

Actual and Reasonable Water Allocations under TANK¹ Plan Change

February 2024

The rules in the TANK Plan Change (Rules 8 & 9) require that water is allocated on an actual and reasonable² (A&R) basis, however, there are four reasons/cases when different volumes could be granted. A volume that differs from the A&R volume calculated by HBRC can be granted as a result of the following being taken into account:

- The completeness of the water permit and water meter data record;
- The climate record for the same period and whether that resulted in water use restrictions or bans being imposed;
- Effects of water sharing arrangements;
- Crop rotation/development phases.

Based on examples shared with us so far, it seems that most growers are likely to either have incomplete or inaccurate water meter data; or have undertaken development or crop rotation that means that your water use up until 2 May 2020 does not now accurately reflect your water needs. Below is a bit more information about these reasons to help you decide whether they could help you argue for more water than the A&R volume calculated by the HBRC.

Development phases

We have heard of many instances where older orchards have been redeveloped. Before redevelopment those orchards had been infrequently irrigated, or not irrigated at all. Redevelopment has seen old trees replaced with new, shallower rooting stocks at higher densities. In many cases drip/micro sprinkler irrigation has been installed so water use will be more efficient. In some cases further redevelopment is planned – either whole blocks, or additional plantings within blocks that have been partially redeveloped. Water meter records may show that more water has been taken since May 2020 than during the preceding ten years, however given the three consecutive wet seasons since 2020 there may not be any water meter data available reflecting the irrigation needs of the redeveloped orchard.

Crop rotation

At the simplest level crop rotation means that the crop you are now growing requires more water than your previous crop. However, for annual vegetable crops in particular there can be additional complexities. We understand that in very dry years, 2nd and/or 3rd crops may not have been planted due to concerns about getting them established - this means that in a drought year your water use may have actually been lower than in a wetter year because you didn't plant a second crop. You may have also grown crops with a lower water demand

¹ TANK = Tutaekuri, Ahuriri, Ngaruroro and Karamu Catchments.

² Actual and Reasonable cannot be more than the quantity specified on the expiring consent, or any lesser amount applied for; and is the smallest number of either: 1) the maximum recorded annual water use between May 2010 and May 2020 (if accurate water meter data is available); or 2) for irrigation takes, the quantity specified by the IRRICALC, where the irrigated area is i) no more than that specified in the expiring consent, or any smaller area applied for, and within the Heretaunga Plains Groundwater Quantity area, no bigger than the area irrigated between May 2010 and May 2020. For the full definition please refer to the HBRC website.

such as peas since you installed a water meter in 2018, but you now grow beans which require more water, or your full rotation now includes more higher water demand crops. Some people may also have changed from annual cropping to a permanent crop which has increased their water demand.

Incomplete/inaccurate water meter data

Both of the circumstances outlined above basically mean that the water meter data HBRC used for their A&R calculation doesn't accurately reflect the irrigation requirements of your current growing operation. Some additional things to consider which may also mean that your water meter data between May 2010 and 2020 isn't that helpful:

- When was your water meter installed? If it wasn't until later in the 2010-2020 period, then you may have only a couple of years of data, and that might be patchy due to technical issues with installation, data transmission etc.
- Is your pump/meter fixed or mobile? Mobile meters can be knocked around during transport potentially impacting accuracy.
- Have you looked at your water meter data - does it look 'normal'? AgFirst have identified issues with some water meter records where use has been underreported. It may pay to check your record.
- Soil conditions at your property meant that irrigation was not necessary.
- Your water meter data since May 2020 shows that you have taken more water (than during the 2010-2020 period).
- Labour shortages prevented irrigation equipment being shifted - again reducing volumes of water taken - not because your crop didn't require it, but because you had no means of getting it applied.

What about a voluntary reduction?

Some growers have indicated that they could continue to grow with a smaller annual volume, but that volume is bigger than the A&R figure HBRC have calculated. A reduction in the overall allocation is needed, so if you believe you could reduce your annual volume from what you have had, this is an argument worth trying. You would need to explain why you need the annual volume you are proposing.

Where to now?

If you clearly fit into one of the exception categories, you could go back to HBRC outlining the alternative volume you want. We understand that you would need to provide evidence to HBRC to support any alternative volume. Evidence could be photos of your redeveloped orchard, or a copy of your crop rotation schedule for example. If you don't clearly fit into any of the exception categories, have a think about whether you could continue to grow with a reduced allocation. If it all still seems very confusing, please reach out.

WHERE TO GO FOR MORE INFORMATION

- HortNZ: Charlotte Drury 027 3225595 or via email on Charlotte.Drury@hortnz.co.nz or charlotte@viewconsult.co.nz
- Hawke's Bay Regional Council: On the website at [Heretaunga Plains Groundwater Quantity Area | Hawke's Bay Regional Council \(hrc.govt.nz\)](https://www.hrc.govt.nz/Heretaunga-Plains-Groundwater-Quantity-Area), or via email to waterpermits@hrc.govt.nz (quote your application number)