Guidelines for desilting 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 effecting water quality and quantity.

This fact sheet provides important information on cleaning dams and your obligations under the Natural Resources Management Act 2004

Regular dam maintenance is good practice

Dams require regular maintenance to maintain their lifespan, water quality and quantity and to prevent costly structural failures. It is good practice to inspect dams, spillways, and catchments when both full and dry to plan for any required maintenance works.

Dams collect and store surface water

Dams are designed to collect and store surface water. On Eyre Peninsula many dams have failed due to their siting and construction design and methods. Interactions with saline groundwater and surface water have caused many dams to turn salty. Some dams may fail because of leaks due to a lack of impermeable soil or material. Consideration for the initial construction of a dam, such as the siting, size, depth and catchment before undertaking any desilting works is important for its lifespan. For example, a clay liner may have been installed to prevent leakage, or the dams’ base level may have been set and constructed above a saline water table to avoid salinity issues.

To minimise risk it is suggested that an experienced contractor is engaged to help plan and/or undertake any required works or cleaning out of dams.

Desilting a dam

Desilting a dam can be undertaken under the current Eyre Peninsula NRM Plan without application for a Water Affecting Activity Permit. Specific conditions to undertake the works required in desilting dams must be followed. Please refer to the following page for details.
Duty of care

In South Australia, all people have a general statutory duty under the Natural Resources Management Act 2004 to act reasonably and responsibly in relation to the management of natural resources. This includes an obligation to maintain and not damage a watercourse, floodplain, or lake.

Your obligations for desilting a dam within the Eyre Peninsula NRM region

The following conditions (Principle 21) for undertaking desilting works on dams can be found on pages 76 in the Strategic Plan for the Eyre Peninsula Natural Resources Management Region 2017-2027, of the chapter titled The Policy Framework.

Guidelines for desilting dam

Dam maintenance:

21. A permit is not required for desilting a dam provided:

a) desilting only involves the removal of material deposited post dam construction or material deposited since the dam was previously desilted;

b) excavated material removed from desilting shall not be deposited within a watercourse, lake or floodplain of a watercourse; and

c) the capacity of the dam is not increased beyond its original size.

Definition of a watercourse or lake

For the purpose of the relevant principles of the Eyre Peninsula Natural Resources Management Board Plan, a watercourse means a river, creek, or other natural watercourse in which water is contained or flows whether permanently or from time to time. Examples include; a dam or reservoir that collects water flowing in a watercourse, or a lake, channel, part of a watercourse, or estuary, through which water flows. A watercourse must have a defined channel with both bed and banks (as distinguished from a mere fold or depression or contour in land along which surface water flows). A lake means a natural lake, pond, lagoon, wetland or spring (whether modified or not).

Important note: Activities which include works other than desilting a dam may require a Water Affecting Activity (WAA) Permit to undertake the works. These activities include works to construct new dams, to deepen or enlarge existing dams, and other structural modifications. If you are unsure whether the works you are proposing to do will require a permit, call a Water Resource Officer for advice before commencing your works.

Penalties apply

Undertaking a WAA without a permit, breaching of the permit conditions or breaching the principles of the Eyre Peninsula NRM Plan is an offence under the NRM Act. If you are unsure whether the works you are proposing to do will require a permit, call the Board or for advice before conducting any works. If in doubt contact Natural Resources Eyre Peninsula.

Dams are important resources, and should be managed appropriately; please contact a Water Resources Officer to discuss your management plans and options.

Contact us

Natural Resources Eyre Peninsula
Ground Floor, 86 Tasman Tce, Port Lincoln SA 5606
T. (08) 8688 3111 | F. (08) 8688 3110

Department for Environment, Water and Natural Resources
PO Box 2834, Adelaide SA 5001
T. (08) 8463 6800
www.environment.sa.gov.au

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