

Review into water harvesting rights in coastal-draining catchments

This fact sheet summarises modelling and studies completed as part of a review into coastal harvestable rights and details how you can help us gather further important information.

The NSW Government through the Department of Planning, Industry and Environment is undertaking a review of harvestable rights for all coastal-draining catchments. We are reviewing a proposal to increase the volume of water landholders in coastal draining catchments can capture in farm dams as a basic right, without the need for a licence or approval.

The review is exploring the potential benefits and impacts of increasing the harvestable rights percentage, as well as allowing harvestable rights dams on third-order streams.

We are assessing how increasing the current limits on harvestable rights might change the:

- availability of water for downstream water users
- water trading market
- availability of water for the environment.

The work and studies we have done so far have focussed on:

- hydrological modelling
- water trading activity
- water pricing and charges
- the importance of different types of flows for the environment
- key industries along the coast that might benefit or be impacted by increased harvestable right limits.

Comprehensive modelling

The department engaged an independent consultant to undertake hydrological modelling of different harvestable rights scenarios in ten case study catchments. We wanted to predict how river flows might change at the end of those catchments. The scenarios modelled included:

- 4 percentages of average annual regional rainfall run-off captured in farm dams
- 2 location limits where harvestable rights dams can be built (on which stream order)
- 5 levels of harvestable rights uptake, reflecting different rates of harvestable rights dams being built across a catchment.

Table 1. Modelling scenario combinations

Parameter	Scenarios considered
Harvestable right %	10%, 20%, 30% and 50%
Stream order	1 st and 2 nd order streams and 1 st , 2 nd and 3 rd order streams
Uptake level	Current, 25%, 50%, 75% and 100%

Results from modelling

The modelling tells us:

- the current uptake of harvestable rights by landholders within case study catchments ranges from 1% to 70% – this is the portion of the total catchment area where harvestable rights dams could be built that is already being used to capture run-off
- how much river flows change in response to different harvestable rights limits varies a lot between catchments and depends on a range of local factors
- the extent to which river flows change will be generally greater:
 - as the harvestable rights percentage increases
 - if harvestable rights dams were allowed on third-order streams
 - as the level of uptake increases
- flows important for downstream water users – including licensed water users, town water supply and other basic landholder right users – are likely to be altered and may result in more frequent and longer cease-to-pump events
- flows important for the environment, fisheries, estuaries, water quality, cultural values and practices, amenity of towns located on rivers and estuaries, and tourism dependent on healthy functioning ecosystems are likely to be altered.

Conclusions from investigations

The department conducted investigations into various aspects of water access that, when considered with the modelling results, suggest:

- the water trade market is not being used effectively by water users, partly because of tight trading rules in water sharing plans. The potential impact on the trade market cannot be quantified due to limited trade data
- if landholders handed back or sold water entitlements in response to a larger harvestable right, water prices and costs for remaining users could be affected, though it is not known to what level
- rural firefighting services would benefit if more water was stored in farm dams close to bushland
- there are valuable industries in coastal-draining catchments that could benefit from, or be impacted by, the ability to store more water in harvestable rights dams.

Gathering further information

The modelling completed to date as part of this review does not tell us:

- how many people would take up a larger harvestable right if it was available, which strongly influences the extent to which flows would change
- how flows might change at different points within the catchment, including in tableland and hinterland areas (in other words, it only models end-of-system flow changes)
- how specific ecosystems or environmental assets would respond to altered flows.

Increasing harvestable rights would affect the frequency and duration of different flow events. However, these flow changes and how they might affect downstream water users and the environment will vary by catchment.

We need further information from landholders and water users about how they would respond if harvestable rights limits increased. This will help us to understand:

- the likelihood of flow changes
- how water trade, pricing and costs may be affected
- the catchments where landholders seek more access to water.

Other ways to improve water access

Increasing harvestable rights is just one option for increasing access to water. The department is considering a range of ways to improve access and support agricultural production in coastal-draining catchments. Opportunities for change include:

- regional water strategies – these aim to improve the resilience of NSW water resources and water users to changes in water availability. The strategies are considering current and future water needs in each region, taking account of the latest information on climate variability
- coastal unregulated water sharing plan remakes – the process of remaking water sharing plans presents an opportunity to review how water is shared such as extraction limits and trade rules. The process happens every 10 years and is supported by risk and other assessments for each water sharing plan area.

Public consultation

The department would like further information from all interested stakeholders before making recommendations to government.

We have prepared a discussion paper and supporting documents to provide you with an opportunity to review the information gathered so far and to fill information gaps. Your feedback will help inform the recommendations to government. You can view these documents on the Department's website at dpie.nsw.gov.au/coastal-harvestable-rights-review.

Specifically, we want to know:

- how you think an increase in harvestable rights would affect you, other water users and the environment
- if you are a landholder, would you take up an increased harvestable right
- how water users might respond to an increased harvestable right – for example, would there be more trading of licences and entitlements and changes to farming operations
- your thoughts on other options to improve water access.

This paper and appendices have been published ahead of consultation to provide interested parties time to review them prior.

The public consultation and submission period of the Coastal Harvestable Rights Review will commence in early 2021. Additional supporting information, and details about the consultation process, including specific dates and how you can provide your feedback will be provided on the Department's website before consultation commences at dpie.nsw.gov.au/coastal-harvestable-rights-review.

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