

# Dam maintenance guideline



There are over 20,000 privately owned dams across the Adelaide Hills and Fleurieu Peninsula. These dams are important resources for farming systems and the environment. Routine inspection and maintenance leads to improved productivity and profitability, as well as benefits to biodiversity conservation.

## Purpose

In the Hills and Fleurieu region, some dams are performing poorly or have failed due to stock traffic damage, minimal to no vegetative cover, spillway blockages and deficiencies that have not been repaired. Private dam owners often overlook their responsibility to maintain their dams, or have a lack of understanding on practices that help maintain them in good condition.

This guideline provides information to landholders to better understand their responsibilities and examples of maintenance practices.

## Responsibilities of dam owners

Confusion around who is responsible for a dam is very common. If you have a dam on your property you are responsible for routine inspection and maintenance, even if taking ownership of an existing dam on a recently purchased property.

## Good practice maintenance examples

### Vegetative cover

Having a well-grassed dam wall, spillway and buffer zone around the dam is a great way to enhance it. Vegetation assists in capturing sediments, filtering pollutants and minimising erosion. A layer of topsoil over the bank (to a depth of 150mm minimum) and spillway is essential to keep a contiguous vegetative cover. Only low growing plants are to be planted and to remain on the bank. Refer to our '[sedge and rush planting guide](#)'. Larger plants such as a tress are hazardous as roots may compromise the dam wall by both drying out the dam and opening up routes for seepage. As trees and shrubs help reduce evaporation by reducing wind and shading the water ensure they are located at least 15m away from the dam wall or around the dam.

### Limit or exclude stock

Limiting or excluding stock from your dam improves water quality, and reduces sedimentation and erosion. Grazing stock will remove plant cover by grazing and trafficking routes. Fencing-off the dam

is highly recommended. The wider the buffer the more resilient to erosive forces. If this is not an option, construct shorter lengths of fencing to deflect stock.

### Provide alternate water supply for stock

Providing troughs is an effective way to offer clean water to stock. If this is not an option, partially-fencing off a dam will limit stock access. Constructing a hard surface access point can minimize pugging and sedimentation.

### Maintaining dam integrity

Undertake routine inspection by looking for any leaks or signs of animal burrows, cracking, slumping or erosion. Keep an open and functioning spillway by removing any blockages; routinely slashing growing grass to encourage dense groundcover; and ensure the water level is at least a metre below the top of the dam wall to prevent overtopping.

Undertaking repairs, modifications or removal activities require a water affecting activity permit or development approval. Please contact Landscapes Hills and Fleurieu staff for further information.

### De-silting farm dams

From time to time, a dam will need to be cleaned out. Silt and accumulated sediments, along with salts, can build up in dams, affecting water quality and quantity. It is strongly recommended that desilting be carried out when dams are dry or have been de-watered. Refer to our [current recommended practice on desilting farm dams](#).

#### Routine inspection and maintenance checklist:

- Does my dam have a spillway operating that ensures the water level is no less than 500mm below the top of the dam wall?
- Are there any leaks or signs of animal burrows, cracking, slumping or erosion on the dam wall?
- Is my dam wall free of obstructions and vegetation other than grasses?
- Does my dam need de-silting to maintain its volume?
- Can I exclude livestock where possible?
- Can I pass low-flows through or around my dam to help with catchment health?

### Help and further information

Landscapes Hills and Fleurieu

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The South Australian State Emergency Services (SASES) can be reached on 132 500 in the case of a flood or storm emergency.