



## Wild rivers

### Guide for self-assessable stock and domestic dams

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This guide outlines the wild river requirements for constructing self-assessable dams that capture and store overland flow water for stock and/or domestic purposes in a high preservation area or floodplain management area of a wild river area. Note that this fact sheet only summarises the requirements and does not over-ride the *Wild Rivers Act 2005*, a particular wild river declaration or the *Wild Rivers Code*. More information about wild rivers is available from: [www.nrw.qld.gov.au/wildrivers](http://www.nrw.qld.gov.au/wildrivers) or a wild river officer (phone 4039 8281 or email [wild.rivers@nrm.qld.gov.au](mailto:wild.rivers@nrm.qld.gov.au)).

#### Key terms

Water for stock purposes is limited to the volume necessary for the watering of animals of a number that would normally be depastured on the land on which the water is used. This includes consideration of any seasonal fluctuations in the carrying capacity of the land. It does not include livestock held in close concentration for a purpose other than grazing, such as in a feedlot.

Water for domestic purposes is limited to those purposes for which water is used ordinarily in or in connection with a dwelling house. It includes water used for a garden no bigger than 2,500 square metres. It does not include water used in any business, commercial or manufacturing purposes carried on in, or in connection with, a dwelling house. It does not include irrigation of produce grown for sale or exchange.

Overland flow water generally is that water flowing over land other than in a watercourse or a lake. This includes runoff that travels over land after a rainfall event, or water that has broken over the banks of a watercourse during flooding.

Self-assessable means that a development permit is not required provided the works comply with the relevant part of the *Wild Rivers Code*. If the works do not meet these requirements, they are considered to be assessable development and require a permit from the department. As well as this the works would be assessable if they are considered to be referable works under the Water Act (e.g. over 8m high and storing more than 500 ML).

#### Steps to follow:

1. Check that dams that capture and store overland flow water for stock or domestic purposes are listed in the wild river declaration as self-assessable development. If they are not, then this process cannot be used and an application for a development permit must be submitted before any works begin.
2. Calculate the water demand for the dam. Use the Stock and domestic water requirements worksheet form to estimate the total volume of water needed to be stored to meet your needs. This form includes an allowance for evaporation and seepage.
3. Design and locate the dam so that:
  - it is not larger than the volume determined in step 2;
  - it is not located in a major flood channel, such as a flood runner;
  - it is setback at least 200m from the outer banks of any watercourse or lake in a high preservation area or from any nominated waterway (this is to preserve the riparian and wildlife corridors along those streams and lakes);
  - any levee or bank used to divert water into the dam is not longer than 200m;
  - any drain or trench used to divert water into the dam is shallower than 30cm on average below the original ground level;
  - it does not impound water on a neighbour's property; and
  - the bywash returns water to the original flow path before it reaches the property boundary.
4. Notify the department (on the appropriate form) of the works when the dam is completed.

Copies of the notification form and Stock and domestic water requirements worksheet can be found in the Wild Rivers Code and on the NRW website: [http://www.nrw.qld.gov.au/wildrivers/code\\_of\\_assessm ent.html](http://www.nrw.qld.gov.au/wildrivers/code_of_assessm ent.html).

*Note: Outside a floodplain management area or a high preservation area there are no wild river requirements but there may be requirements under the Water Act.*

**Stock and domestic water requirements worksheet worked example:**

Below is the worksheet used to estimate the annual water requirements for stock and/or domestic purposes. In the worked example the grazier has 800 head of cattle and 20 sheep. The net annual stock water requirement comes to 16080 cubic metres (m<sup>3</sup>) (A). There is only one household so the net domestic water requirements comes to 2500 m<sup>3</sup> (B), giving a

total stock and domestic water requirement of 18580m<sup>3</sup> (C). If the evaporation factor is 3 then by multiplying the total water requirement of 18580 by 3 and dividing by 1000, it gives a required storage capacity of 55.74 megalitres or 55 740 cubic metres.

The average annual consumption factors and evaporation factors are allowed for in the worksheet.

**TABLE 1 – Stock and domestic requirements**

<b>STOCK</b>	Average annual consumption (m <sup>3</sup> /head)		Stock numbers	=	Sub-total (m <sup>3</sup> )	
Cattle and horses	20	x	800	=	16 000	} +
Sheep and goats	4	x	20	=	80	
Net annual stock water requirements			<b>A</b>		16 080	=
<b>DOMESTIC</b>	Average annual consumption (m <sup>3</sup> /household)		No. of households	=	Sub-total (m <sup>3</sup> )	
Household & garden	2500	x	1	=	2 500	
Net annual domestic water requirements			<b>B</b>		2 500	
<b>TOTAL Net annual water requirements (A+B)</b> (m <sup>3</sup> = cubic metre = 1000 litres = 1 kilolitre)			<b>C</b>		18 580	

**TABLE 2 – Evaporation and storage factors**

Local average annual rainfall	Evaporation and storage factor (D)
More than 600mm/annum (2 years of storage required)	3
Less than 600mm/annum (3 years of storage required)	5

**TABLE 3 – Calculation of maximum capacity allowed without planning approval**

Net annual water requirements from Table 1	<b>C</b>	18 580
Evaporation and storage factor from Table 2	<b>D</b>	3
<b>Required storage capacity = CxD /1000</b>		55.74 ML

For further information, contact your local NRW office.