



Speech by

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**MEMBER FOR BARRON RIVER**

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### **ACID SULFATE SOILS, EAST TRINITY**

**Dr CLARK** (Barron River—ALP) (6.28 p.m.): Last week I attended a seminar in Cairns on the problem of acid sulfate soils on the NatWest site at East Trinity, across the inlet from Cairns City. There are a number of political agendas involved in this issue, but tonight I will confine myself to science.

The seminar heard from scientists Rob Fitzpatrick and Warren Hicks from the CSIRO's Division of Land and Water, who described the results of their three-year study of soils in three sites on East Trinity. It confirmed that a major acid sulfate soil problem exists, particularly in 110 hectares in the south-east corner of that site, which poses a significant environmental threat to the surrounding Trinity Inlet.

On the basis of the Cairns Post's report of this seminar, however, the community could be forgiven for thinking that the State Government had no knowledge of or interest in the acid sulfate soil problem in East Trinity or Queensland generally. As I will demonstrate to members, this is clearly not the case. The State Government is committed to working with all levels of government and the community to address this issue in a non-political way.

The 110-hectare problem area identified in the CSIRO report was recognised as seriously degraded land and earmarked for rehabilitation in the Trinity Inlet Management Plan. However, it was recognised that research was first needed to determine the nature of the soil and water quality to inform any rehabilitation and remediation measures. TIMP secured funding and Doug Smith, a soil scientist from DNR, and John Russell, a fisheries biologist from DPI, began their research assessing water and soil samples and assessing the impact of the acid leachate on marine life. That was a four-year program beginning in 1994. It was their work that attracted the interest of the CSIRO, which subsequently carried out that in-depth study. However, the State Government's work remains the only research examining the off-site impacts of the leachate from acid sulfate soils.

In spite of the amount of leachate, estimated by CSIRO to be equivalent to 120,000 tonnes of sulfuric acid being released since 1976, the measured impact of water quality on fish and crab life is currently less than might be anticipated, primarily due to the tidal flushing of the inlet, because sea water dilutes and acts as a buffer to acid contaminants. Thus there have been only three recorded instances of fish kills in the study period when the acid levels in the tidal creeks were exceptionally high. However, the potential does exist for the accumulation of heavy metals in the tissues of marine life, and this does need to be investigated further.

However, nobody doubts that there is a significant problem. The question is: what action is required? Unfortunately, the Cairns seminar was disappointing in this regard. The general principles of various remediation measures were clearly explained and contained in a draft national strategy on the management of coastal acid sulfate soils. But further work is clearly necessary to devise a particular strategy appropriate for the remediation of a specific part of the East Trinity site. The implementation of the chosen remediation management strategy will be costly regardless of what is ultimately considered most appropriate.

As I have indicated, the specific site studied by the CSIRO and the State Government has been identified for rehabilitation back to a natural wetlands system, regardless of the ultimate use of the rest of the NatWest site. Therefore, I believe we should focus our efforts on achieving this goal, because this is where the immediate problem is, and certainly it is where the most significant pollution problem

has been identified. The people with the experience to advise us exist within the CSIRO, the State Government's Queensland Acid Sulfate Soil Investigation Team, and the CRC for Coastal Zone Management. The Federal Government has funding available for remedial trials under its Coast and Clean Seas Program, and the landowner, NatWest, certainly has a clear responsibility to contribute financially to cleaning up this polluting site.

It has been suggested that a new body is needed to address the acid sulfate soil problem. I disagree. I believe we already have a body that could coordinate further research and initiate remediation measures, namely, the Trinity Inlet Management Program. If this program were given sufficient support by the State Government, the Cairns Port Authority and the Cairns City Council—the agencies that fund and direct the program—I believe it could effectively coordinate the preparation and monitoring of a remediation strategy.

TIMP was established in 1992, when the inlet and the Cairns mudflats were under enormous threat from massive development, which has been averted by its action. It is again time for TIMP to play a significant role to achieve its charter of ensuring the ecological sustainability of the inlet in the face of this current threat, or I believe it risks becoming irrelevant in the eyes of the community. As the architect of TIMP in 1992 and as a current member of the TIMP policy committee, I will be actively pursuing this goal. I look forward to the support of my parliamentary colleagues on TIMP, the Cairns Port Authority and the Cairns City Council in this regard.

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