

# PEEL-HARVEY

## The Decline and Rescue of an Ecosystem

Excerpt from book by Keith Bradby  
1997

Proudly brought to you by



www.peel-harvey.org.au

Issue 22 of 22

### Unfinished business

*Fifteen years ago I finished 'Decline and Rescue' hopeful that the ecosystem had indeed been 'rescued' - damaged perhaps, but at least pulled back from the brink of an irreversible decline. My primary concern was that we hadn't really learned from the experience and would remain slow to act when other environmental problems arose.*

*Excerpts from Chapter 9, 'Flowing into the Future: Stories of hope, stories of caution', pp. 195, 207-8.*

A huge amount of effort and change is still needed in the Peel-Harvey catchment. Our stewardship of the land is such that large loads of silt and nutrients still wash into our waterways. Nothing could be more symbolic of the distance yet to be travelled than the soil-stained tides that surge out of the Dawesville Channel during winter. The fertility of our land is still washing away from under us, and the channel cannot be considered a permanent solution to an ailing estuary; it was only ever intended to work in conjunction with much-needed changes to our use of the catchment.

But concerns are already being heard at the possible impacts of the channel on the near-shore environment. Much of the outfall from the Dawesville Channels falls into one of the sunken valleys, known as the Sepia Depression, which extends north towards Cockburn Sound. Whether or not there will be a harmful concentration of nutrients and other material in the depression is still unknown. Like all environmental work, construction of the

Dawesville Channel was shrouded in a degree of uncertainty. Such a massive and expensive engineering project is not the ideal method for solving any environmental problem.

In 1995, during the first year after the channel was opened, the three rivers continued to have water quality problems. The most serious situation was in the Serpentine, the river in which major blue-green algal blooms had first been identified, in 1970. Decades of abuse had built up huge stores of sediment and nutrients in a black, polluted mud covering the bed of the Serpentine Lakes, and lining the deeper pools in the river itself. In 1995, another disastrous algal bloom struck the river, turning a stretch of more than 8 kilometres into the familiar green soup. There are no practical engineering solutions that will give rivers like the Serpentine a reprieve. The Serpentine is clearly telling us that another decade or so of concentrated effort is needed to reduce the pollutants being washed into it - and possibly even more time will be required before the natural system begins to cleanse itself.

In 1910, the Fisheries Inspector based at Mandurah felt that drain construction had caused severe damage to the estuary. In the 1940s, fishers warned that serious changes were happening in the estuary. In the

1960s, these changes were evident for all to see. In the 1970s, studies into the cause of the changes began. In the 1980s, these studies continued, and some management measures were introduced. But it was not until the 1990s that management of the problem was consolidated into programs certain to improve the health of the waterway.

The Dawesville Channel will remain a symbol of the risk and expense we must endure if we ignore, or are slow to act on, the warnings our environment gives us.

What vital early warnings are we currently ignoring? How desperate will be the next round of solutions?



**16 November 2011** – PHCC staff and members at the celebration of the long awaited Peel-Yalgorup System Ramsar Site Management Plan, officially launched by Chief Scientist for WA, Professor Lyn Beazley AO. Prepared in partnership with the community for the 'wise use of wetlands' the Plan and associated Ecological Character Description provides an understanding of the system and direction for its collaborative future management. As so beautifully put by Dr Pierre Horwitz, "The Peel-Yalgorup System is your's to cherish and the world's to celebrate".

### Chronology

**Nov 2011:** 'In 1982 I first learnt about the likely drying of south-western Australia as a result of "the greenhouse effect". In 2010 the rivers that eventually reach the Peel Harvey experienced around 2% of their 'average' flow. This is part of a consistent and well documented decline in rainfall and flow happening since the mid-1970s, as predicted by numerous climate scientists. Watching the climate change debate is like watching a re-run of the 100 year saga that surrounded the decline of the estuary, except that this time it's a bigger and potentially more lethal saga.' **Keith Bradby, Director, Gondwana Link**

**2011:** "History is repeating itself. Agencies and community are working hard to arrest the continuing decline of the Estuary and rivers but the State Government is not listening. The bad state of the rivers is obvious, the estuary decline is more subtle. A whole of government approach to land use planning and the management of estuary and waterways is required. One that truly recognises the unique values of the Peel region. It needs to involve the community and it needs to be done now." **Jan Star, AM, Chair PHCC**

*Our thanks to Keith Bradby and Margaret Robertson for their help in presenting this 22 part series of Keith's 1997 book "The Decline and Rescue of an Ecosystem".*