

# Where can they be built without a licence?

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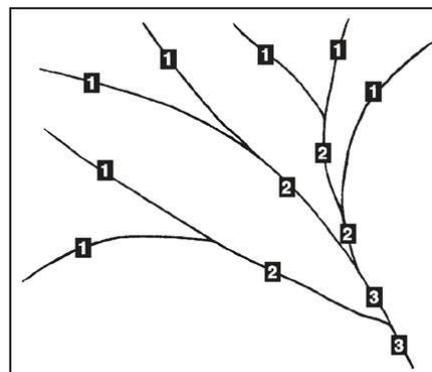
October 2017

Dams that are part of the harvestable right of your property can be located on minor stream. For more information on harvestable rights see *Dams in NSW – Do you need a licence?*

## What is a minor stream?

Minor streams are defined by the Harvestable Rights Order, *Water Management (General) Regulations 2011* and the Strahler stream ordering method (Figure 1) as any stream or part of a stream that is a first-order or second-order stream or part thereof, that does not permanently flow and that does not at any time carry flows from a third, fourth or higher order stream. The Strahler system is explained as follows.

- Starting at the top of a catchment, any watercourse that has no other watercourses flowing into it is classed as a first-order stream (1).
- Where two first-order streams join, the stream becomes a second-order stream (2).
- If a second-order stream is joined by a first-order watercourse – it remains a second-order stream.
- When two or more second-order streams join they form a third-order stream (3).
- A third-order stream does not become a fourth-order stream until it is joined by another third-order stream and so on.



## How do I work out the stream order of a river on my property?

The harvestable rights stream order can only be determined from a topographic map that has been defined under the harvestable rights order and General Regulations. Streams are shown on topographic maps as broken or continuous blue lines and are deemed to be continuous even if they lose definition and then reappear. Contact WaterNSW to determine which map to use.

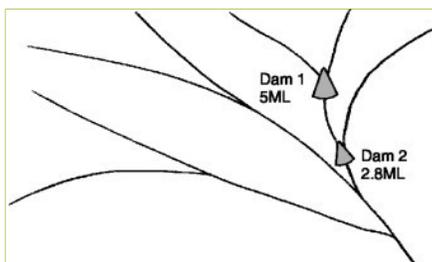
- Topographic maps show watercourses, contours, towns, roads, portion boundaries and other information and are generally available throughout New South Wales at news agencies, tourist information centres and other stores.

**Example:** Geoff owns a 60 hectare property near Kangaroo Valley NSW. Geoff would like to build two dams using his harvestable right. The following examples show the size and location of Geoff's proposed dams.

**Step 1:** Geoff needs to calculate his Maximum Harvestable Rights Dam Capacity (MHRDC). For information on the MHRDC, go to the calculator provided at: [www.waternsw.com.au](http://www.waternsw.com.au) Basic water rights > Harvesting runoff. (Note that a harvestable rights dam can only be constructed where the Harvestable Rights Orders apply. More information on requirements for a harvestable rights dam is provided with the calculator.)

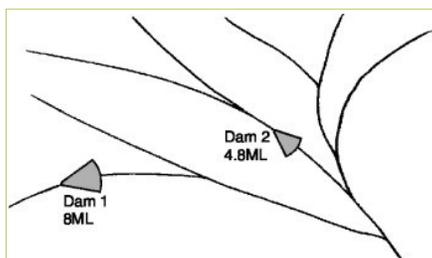
Using the calculator, Geoff works out he can build dams with a combined volume of up to 7.8 ML, using his harvestable right on his property.

**Step 2:** Geoff needs to work out where to construct his harvestable rights dams on his property. He has a few alternatives to assess.

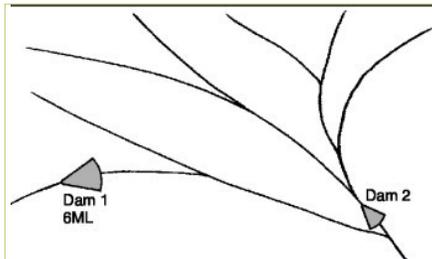


Dams 1 and 2 would be located on second-order streams.

The total dam capacity of dams 1 and 2 would be 7.8 ML, which is equivalent to the MHRDC for the property.



Dam 1 would be located on a first-order stream, BUT would be 8 ML i.e. bigger than the permissible MHRDC of 7.8 ML so it is not allowed under the harvestable rights provisions.



Dam 2 would be located on a second-order stream and would be 4.8 ML. It is permissible since it would be less than the MHRDC of 7.8 ML.

Geoff could build both dams 1 and 2 if the combined volume was 7.8 ML e.g. Dam 1 could be reduced to 3 ML.

Dam 1 would be located on a first-order stream and would be 6 ML, which is less than the MHRDC of 7.8 ML.

Dam 2 would be located on a third-order river. Harvestable rights do not apply here. If Geoff wishes to build a dam at this location, he must obtain approval from WaterNSW before commencing construction. Geoff would also need to hold a water access licence for this dam.

## More information

Phone: 1300 662 077

Email: [Customer.Helpdesk@waternsw.com.au](mailto:Customer.Helpdesk@waternsw.com.au)

[www.waternsw.com.au](http://www.waternsw.com.au) for information about water licencing and compliance.

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Disclaimer: The information contained in this publication is based on knowledge and understanding at the time of writing (October 2017). However users are reminded of the need to ensure that the information upon which they rely on is up to date and to check currency with WaterNSW or with the user's independent adviser.

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