

Paul McEvoy (*pronounced mac\_ev\_oi*)

Department of Environment, Water and Natural Resources

## Topic: Update on projects and events in the Lakes, Coorong and Murray Mouth

### 1. What has been happening at the barrages?

Bron, as you are aware, last century - between 1935 and 1940, five barrages were constructed at the mouth of the River, on the ancestral lands of the Ngarrindjeri people. The sequence of their names (from west to east) is: **Goolwa, Mundoo, Boundary Creek, Ewe Island and Tauwitchere.**

Their function, both at that time and today, is the prevention of salt water entering the lower reaches of the River Murray system. The barrages withstand tidal pressure, but readily pass flood waters. They also have a highly significant function in delivering life-giving environmental water to sustain the lagoons of the Coorong, and maintain an estuary in the vicinity of the Murray Mouth.

In the barrages, we have a problem for our fish. Being highly mobile animals, each species is known to migrate to some extent. Adding fishways assists them to find a solution to this problem. Migrations include movements from fresh to saltwater, or *vice versa*. They take place to favour feeding, spawning, dispersal and avoiding unfavourable conditions. The allowance for fish movements (which biologists term **fish passage**) was not part of the original design criteria for the Lower Murray Barrages. Stretching as they do from the southwest corner of Hindmarsh Island to Pelican Point, just to the west of Meningie ( which is a distance in excess of 7 kilometres ), , this leaves fish looking up at an almost-continuous barrier. These limitations to fish passage have significantly hindered fish populations in this region.

## **2. The barrages have had fishways for many years, why this spending on new ones?**

Yes Bron, that's right. There were four fishways already in place. However - they are located far apart (really, at either end of the 7 K span) and they do not suit all fish species. With the variety of fish types present, no individual fishway is capable of doing so. We need a suite of passage options to get the best outcomes. The Australian Government is providing 2.6 million dollars, together with almost 300,000 dollars from our government here in South Australia.

Studies by our partners at SARDI Aquatic Sciences indicate that more than 30 species of native fish are likely to passage through them, so there is great potential to create healthy waters - where fish move freely between the Coorong and Lower Lakes. We do not plan to provide benefits solely for fish with high ecological significance. Increased sustainability for populations of species significant for the important commercial fishery in the region, which include Mulloway, Coorong Mullet and Greenback Flounder are expected. Likewise, fish of interest to recreational fishers, like Golden Perch and Bream are anticipated to benefit.

We look to our monitoring results to inform us of whether we are managing the wetland for healthy conditions. Signs are good, in a number of areas. This past August, we detected the rare and primitive lamprey fish (which have slender, eel-like bodies) using this region as a gateway for the river's channel, and we await reports from NSW or Vic to see how far they penetrate into the Basin's interior. The DEWNR website recently announced the strength evident in the iconic waterbird, the Australian Pelican. Community monitoring is in progress with Goolwa-Wellington LAP Group, keeping us informed of frog activity.

By way of summary, I'd say that - as we build the series of fishways - this investment will contribute to the State goal of maintaining the Coorong, Lower Lakes and Murray Mouth as a healthy and resilient wetland of international importance.

### 3. That term is familiar to me, but I can't place it!

It is the goal of the Long Term Plan for the wetland, which is a Ramsar Wetland of International Importance. I'd also draw attention to the significance of tomorrow's date, Bron – for that will mark exactly 30 years since the adoption of the Coorong and Lakes Alexandrina and Albert were designated a **Wetland Of International Importance** on *November the First of 1985*. The Department will be taking care to recognise this birthday with community representatives.

### 4. Paul, you said earlier that the barrages influence water levels?

Yes, that's right, and in the lakes for the past few months, water levels have been maintained at about 0.8 metres elevation, which is above what some might expect for this time of year. Among the reasons for taking this approach is holding water that is earmarked to be delivered through the fishways and on to the Coorong, providing opportunity to water wetland areas at lake margins to assist threatened Bell Frogs and Pygmy Perch, and as a water security strategy that reduces the risk lakes will drop below critical thresholds over the drier summer months.

**5. I want to take you back to those fishways, Paul – what have you achieved regarding their construction?**

Things have hotted up, Bron! The finishing touches to the Boundary Creek fishway are being added, and by mid November, an opening of this, the first cab of the rank, will be made. Hot on its heels will be the roll out of fishways at Ewe Island and the first of two new structures in the Goolwa Barrage – both in prior to Father Christmas' arrival. By June, the installation of a further three to four fishways will see the completion of this project. I want to take this opportunity to acknowledge the great achievements made of SA Water (and I refer to not just the local Barrage Operations team, but members of that organisation delivering project management and direction, as well as some snazzy prefabrication engineering in the workshops up at Berri), staff at the Murray-Darling Basin Authority, and local SA industries. Highly satisfactory outcomes come from this integrated level of collaborative effort and dedication to the possible.