

DEALING WITH DEATH IN THE VASSE-WONNERUP WETLANDS

Action is being taken to reduce mass fish deaths in the Vasse-Wonnerup wetlands.

Because of community concern over the large number of fish deaths, and the death of trees fringing the estuary, a report outlining strategies to protect the estuary has been prepared by the Vasse Estuary Technical Working Group.

This group has representatives from the Department of Conservation and Land Management (CALM), the Water and Rivers Commission, the Water Corporation, Fisheries WA, Agriculture WA, the Shire of Busselton, and GeoCatch.

Group Chairman Charlie Broadbent, of CALM, said likely causes of the problem had been identified and a range of options for preventing further deaths were being considered.

"Mass fish deaths in the estuary have a long history. Many dead fish were reported in February 1905, and there were further kills between then and 1960. Since then, there have been mass deaths in 1966, 1988, 1989, 1997 and again last summer," he said.

"The main cause is believed to be temporary falls in oxygen levels, probably as a result of algal blooms and high water temperatures. Algal toxins are also a factor."

Mr Broadbent said agencies on the Working Group had already begun to implement several strategies to combat the problem.

These included opening the sandbar across the mouth of the Wonnerup



Above: Collecting algal growth on the Vasse-Wonnerup estuary.

Inlet at the beginning of January to improve water quality and allow free movement of fish from the estuaries, and a fish and water-quality monitoring program.

Tree planting on the banks of the Vasse estuary exit channel has also been proposed, to provide some shade over the water and reduce its temperature.

"The deaths of nearly 800 mullet in the Wonnerup estuary early in January this year came out of the blue, as there was no history of mass deaths in that body of water," Mr Broadbent said.

"Since then, we have been monitoring the Wonnerup estuary on a daily basis and have saved more than 4000 fish by two strategically timed openings of the floodgates to maintain appropriate water levels.

"By checking the estuaries each day, and piecing together information from the monitoring program,



Left: Vegetation fringing the Vasse-Wonnerup estuary is threatened by raised water levels in summer-autumn.

Photos - Jim Lane

we're getting a better idea of the conditions that cause fish deaths.

"If these measures prove unsuccessful in reducing the fish kills, we will investigate additional measures, subject to funding."

Mr Broadbent said the Group recognised the efforts made by landowners and other sectors of the community to reduce fertiliser run-off from the catchment and to eliminate point sources of nutrients such as dairy herd waste.

"If nutrient loads to the estuary are not reduced, the fish kill problem will almost certainly worsen," he said.

"The formation of the land conservation groups

and the catchment coordinating body GeoCatch, was an important step in implementing better management of the Vasse-Wonnerup and Geographe Bay catchments.

"The Group's findings on technical aspects of the fish-death problem emphasise the complex nature of local environmental problems and the need for a cooperative approach to solving them.

Copies of the technical report are available for \$5.00 from CALM's office in Queen Street, Busselton. It can also be viewed at the Busselton offices of CALM, Agriculture WA, Fisheries WA, GeoCatch, the Shire of Busselton and the local library.

LANDSCOPE

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Discover the fascinating world of 'Starfish, Urchins and their Relatives' on page 10.



'The Art of Interpretation' on page 36 discusses how interpreters use a variety of techniques to enrich our experiences.



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