

## **The Yarrahapinni Wetlands Story - a summary:**

The Yarrahapinni Wetlands is located west of Fishermans Reach Road and east of the Pacific Highway, stretching some 6 kilometres north from Andersons Inlet. It consists of a Broadwater at its southern end with islands along the estuary edge and various shallow tidal wetland 'flats' either side of the Barraganyatti Creek which narrows toward the most northern 3 kilometres, where it is a narrow excavated drainage channel.

The Wetlands was cut off from salt water tidal exchange by levee and drainage gates in 1972, constructed under flood mitigation scheme works, with the aim of draining the area to create productive farm-land. However, the drainage destroyed a large salt-water fish nursery habitat and exposed Acid Sulphate soils to the wetting and drying processes. This discharged large amounts of Sulphuric Acid and low dissolved oxygen fresh water into the Macleay River, when it rained heavily, most of the time. This not only damaged the fish stocks, fish health, but also dissolved the oyster shells (being calcium). The drained land was never much good for agriculture anyway, also due to the Acid Sulphate soils.

Realising the on-going damage to environment and economy, a community group approached Crown Lands and in 1996, Yarrahapinni Wetlands Reserve Trust was established to effect the restoration.

By the early 1990s the land was mostly privately owned and had to be bought back by the Crown for restoration. Also, planning legislation (SEPP 14) to protect wetlands had also been introduced - largely to prevent 'canal developments' in estuarine areas. In the legislation, Yarrahapinni Wetlands was categorised as 'Freshwater Wetlands' and to change it to its historic 'Saltwater' status meant it was caught up in the planning legislation, which considered re-inundation with salt water as 'Filling', but did not include clauses considering historic states of wetlands or restoration of damaged wetlands. The legislation required the Trust to prepare Environmental Impact Statements (EIS) and develop all the science required to argue the case for change of status and restoration. In spite of preparing the EIS and a successful 'Trial re-inundation', Kempsey Shire Council, who was the 'Designated Authority' and its then Directors, wanted to maintain the status quo. They believed change would invoke potential for damages claims, as the Flood Mitigation Works was (typically) passed to Local Council for management and maintenance. Thus restoration of the Yarrahapinni Wetlands was going nowhere under Part 4 of the Environmental Planning and Assessment (EPA) Act!

Under Part 5 of the EPA Act, which relates to State Government Department developments, it would require ownership by The State and a relatively simple Review of Environmental Factors (REF) to effect restoration of the Yarrahapinni Wetlands. The Crown Lands and Reserve Trust had acquired much of the land area needed. And after many years of no funds, the assistance of a very generous local donor meant the restoration could be afforded. In 2007, the Trust, with the agreement of Crown Lands and the National Parks and Wildlife Service (NPWS), decided to hand the area and the restoration project to NPWS to effect with a simple REF.

The progressive, monitored and reactive management of the re-inundation of salt water tidal exchange by NPWS has covered the Acid Sulphate Soils with salt water, buffering and almost eliminating the discharge of Sulphuric Acid into the estuary from the Yarrahapinni Wetlands. Mangroves and other salt water vegetation and seagrasses now steadily replace the Swamp Oaks and fresh water vegetation. Also it has already become a very viable fish nursery habitat. This was sadly evidenced from the number, diversity and size of fish killed from a recent discharge of acidic and low dissolved oxygen water from Clybucca, which was, quite ironically, brought into the Yarrahapinni Wetlands by the tidal exchange.

The fact that such extensive fish-kills in Yarrahapinni (and damage to fish health and oysters in the Macleay Estuary generally) could be caused by another source means that the restoration of these Acid Sulphate soil and drained lands discharging low dissolved oxygen water, needs to be addressed holistically estuary-wide, not in just one area.

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