

DECISION MAKING FOR ON-FARM WATER STORAGE

Quick guide



A process to support primary producers in navigating farm dam permit and water licensing applications



Australian Government
Department of Agriculture,
Fisheries and Forestry



Future
Drought
Fund



TAS FARM
INNOVATION HUB



ACKNOWLEDGEMENT

The content for this quick guide was collated from information and resources available from the Department of Natural Resources and Environment Tasmania, accessed between August and October 2024. The quick guide highlights key information, fact sheets, forms and processes applicable to water in Tasmania, in the context of on-farm water storage. Further information can be found at nre.tas.gov.au/water. The links and QR codes within this quick guide will be maintained where practical.

Welcome

This quick guide has been developed to assist you in navigating farm dam permit and water licensing applications.

The guide outlines a practical step by step process with handy tips and links to further information.

DISCLAIMER

This guide has been prepared with the aim of supporting Tasmanian primary producers to navigate the processes for dam approval and water licences. Any findings, conclusions or recommendations only apply to the aforementioned circumstances and no greater reliance should be assumed or drawn by the reader. The guide has been prepared as an output of the Water Use Efficiency project delivered by Pinion Advisory and the TAS Farm Innovation Hub, solely for the use of guiding primary producers, and Pinion Advisory and the TAS Farm Innovation Hub accept no responsibility for its use by other parties. Reproduction in whole or part of this publication is prohibited without prior permission from Pinion Advisory or the TAS Farm Innovation Hub.

Released 2024
Produced by Pinion Advisory





Contents

■ Farm dam construction	1
■ Water licensing	10
■ Case study	14

1

Service providers are available to assist landholders with preparing the information required to submit for dam construction permits and water licence applications.

Have you engaged a suitably qualified consultant?

Why do I need a service provider?

Dam permit applications and water licence applications can not be compiled by just anyone. Suitably qualified consultants are required to ensure that any application prepared and submitted is compliant with the application requirements.

When selecting a service provider consider:

- knowledge, skills and experience
- cost effectiveness
- recent work

Scan to find a
consultant:



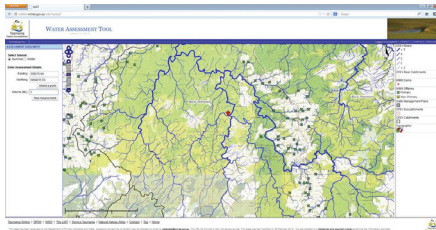
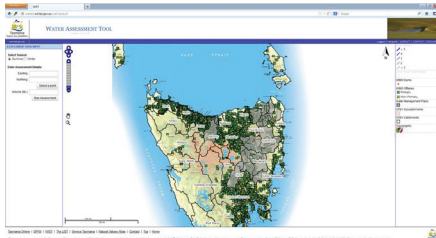
What is the availability of water in your catchment and sub-catchment for the proposed dam site?

If you are considering constructing a dam for a commercial purpose (including irrigation) and the dam is located on a watercourse or will be pump filled from a watercourse you will require a water allocation to take this water into the dam. The Department of Natural Resources and Environment (DNRE) oversee this process and provide some tools to service providers to help determine the likely amount of surface water available for allocation.

Your service provider will access the Water Assessment Tool (WAT) to determine the volume of water available for allocation. The WAT provides a consistent data set for all users, reducing potential for dispute or confusion when estimating water availability. The WAT is only available to consultants trained in its use.

There are also some catchments within Tasmania that have a Water Management Plan developed. Within these catchments the WAT should be used in conjunction with the plan to determine the amount of water available for allocation at a given location.

Example of the Water Assessment Tool (WAT) interface.



Is there water available for the needs of your proposed dam project (informed by WAT)?

YES

Progress to
Step 3.



NO

Catchment
allocation is
offered on
a first come,
first served
basis. Some
catchments in
Tasmania are
fully allocated.

Scan to learn
about the Water
Assessment
Tool (WAT):



Based on risk-based criteria, is the proposed dam classified as a lower risk dam or higher risk dam?

Approval of dams within Tasmania are assessed through a risk-based approach. If a proposed dam meets ALL the specific criteria that deem it to be lower risk, it will go through a streamlined permitting process (Division 4 Permit). Dams NOT meeting all these criteria are considered higher risk and require a full application, assessment and a more detailed permitting process (Division 3 Dam Permit).

All dams on a watercourse are considered high risk and automatically require a Division 3 Dam Permit.

Case study

A proposed dam will be constructed on a watercourse. Given this, a Division 3 Dam Permit will be required. A Division 3 permit applies to any dam constructed on a watercourse or waterway (including a floodplain). This also applies to any dam within the coastal zone (1km of coast), due to the need to address coast zone impacts. A Division 3 Permit identifies a 'higher risk' dam.

Scan to review a fact sheet comparing low risk v high risk dams:



Scan for more information about lower risk dams:



4

Application development.

Have you arranged a consultant to undertake the site visit?

With support from a consultant, the permit application process is initiated:

1. Undertake site visit with consultant to determine dam details.
2. Consultant to undertake assessment of the dam safety category (Consequence Category Assessment).
3. If a dam is over 100ML a site plan by a surveyor is required. Most dam builders require a detailed dam model and plan with accurate volumes. Therefore most dams are now survey modelled regardless of capacity.
4. The consultant prepares supporting documentation for the application, in compliance with the Dam Works Assessment Decision Framework. The framework ensures due consideration is given to threatened species, salinity, acid sulphate soil, land slide risk, sediment and erosion risk, spillway size etc. Additionally, a consequence category assessment must also be completed. The consequence assessment determines the level of engineering design input required.

Scan to explore the
Dam Works Assessment
Decision Framework:



Scan to access
Dam Works
Application Forms:



Submission of dam permit application and supplementary information to the Department of Natural Resources and Environment

What to expect:

- If the application is complete and submitted with the prescribed application fee, it can take up to 12 weeks for a decision from when it is accepted by DNRE.
- Incomplete applications do not progress. Additional information will be sought by DNRE.
- Once the application is accepted, details are advertised and a 14 day representation period commences. Representations are usually dealt with under mediation, but occasionally will go to appeal with the Resource Management Planning Appeals Tribunal.

Approval received?

- Division 3 permit is valid for 2 years, with the option for a two year extension.
- Division 4 permit is valid for 2 years.

6

Engage an earth moving contractor



1. Before you engage an earth moving contractor, ensure you have a valid permit and have submitted the notice of intention to commence works form to DNRE.
2. Select and engage with a suitably experienced dam construction contractor. Contractors must have 5 years experience building dams of the same height and consequence category.
3. Understand and refer to the permit conditions and applicable Dam Works Code for approved permit. The code applies to all dam works including constructing a new dam, repairing, modifying or removing an existing dam as authorised under a Division 3 or Division 4 permit.
4. During construction random DNRE inspections are possible.
5. The contractor keeps adequate records during construction to allow for the notice of completion report to be submitted.

Scan to review
contractor
responsibilities:



Scan to explore
the Dam Works
Code for each
permit type:





Following completion of the construction phase of the dam, the dam owner is required to submit a completed 'Notice of Completion of Dam Works'.

The dam owner is responsible for ongoing monitoring of the dam. Having a well maintained and regularly inspected dam will greatly reduce the chance of a dam failure or incident.

Scan to review
dam safety
responsibilities
factsheet:



SUMMARY: A process to support primary producers in navigating dam construction and water licensing applications.

- 1 Service providers are available and required to assist landholders with preparing the information required to submit dam construction permits and water licence applications. Have you engaged a suitably qualified consultant?
- 2 Have you identified a site for the dam? What is the availability of water in your catchment and sub-catchment?
[What will the dam be used for? Go to the **water licensing** process.](#)
- 3 Based on risk-based criteria, is the proposed dam classified as a lower risk dam or higher risk dam?
- 4 Application development. Arrange consultant to undertake site visit and compile the dam permit application and required supporting reports and documentation.
- 5 Submission of dam permit application and supplementary information to the Department of Natural Resources and Environment. Wait for approval to be granted.
- 6 Engage an earth moving contractor.
- 7 Submit a completed 'Notice of Completion of Dam Works' when the construction is completed. Dam owner to undertake ongoing monitoring.

Water licensing

1

What is a water licence?

- A water licence specifies where you are allowed to take water for a commercial purpose, which may include any river, stream, creek or in-stream dam within your property boundary that connects to other watercourses in the catchment.
- You must have a water licence to take, trap or store water from a watercourse for the use of using water for a commercial purpose such as irrigating a crop, running a fish farm, hydro power generation or using water in a feedlot.
- A water allocation specifies how much you can take, and the period through the year when the water can be used.
- A water allocation can be obtained through an application to the Minister (through DNRE), or by transferring water from another licence.
- You can hold a water licence without necessarily having a water allocation but you cannot have a water allocation without holding a water licence.

2

Do I need a water licence to collect water in a dam?



A Dam Works Permit only covers you for the construction of the dam. A Water Licence may also be required if you intend to collect water into the dam directly from a stream or pump water into the dam from another watercourse for a commercial purpose.

Special conditions may be added to a pre-existing water licence, if a new in-stream dam is constructed, based on the new dam's holding capacity. Use of an existing licence to fill or top up a non in-stream dam is permissible if it does not violate the conditions of your water licence and/or water allocation.

3

What will the dam be used for?

Stock and domestic only



Water licence is not required

Irrigation



A water licence is required, with an allocation for irrigation from an in-stream dam

4

How do I get a water licence?

Make an appointment with a consultant to discuss your proposal.

During the consultant visit, licence requirements will be determined. If required, it is good practice for a water licence application to be lodged before a dam application is progressed too far so that the proponent knows that they have a water allocation approved.

The consultant prepares the required application and supporting documents. If the water licence is approved, then the dam permit application can be further progressed.

Sections 63 and 64 of the Water Management Act provide the power to grant or refuse an application for a licence to the Minister, however this power has also been delegated to specified persons within the Primary Industries and Water Division of NRE Tas.

Scan to find a consultant to support you in the process:



Scan for more information about water licensing:



Case study

Planning new on-farm water storage?

A case study which aligns with the content of this quick guide has been developed to present an approach a farmer might take when considering constructing a new farm dam. The case study steps through the process a farmer would navigate with the support of a consultant to determine availability of water and other details relevant to applying for water licence and dam construction permits.

Scenario

A farmer contacts a consultant about the possibility of constructing a large-scale dam on their property for irrigation purposes. They advise they have a creek with a good gully that has ample water to fill a big dam. There are existing farms on neighbouring properties located on the same creek further downstream, and they advise there is a lot of water that flows down the creek in winter. They are proposing to construct a dam in the vicinity of 200ML. Where do they start?

Scan to
read the
case study:



For further information contact DNRE



Australian Government
Department of Agriculture,
Fisheries and Forestry



**Future
Drought
Fund**



TAS FARM
INNOVATION HUB

