Woodlane Reserve

REVIEW OF MANAGEMENT OPTIONS FOR FOUR RIVERBANK COLLAPSE HIGH-RISK SITES

The reserve is on the right bank of the River Murray about 9km downstream of Mannum. The site is on the edge of the floodplain.

There are two areas of concern. One is the grassed area in front of the houses upstream of the access road, where cracks have been observed close to the riverbank. The other is the access road close to where two collapse events occurred in early 2009. In that incident pumping infrastructure was damaged and collapsed into the river.

The cause of riverbank collapse

Collapses of some sections of the banks of the River Murray began in February 2008 as a result of very low water levels in the lower reaches of the river in South Australia. As a result, some sites were closed or access was restricted. Inflows from the Murray-Darling Basin have restored river levels to the normal operating range. However, some sites continue to show instability.

The 2012 site review

The Department of Environment, Water and Natural Resources commissioned a review by Coffey Geotechnics of management options for four high-risk sites. It determined that sites which have already been affected by significant cracking may be particularly vulnerable to collapse.

Findings and recommendations

"In our opinion, the riverbank in front of the houses is vulnerable to collapse during periods of low river level.

On present knowledge it is also possible that a very large collapse or a progressive failure could affect parts of the access road in front of the houses. However, the collapses are not likely to extend back to the houses."

Options to reduce the risk of collapse at the site include:

- Further investigations of the area in front of the houses to confirm the nature of subsurface material.
- Moving the access road near the pump station collapse further away from the riverbank.

Next steps

The reserve area, road and pump station site are Crown land under the care and control of the Rural City of Murray Bridge. All properties at the site are privately owned under Certificate Title.

The Department of Environment, Water and Natural Resources has provided the investigation report to the affected councils and will continue to work with them, and the community, to achieve the best long-term outcomes for affected sites.

For more information

visit <u>www.sa.gov.au</u> and search for "riverbank collapse"

The investigation report, Review of Management

Options for Four Riverbank Collapse High-risk Sites, is
available at www.waterconnect.sa.gov.au



