at Hattah Lakes has shown what infrastructure can help deliver, now it's time to extend what has been proven to work.

The Victorian Murray River Floodplain Restoration Project (VMFRP) is a rescue mission to save our floodplains. The VMFRP aims to return a more natural flooding regime across more than 14,000 hectares of high ecological value Murray River floodplain by removing blockages that stop water flowing into creeks and building infrastructure to water the floodplain and hold water there for longer before returning it to the river.

This water will help our floodplains to survive and cope with climate change, future dry conditions and drought, so they can continue to be enjoyed by future generations.

It's time to save our floodplains and the long serving woodland warriors that stand guard along its fringes. Doing nothing is not an option.



Black Box trees occupy around

# 41,700<sub>ha</sub>

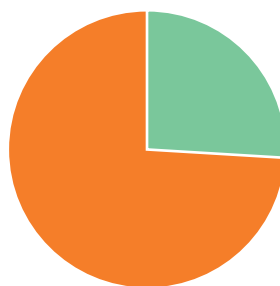
on the Murray River floodplain  
between Albury-Wodonga and the  
Lower Lakes (MDBA 2019).



Bush birds also thrive  
when Black Box trees  
receive water.  
This includes parrots,  
honeyeaters, and wrens.

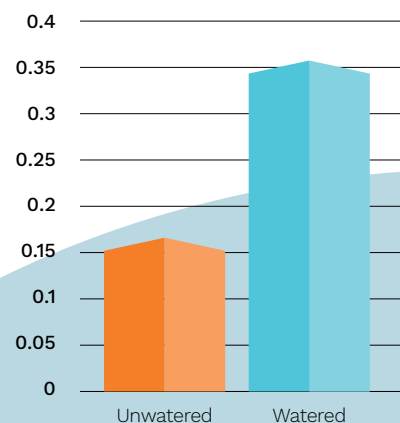
**The total numbers of bush birds  
were 60% higher for up to 3 years  
after a flood event**, which shows  
the lasting effects of watering  
on tree health and the  
food resources they  
provide.

**Black Box trees produce  
more flowers after they  
have been flooded** and this  
contributed significantly to  
the increased abundance  
of bush birds. Tree  
measurements showed that  
when trees flower strongly,  
bird abundance increases  
dramatically. Flowers and  
their nectar are consumed  
by a wide range of birds  
including Red-rumped  
Parrots, Australian Ringnecks  
and Yellow Rosellas.



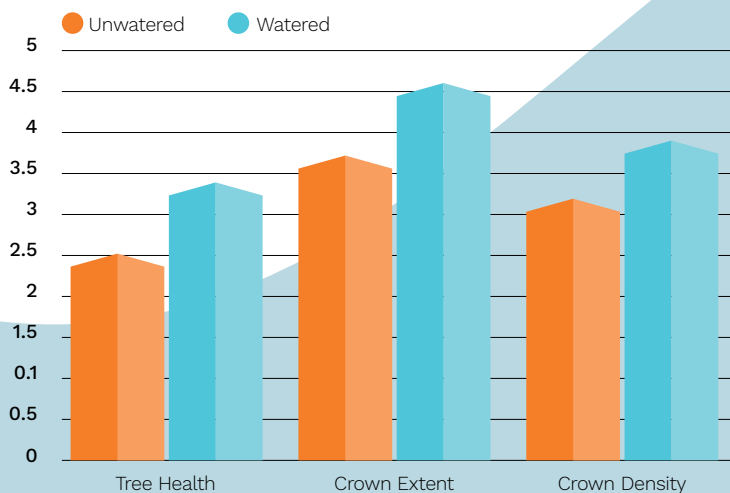
In 2012, at the end of the Millennium Drought, only 26% of all the Black Box Woodlands at The Living Murray Icon Sites was in good condition. The condition of the other 74% was poor, degraded or severely stressed.

● 26% Good Condition  
● 74% Poor, Degraded, Severely Stressed



The response of Black Box trees at infrastructure assisted watered sites have demonstrated more seedlings and saplings than at unwatered sites.

**Environmental works** have made it possible to return water to Black Box stand at Hattah Lakes and the response has been impressive:



[vmfrp.com.au](http://vmfrp.com.au)