



**River Murray – Riverbank Collapse
Frequently Asked Questions And Answers
Issued: 11 September 2009**

Over the past year there have been a number of riverbank collapse incidents along the River Murray below Lock 1. These occurred particularly in the summer months and usually involved soil and rock sliding into the river.

1. What are the causes of riverbank collapse?

Despite extensive investigations, no single cause of these riverbank collapses has been identified. Monitoring and investigations are continuing, focusing on the types of soils involved and the geological properties of identified areas. Areas identified as 'high risk' include those where there is:

- Deep water immediately adjacent to riverbanks, or
- Large cracks on the bank or floodplain, or
- Significant weight on the riverbank- including trees (both willow and gum).

2. What has happened so far?

A number of collapse events have occurred along the River Murray in the reach below Lock 1. The most significant incident occurred in February 2009 at Long Island Marina, when a large amount of soil and some trees and vehicles slid into the river. A significant number of floodplain and riverbank cracks have since been identified and are being monitored.

In some cases, trees have been removed to reduce the pressure and weight on the riverbank. Where trees and riverbanks have already fallen into the river, these are managed to ensure that there are minimal risks to public safety or impediments to safe navigation. Signs and fencing have been erected and a public awareness campaign has been undertaken, including the use of various media and public notices and direct contact with landowners of riverfront properties.

3. What are the signs that a riverbank may collapse?

All river users should remain vigilant and lookout for signs that a riverbank could collapse. The signs of potential riverbank collapse include:

- Longitudinal cracking along riverbanks, sometimes well away from the River edge.
- Fallen or leaning trees or vegetation tilting or slipping towards the River.
- Other nearby collapses.
- Where banks are steep and the channel deep, with sudden "drop off" to depth.
- High riverbanks with a significant drop of over 1m to the river level could be at risk



- Where there are other signs of erosion or bank collapse on a smaller scale.
- Bubbling in the water near the riverbank and boat ramps.

4. Who do I need to inform?

Any reports of recent collapses or any signs of major cracking, erosion or water bubbling can be given via the MurrayWatch Hotline on (08) 8531 0710.

If a tree on a riverbank falls, or looks like it may fall, it should be reported to DWLBC (see **Question 7**).

5. What advice should people follow when on or around River Murray banks?

Anyone on or around River Murray banks should adhere to the following advice.

DO:

- Exercise common sense and take responsibility for your own personal safety.
- Avoid areas where the riverbank shows signs of slumping, cracking or erosion.
- In areas where riverbank collapses have occurred, be aware there may be submerged materials, including trees.
- Abide by any warning signs displayed.
- Report recent collapses and signs of major cracking via the MurrayWatch Hotline on (08) 8531 0710.

DO NOT:

- Enter areas that have been fenced off and/or are signed with warnings.
- Park vehicles on riverbanks close to the water's edge, or where signs of cracking occur.
- Camp or picnic on riverbanks where signs of cracking occur.
- Walk on recently collapsed riverbanks, or where signs of cracking occur.
- Attach mooring lines to trees close to the water's edge, or moor at sites where tall trees grow along the riverbank. Trees that are around 20m from the riverbank and not surrounded by cracking should be safe.
- Approach areas by boat that have already collapsed or are identified as having the potential to collapse.
- Sleep aboard vessels if bubbling is observed near the riverbank after mooring.

6. What should landowners do if they observe the signs of possible riverbank collapse on their property?

Anyone who owns a riverfront property who observes any of the riverbank collapse indicators outlined above should immediately report them to the MurrayWatch Hotline on (08) 8531 0710.



7. What is the process to remove trees from riverbanks?

The Department of Water, Land and Biodiversity Conservation (DWLBC) has developed an easy process to ensure compliance with government legislation. In particular, the *Native Vegetation Act 1991* requires that approvals be obtained prior to the clearance of any native vegetation. DWLBC has worked with the Native Vegetation Council to streamline this process.

Whether a tree has already fallen, or looks as though it may fall, DWLBC should be contacted on (08) 8204 8258 or (08) 8204 8576.

If a tree has already fallen, DWLBC will then organise for the appropriate action to be taken. This may be remove, relocation or trimming.

If a tree looks as though it will fall, DWLBC will seek to obtain all required clearances to remove problem trees. This clearance will be fast-tracked to ensure a direction is given within 48 hours.

If a tree is removed from private land, this will occur at the landowner's expense once approved for removal via DWLBC.

8. Where is further information available?

Anyone who owns or leases land adjacent to the River Murray should speak to their insurance company to determine their obligations should a riverbank collapse occur. The local council can also provide advice specific to your situation and location.

For further general information about riverbank collapse, contact DWLBC on (08) 8204 8258 or (08) 8204 8576, or visit

www.dwlbc.sa.gov.au/murray/drought/index.html#Riverbankcollapse