

DAM MAINTENANCE

FACT SHEET

This fact sheet provides information to persons with an existing or approved dam on their property. This fact sheet does not relate to the approval process for constructing a new dam or extensively modifying an existing dam. Furthermore, this fact sheet does not relate to maintaining a Referable Dam, as defined under the Water Act 2000.

The Law

Dams within the Fraser Coast Region are generally governed by the *Fraser Coast Planning Scheme 2014* (or the version in place at the time of construction) and the *Planning Act 2016*. Dams that required an approval to be issued may be subject to conditions and it is the responsibility of the owner of the property to ensure they are aware of and are complying with these conditions.

The Planning Scheme also provides governance over any maintenance works undertaken on dams, with some works able to be performed without the need for any further approvals. For works that require an approval, a development permit must be in effect prior to these works being carried out. Property owners are encouraged to contact Council's Development Section for advice prior to undertaking any earthworks or modifications to an existing dam.

Notwithstanding the need to obtain all necessary approvals, where required, property owners are responsible for appropriately operating, inspecting and maintaining the dam to ensure its safety and efficacy, as well as to prevent potential failures and prevent overflow traveling to neighbouring properties.

Operation and Maintenance

Property owners should know the capacity of their dam, have plans and infrastructure in place to reduce the water level in the dam when required, and ensure any overflow is suitably captured and/or directed in a manner so as to not cause any adverse impacts to neighbouring properties.

Additionally, the following actions are recommended to ensure the safety and ongoing efficacy of the dam:

- Minimise damage to dam walls by restricting access to livestock (water troughs or other suitable storage vessels may be provided for drinking

water) or providing suitably designed and located access points that are regularly inspected and maintained.

- Refrain from planting deep-rooted trees and shrubs on dam walls and in the spillway area as this may undermine the integrity of these areas. Dam walls and spillways should be effectively stabilised through the use of ground cover vegetation (shallow-rooted grasses and vegetation that have outward-extending fibrous roots that form a vegetation mat cover over the area).
- Water levels should be monitored and in wet periods or when heavy precipitation is forecast, suitable arrangements should be made to reduce the water level in the dam to increase holding capacity (water may be extracted and directed to alternate storage vessels or used for irrigation purposes).
- Regularly inspect the dam for signs of burrowing from animals and undertake necessary works to address any damage resulting from this.



Inspections

In addition to the above, it is recommended that property owners regularly inspect their dams for any signs of damage or failure by monitoring water levels, checking the inlet and waterline, looking for signs of water seepage and sinkholes or particularly lush vegetation, and checking for signs of settlement. The following checklist is provided to assist with this inspection:

- Commence the inspection at the dam inlet. Walk slowly around the waterline looking for any signs of damage. Observe the water, looking for signs of discolouration or small whirlpools.
- Inspect the dam wall by walking slowly across the crest and face. Dam walls should have well rounded tops to avoid ponding, be at least one metre above the dam's maximum holding capacity, have gentle slopes that encourage even distribution of water across the surface at a slow rate of flow to minimise erosion, have a good cover of topsoil and grass or other shallow-rooted ground cover, and be free of any signs of erosion or movement.
- Inspect trickle pipes in the dam wall, where present, to ensure they are free of debris/blockages and are operating effectively.
- Inspect the spillway. The spillway should be a level and stable surface that is free from erosion, large plants and debris.
- Inspect downstream areas, looking for any signs of seepage, wet or boggy areas, tunnelling, erosion, or excessive vegetation.

The above inspection checklist is not exhaustive and you may wish to engage the services of a suitably qualified person such as a civil engineer or water resource engineer to assist in undertaking this inspection. Furthermore, where an issue is identified, it is recommended that you engage a suitably qualified and experienced engineer to assist you in undertaking the required works to ensure the dam remains safe and reliable.

Being a Good Neighbour

Council encourages neighbours to consult with one another to address any concerns associated with the installation, operation, and ongoing maintenance of a dam to reach an amicable solution for all relevant parties. Where an amicable solution is unable to be achieved, mediation is recommended.

It is important to note that damage to property resulting from the inadequate operation and/or maintenance of a dam is a civil matter and affected parties may pursue civil litigation for damages incurred.

For further information in relation to dam maintenance and approvals, please contact Council on 1300 79 49 29.

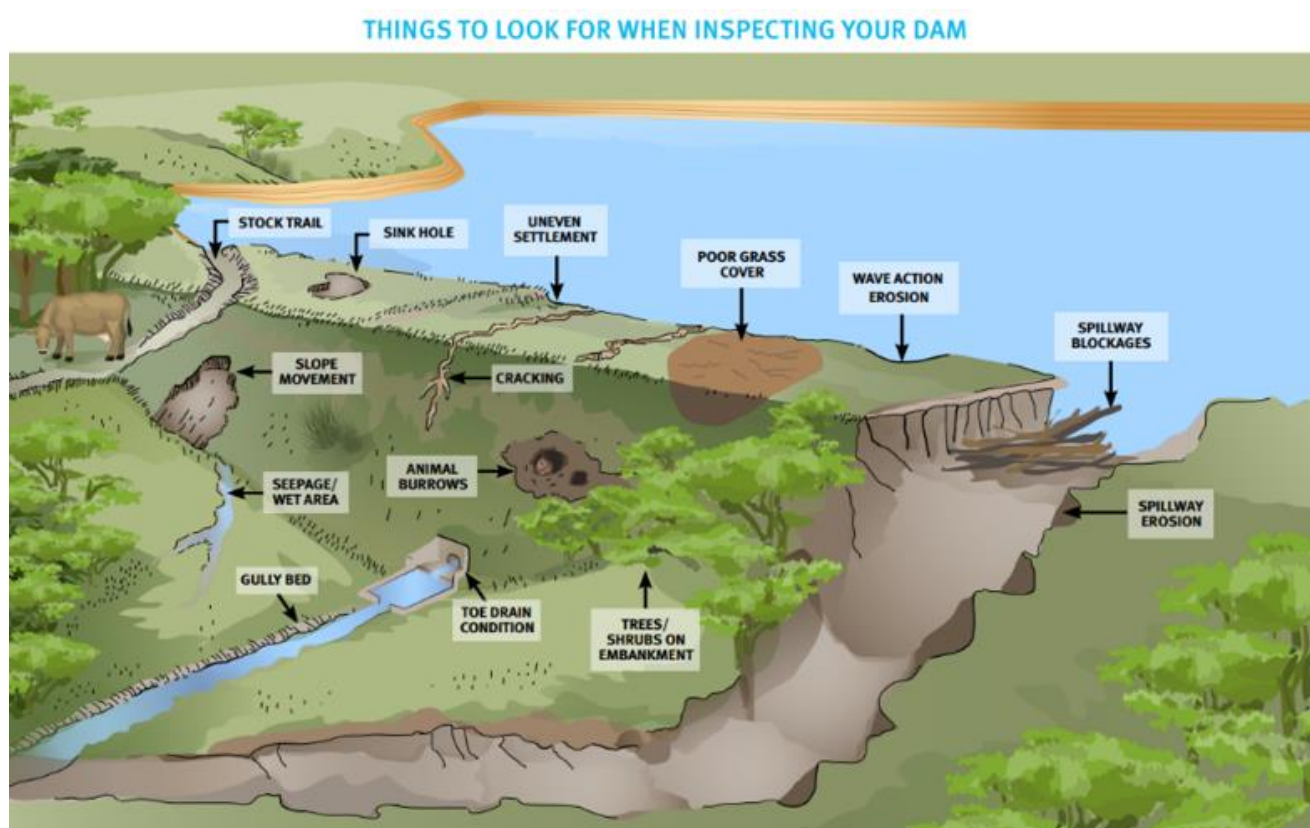


Figure 1: Things to look out for when inspecting your dam.

Credit: State of Queensland 2020

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