Flooding reaches Banrock Station

Like everywhere in the Riverland, Banrock Station has been hindered by years of drought, but this week flooding arrived for the first time in 14 years.

During the past decade, despite the drought, we have strived to manage our RAMSAR-listed wetlands for the best possible outcomes, including deliberately drying and flooding the wetlands to mimic natural cycles which stimulate the breeding of native animal and bird species.

The flood that is now inundating our floodplain is entirely natural and will therefore bring enormous benefits to the River Murray and surrounding wetland ecology.

Why is this flood so important?

- Our landscape has a lot of salt in it, in the soil and the groundwater. This is a natural result of having once been an ocean floor. Groundwater in the floodplain is up to three times saltier than the sea. While some of our vegetation, such as samphire and pigface, is well adapted to the saline conditions, every species has its limit. A flood flushes salt out of the system, gives plants a big drink of fresh water and, most importantly, deposits a 'lens' of freshwater into the ground, which will sustain trees for many years, until the next flood. This is particularly true for Red Gums and Black Box.

- We know from monitoring our groundwater that this freshwater lens has been almost completely absent for several years, with the exception of the immediate wetland area where we have been able to provide water.

- The flood also provides on a much larger scale what we have been recreating in our wetland – the boom conditions which trigger many species to breed. Many of our native aquatic species will only breed in significant numbers in flood conditions, so if it's been too long between drinks, there may be very few of some species left to breed.

What is there to see?

- The view from the deck of our Wine and Wetland Centre is amazing: a large expanse of water with islands of higher ground, and lots of healthy trees with a light green halo of new growth.

- Although our boardwalk is currently under water, and may be for some weeks, you can still use most of our walking trails and get an up-close look at the wetland.

- Many birds are enjoying the shallow water and the good pickings to be had in areas which have not been inundated for many years. We have erected temporary bird-viewing screens to help visitors get closer to the wildlife.

Keeping it in context

- It is important to recognise that, while impressive, this part of the River Murray is experiencing only a minor flood in a historical context. In fact, this kind of flood would have happened on average 6 out of every 10 years before river regulation.

- Regulation of the River Murray through the installation of weirs and large storages (dams), while important for domestic use, food production and river transport, has had many impacts on our wetlands and floodplains, including drastically reducing the frequency of minor floods such as this one.

- Flooding is a natural and incredibly important process for the Murray Darling Basin. We live in a highly variable climate and all the ecosystems are not only adapted to cope with this variability, they need it to survive.

- Although we have been able to mimic part of the natural cycle for the Banrock Station wetland by reintroducing a wet and dry cycle, we cannot simulate this kind of flood. This means that our floodplains have been under severe stress, most obviously in the poor health of River Red Gum and Black Box trees. Unfortunately, many of these trees have waited too long for a flood and will not recover, however many severely stressed trees will have a whole new lease on life.