



COMMUNITY HELPS HYDRO MAKE HISTORY

Hydro Tasmania made history in 1999 when it began releasing the State's first scientifically assessed environmental flow into the Mersey River.

Eight years down the track – or along the river - the signs of the success of this experiment in helping nature repair itself are to be found under every stone, round every bend, in every log.

A cooperative monitoring program implemented by scientists is showing that the Mersey's aquatic ecosystem is recovering, helped not just by the new rush of water, but by work carried out by a highly enthusiastic local National Resource Management group – water power meets people power.

At the same time the program is setting an Australian benchmark in environmental flow monitoring.

These are happy times again for the Mersey as it weaves its way from Tasmania's Central Plateau through North West Tasmania to Devonport, where it merges with Bass Strait and provides a safe harbour for the Spirit of Tasmania.

In the 1970s, the river's upper catchment was diverted into the Forth River for power generation. Until the first environmental flow was released, the river below the last dam, Parangana, was dry.

Andrew Ford, CEO of the Mersey NRM Group, continues the story.

"The Mersey has been settled for 100-plus years," he says. "People have developed agriculture around it, introduced a whole range of plants and animals, and cleared native vegetation, all of which is necessary for our society. When we got to the 1990s, the Mersey was showing the effects of all this. The whole system was degraded and in many cases the small tributary streams were more degraded than the main trunk stream."

Local activist John Reed brought the Mersey's plight to public attention in 1994. In 1996, his lobbying led to the formation of the Mersey River Working Group.

This group was made up of members from the Inland Fisheries Service, Hydro Tasmania and the former government departments of Primary Industry and Fisheries, and Environment and Land Management. Community consultation and a series of studies facilitated by the associated Mersey River Study Group, which included John Reed and prominent scientist Dr Peter Davies, showed development in the catchment had created unacceptable social and ecological costs.

Releasing an environmental flow was one of several recommendations made by the working group. They were designed to ensure any release would be effectively monitored and enhanced by catchment management activities.

Dr Martin Read from the Department of Primary Industry and Water now leads the team of scientists from his department, the Inland Fisheries Service and Hydro Tasmania Consulting, that is monitoring the recovery of the river.

“There was a three-year study before the flows were released to determine what condition the river was in. I wouldn’t say the river was dead but there were certainly factors in terms of the aquatic communities there that were telling us it wasn’t healthy” said Dr Read.

“We saw a very positive response in terms of the ecological condition of the river quite soon after Hydro Tasmania released the water in the first year, and things are still improving.

“The bugs in the river responded very quickly, we had five-fold increases in the numbers at a number of sites downstream of Parangana Dam. The fish also showed some very early signals that they were responding positively, and they’ve continued to do so.

“We’re continuing to monitor and we’d expect to see a further improvement in the fish species and at some point in time we will see it stabilise and be a much healthier river.

“The Mersey is a benchmark in terms of scientific study, and is probably one of the few long term monitoring programs that exists within this country to look at how effective environmental flows can be.”

Andrew Ford is convinced that the positive monitoring results are due in part to the river care works being done by the Mersey NRM group.



“If you’ve got the water there as we have with the environmental flow, you’ve then got to preserve and improve its quality,” he said. “What we’re largely about is building on and leveraging this flow of water by making things happen outside the channel that affect the water quality and quantity.

“Working on riparian vegetation, removing willows and reintroducing native species helps re-establish the natural food cycle to the river. We’ve removed about 120 km of willows and other weeds within the Mersey system, fenced the banks to keep stock out and re-established native vegetation.

“It’s the other important ingredient, along with increasing water flow.”

Dr Read agrees: “Flow isn’t the only thing that influences how healthy a river is. If you have a flow going through a reach of river that is densely packed with willows for example, you may not see the sort of ecological improvements we’ve seen in the Mersey over the last seven years.

“The two prominent bodies that were involved in the Mersey study were the community, without the community pressure and the work that they’ve done along the river we wouldn’t be where we are now; and also Hydro Tasmania who have had the courage and the foresight to take on environmental flow issues and look at responsible environmental management in a catchment that’s used for a lot of things.”

Photos courtesy of Department of Primary Industries and Water, story by Helga Grant



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