

Current Recommended Practice

Desilting Dams



Desilting means clearing out the build-up of silt or sediment from a dam to reinstate its original depth. This is usually done with a front-end loader or excavator. Care must be taken during the desilting process, to avoid damaging the clay liner at the bottom of the dam, which can lead to water loss.

Like any earthworks, desilting requires planning. You want to make sure the job's done right and that you're looking after the catchment which supplies water to you, your neighbours, and the environment. Keep in mind, water is a shared resource. What you do on your property can affect others downstream. Desilting a dam is a Water Affecting Activity (WAA) under the Landscape South Australia Act 2019.

Purpose of this Current Recommended Practice (CRP)

Desilting activities can harm the environment and impact other water users. The Hills and Fleurieu Landscape Board recognises that well planned desilting works are generally low-risk activities which can be self-managed. If you follow this CRP completely you are **not** required to obtain a WAA permit. If you are unsure whether the works you are proposing require a WAA Permit, contact us for further advice.

This CRP helps you work out if you need a WAA Permit and outlines the steps you need to follow to be compliant.

This CRP contains two sections:

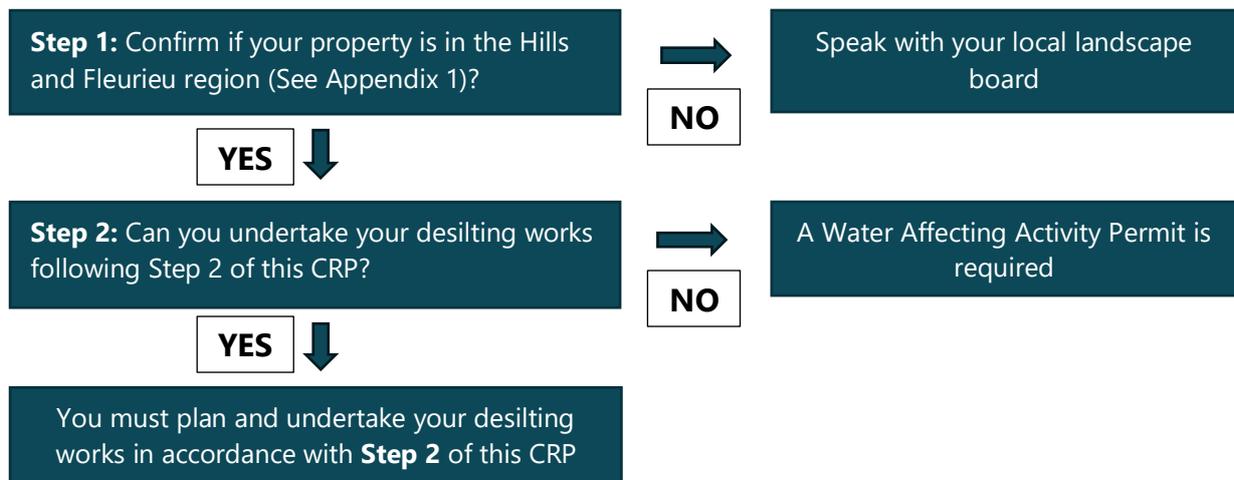
- A WAA Permit decision tree
- Recommended Practice for desilting a dam

Permits and approvals

If proposed works involve re-sealing a dam, repairing the walls or spillway of a dam, increasing or decreasing a dam's holding capacity, a WAA Permit or development approval will be required. Please contact us.

Undertaking a WAA without a Permit or failing to comply with this CRP is an offence under the Act. Failure to comply with directions from the Hills and Fleurieu Landscape Board may result in penalties of up to \$70,000 for a body corporate or \$35,000 for a natural person.

Step 1: Permit decision tree



Step 2: Current Recommended Practice for desilting a dam

A. Plan and assess the dam:

- Consult with professional and experienced contractors if necessary.
- Schedule desilting activities (dry conditions or summer to early autumn is usually best).
- Check weather forecast for significant rain and reschedule if forecasted
- Assess whether you will be removing wet or dry silt.
- Consider the need for sediment control measures at the spillway when working with wet silt. This might include hay bale barriers, filter fences, or sediment traps.
- Plan and identify suitable location(s) to stockpile and then spread the silt.

B. Dewater the dam (if necessary):

- Consider installing a temporary siphon or use the scour pipe on the dam to slowly drain the dam.

C. Removing the silt

- Desilting should occur only within the basin of the dam.
- Aim to reinstate the original depth of the dam - no deeper. If the clay liner is removed or damaged the dam may not hold water.
- Do not alter the slope of the internal walls of the dam.

D. Storing and reusing silt

- Silt is rich in organic matter and is a great soil improver. Consider how your property can benefit from this material.

Dry Silt

- Dry silt can be temporarily piled next to the dam before spreading but it must not be piled within 10 metres of the downstream watercourse. See Figure 1 (green shaded area).
- When spreading silt maintain a 10-meter buffer from any dam, watercourse, floodplain or lake on your property.

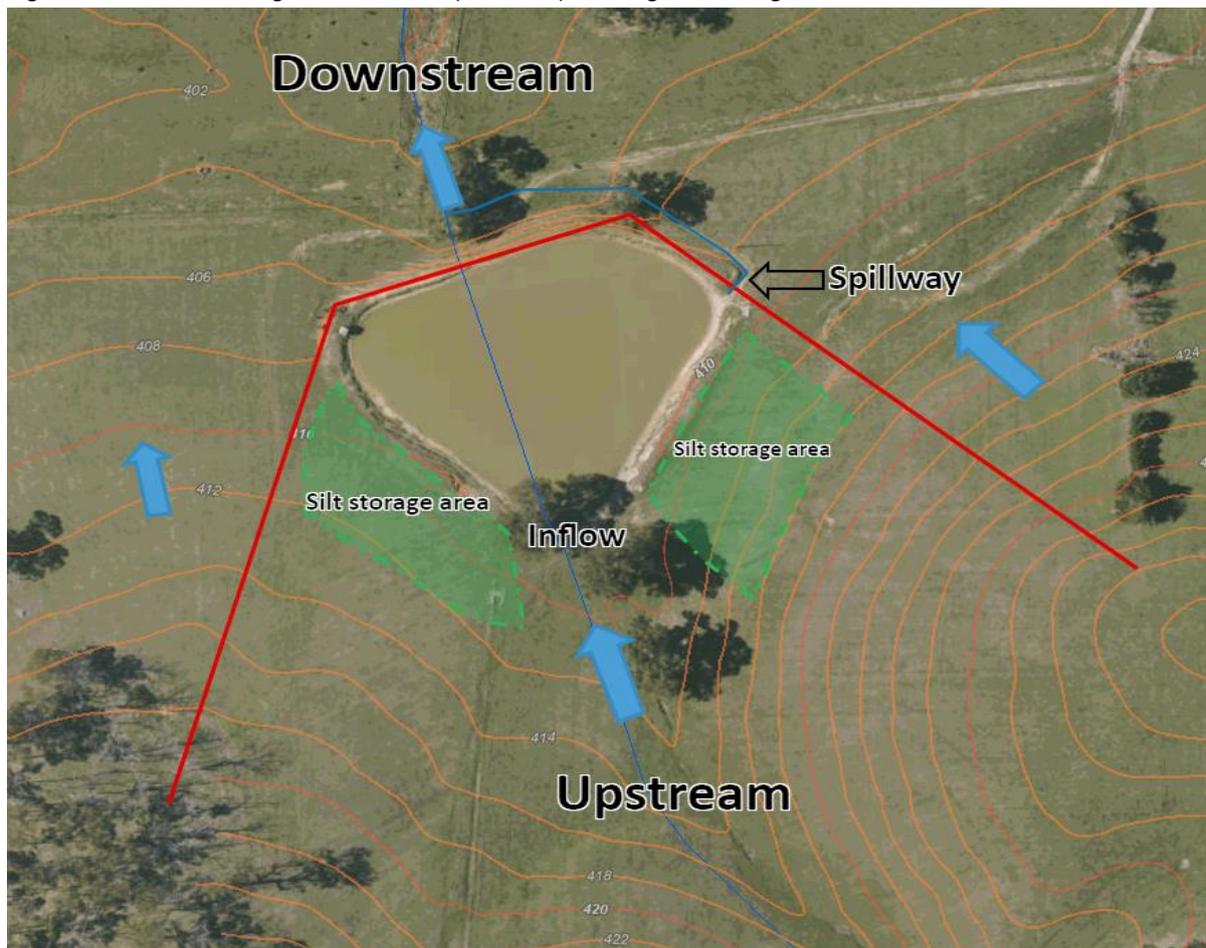
Wet silt

- Wet silt (slurry) cannot be moved far from the dam. It must be temporarily contained and allowed to dry in an area bunded with earthen walls. This area must be upstream of the dam. Figure 1 shows areas where silt should be bunded and left to dry (green shaded areas).
- Once dry, silt can be collected from the bunded areas and spread on paddocks. Maintain a 10-meter buffer from all dams, watercourses, floodplains, and lakes when spreading silt.
- Wet silt must not be deposited in any area downstream of the dam (see Figure 1.)
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E. Other maintenance activities allowed with this CRP

- Repairs to the walls caused by animal damage, small cracks and burrows in and around the dam.
- Removal of vegetation (including trees) growing on the dam walls and in the spillway.
- Please note that removal of native vegetation is regulated by the *Native Vegetation Act 1991*.
- Clearance of common reed and bulrush can be undertaken in line with "[Native Vegetation Council: Clearance of common reeds \(*Phragmites australis*\) & bulrushes \(*Typha domingensis*\)](#)".

Figure 1: Suitable storage areas for silt prior to spreading or reusing



If you are still unsure whether you require a Permit, please contact us for assistance.

Hills and Fleurieu Landscape Board

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Disclaimer - Landholders using this information do so at their own risk and are encouraged to seek advice. Whilst every reasonable effort has been made to verify the information in this document, use of the information contained herein is at your sole risk. The Hills and Fleurieu Landscape Board recommends that you independently verify information before taking any action.

Appendix 1 – Hills and Fleurieu region map

This current recommended practice applies to properties in the Adelaide Hills and Fleurieu Peninsula as per the map below.

