

Hunter Water CLG Meeting – 12 May 2020

Questions

Please Note: Questions below have been formulated by Healthy Hunter Rivers group – formerly No Tillegra Dam Group; Save Chichester Valley group; and Save the Williams River Coalition. These organisations point out that HWC continues to ignore community preferences from two consultations in relation to water planning for the Lower Hunter.

Question 1: I refer to HWC's response to my Question 2, 3 March CCAG Meeting, 2020: *'Whilst a number of dam options were investigated in the 2014 LHWP, no dam options were progressed given the focus of the 2014 LHWP was on drought preparedness'*. P10, Building the Lower Hunter Water Plan – a discussion paper (see attached), clearly demonstrates that dam options were removed during the screening phase of options and only heightening the wall at Lostock was ever considered. Comment?

Hunter Water response:
The 2014 LHWP focused on drought preparedness.

Consistent with best-practice principles, and the adopted COAG National Urban Water Planning Principles, the review of the Lower Hunter Water Security Plan is considering all supply and demand options for our region. To ensure that the decision making process, and the final recommendation to Government is robust, it is important that all options are investigated.

Question 2: In HWC's LHWP Review Document, 2020, (cover sheet), HWC divides options into two categories:

'Option we're looking at to decrease reliance on drinking water (water conservation programs and ways to reduce water losses in our network; stormwater harvesting; recycled water) and Options to supplement our existing water supplies (dams, desal, groundwater, water sharing)'

Community preferences through both consultation processes have demonstrated recycling and stormwater harvesting to be potential supply options and recycling particularly is being used as a supply option both overseas and in Australia. Why, then, is HWC dismissing recycling as a supply option in all of its current information?

Hunter Water response:

Hunter Water is considering options to increase the supply of drinking water, and reduce the demand on drinking water.

At this stage, recycled water and stormwater have been assessed as demand side options, as the implementation of new schemes primarily acts to reduce demand on drinking water, and therefore freeing existing supplies.

We accept your point, and appreciate that the distinction is nuanced. Fundamentally however, this does not impact the investigations Hunter Water is currently undertaking. Hunter Water is considering both supply and demand side options as part of both option and portfolio development for the Lower Hunter Water Security Plan review, and is exploring opportunities to increase recycling and stormwater harvesting.

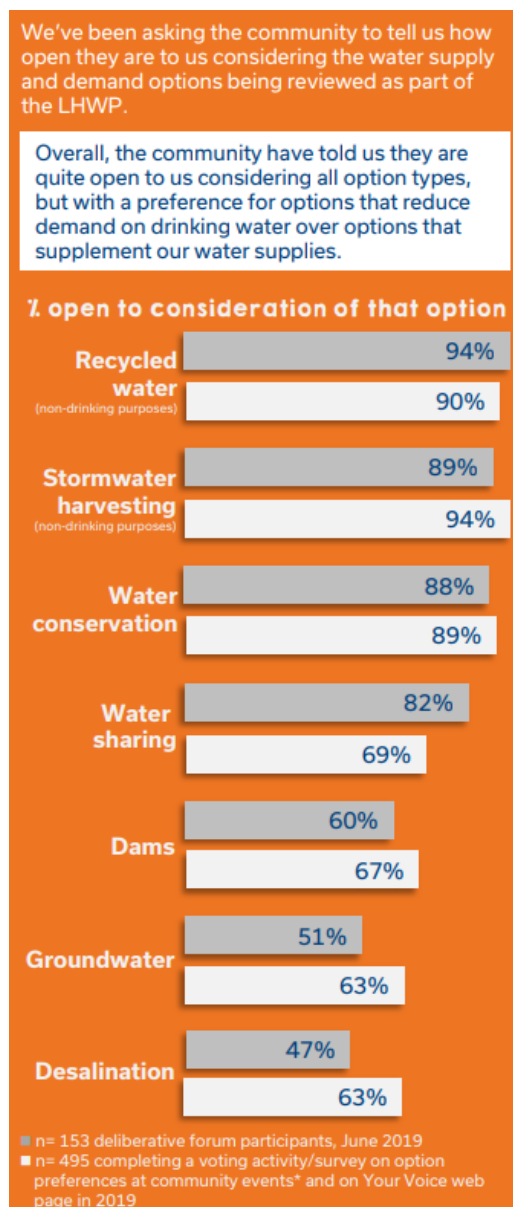
Question 3: In Question 1 responses of my 3 March CCAG questions, HWC states: *'The majority of participants at the Phase II forums were open to Hunter Water considering all option types. Openness to consideration of each option type was as follows: recycled water*

(94%), stormwater harvesting (89%), water conservation (88%), water sharing (82%) and dams (60%). Community openness to groundwater (51%) and desalination (47%) was lower in comparison, driven by concerns about the relative perceived environmental impact of these options.’ It is disingenuous to group dams with the higher community preferences of recycling, stormwater harvesting, water conservation and water sharing. Dams should have been relegated to lower preferences, as has always been the case. Comment?

Hunter Water response:

Hunter Water has transparently shared the results of the Deliberative Forums and other engagement exercises. The full results are available from the Your Voice website here: <https://yourvoice.hunterwater.com.au/water-future>

The summary is accurate. 60% of respondents at the Deliberative Forums and 67% in broader community events did indicate an openness to dams as an option. Hunter Water has transparently shared this information:



Extract from the 2019 Community Engagement Summary (available online [here](#)).

Question 4: The 2014 LHWP removed 'new dam options at numerous locations' (see attached) during the investigation and screening phase. Any new dam options were not included in the final plan (see also attached document). Will HWC please provide the assessment/analysis it has used to now add two new dam options to the revision of the 2014 plan?

Hunter Water response:

Hunter Water is still in the investigative phases of the Lower Hunter Water Security Plan review. Dams remain an option for investigation, alongside other supply and demand option types. At this stage in the investigations, all options are on the table, and are being transparently considered.

Question 5: Has HWC included all costings for its potential Chichester and Limeburner's Creek Dam options in its IPART costings? Why/why not?

Hunter Water response:

Hunter Water has not included any new source augmentation infrastructure in its IPART pricing proposal. These options remain conceptual, and no detailed design or detailed costing work has been undertaken. The outcomes of the review of the Lower Hunter Water Security Plan will inform Hunter Water's next pricing period.

Question 6: In relation to stormwater capture (2014 LHWP), what amount has been spent by HWC on investigating and installing rainwater tanks?

Hunter Water response:

Recent work has identified that 20 per cent of homes in our region have a rainwater tank, however, unfortunately, up to 1/3 don't work efficiently. As a pilot program in July 2019, Hunter Water offered a [Rainwater Tank Tune Up](#). Building on lessons learned in the pilot, the program has now formed part of Hunter Water's [Leak Repair Assistance](#) program. Owners can seek up to \$500 from Hunter Water as a repair for repairs to leaking rainwater tanks.

Additionally, Hunter Water has completed actions associated with Rainwater Tanks from the 2014 Lower Hunter Water Plan. This is summarised in the various MERI reports. You may be interested in the outcomes of the rainwater tank study:

Hunter Water and Hunter Research Foundation carried out a study of rainwater tank functionality in 191 properties in Cameron Park and Fletcher. The purpose of the study was to gather information about current and potential future failure rates of rainwater tanks. Qualified plumbers provided a free rainwater tank check at each property and participating households gave a brief interview, followed by completing a post audit online survey.

The data indicated an overall failure rate of 18% of tanks, based on the following conditions:

- tank not watertight
- gutter to tank plumbing not operational
- switching device not operating
- pump not operational (whether switched on or off).

The failure rate increased to 34% when the definition was broadened to include systems in which the switching device and/or pump had been replaced, indicating a previous failure.

The most common source of failure was the pump, followed by the switching device. Half of households with a failed system thought it was working. Almost one-quarter (23%) of tanks were found to be under-performing, with the majority of these having only one defect. Age of the tank was significantly associated with under-performance, particularly for tanks installed prior to 2011.

The great majority of householders (91%) indicated that the sole reason for installing the tank was to meet BASIX requirements, with environmental considerations a secondary reason for about one in 20 consumers. Most householders had a positive attitude to the rainwater tank, because of its benefits to the environment.

The data overall indicated a low level of consumer knowledge and awareness of the operation and maintenance requirements of their rainwater tank system. This, and associated failures, are likely to become an issue as the stock of rainwater tanks increases to meet BASIX requirements.

This information is informing the development of the Lower Hunter Water Security Plan.

Hunter Water has continues community education on rainwater tanks, including as part of the Love Water campaign.

Question 7: What assessment, independent or otherwise, has been made on the 2014 LHWP? What were the conclusions of this/these, and can our community groups have a copy?

Hunter Water response:

Annual Monitoring, Evaluation, Reporting and Improvement (MERI) Reports on the Lower Hunter Water Plan are submitted to the Independent Water Advisory Panel for review.

These reports are available publicly from Hunter Water's website:

<https://www.hunterwater.com.au/our-water/water-supply/water-in-the-lower-hunter/lower-hunter-water-plan>

On what basis have dams been reintroduced to any revised plan?

Hunter Water response:

Consistent with best-practice principles, and the adopted COAG National Urban Water Planning Principles, the review of the Lower Hunter Water Security Plan is considering all supply and demand options for our region. To ensure that the decision making process, and the final recommendation to Government is robust, it is important that all options are investigated.

Hunter Water developed a gap analysis at the start of the review covering all option types. For dams, the gap analysis told us:

- viable new dam options are more likely to be offriver storages, or expansions of existing dam schemes, rather than new on-river dams
- it is important to demonstrate that a storage option is the 'best site' available.

Hunter Water engaged the CSIRO to identify potential surface water options for further investigation using their DamSite spatial mapping program to provide automation and objectivity to the analysis. The program identified thousands of potential dam sites and produced key characteristics of these sites, such as dam wall size, reservoir volume and surface area.

Hunter Water used this initial data to develop a list of sites which were most effective in terms of the dam wall size and reservoir volume. These areas were screened based on land use (including environmental and social impacts) and critical infrastructure, and then again based on the reservoir shape. Reservoir shape is an important measure of how much water is lost to evaporation, and also how much land is inundated to achieve a certain storage volume.

Each site was then assessed for how it would operate, including how the dam would fill and how it would supply water. From this process, a shortlist of potential sites was developed. The shortlist included on-river and off-river storages, however we did not consider on-river storages that would create a new barrier to flows within unregulated (nondammed) rivers. Only dams immediately upstream or downstream of existing dams were included.

Hunter Water then conducted a desktop investigation to understand the feasibility and potential costs/impacts and benefits of the shortlisted sites. Geology as well as potential environmental and social impacts were also investigated in this way.

This process identified two potential sites for further investigation: Limeburners Creek (east of Clarence Town) and Upper Chichester (upstream of the existing Chichester Dam).

Question 8: How will HWC be updating the Balickera pumping station so that it is able to pump at full capacity?

Hunter Water response:

The Balickera pumping station is able to transfer up to 1.8 billion litres per day into Grahamstown Dam. The station is able to meet this need, and an upgrade of the station is not required.

Actual transfers during individual rainfall events vary due to environmental licence conditions, stream flow, and water quality in the Seaham Weir Pool.

Hunter Water has transferred significant volumes of water into the Dam during recent rainfall

Over the nine weeks from the end of February to the end of April 2020, approximately 31 billion of water has been transferred to Grahamstown Dam through Balickera pumping station, equating to a 17% increase in Grahamstown Dam storage.

Questions from Save Chichester Valley Group

Question 9: Does Hunter Water believe that to supply water to the homes in our region its necessary to destroy the homes and communities in beautiful places like Chichester?

Hunter Water response:

The LHWSP is considering a range of supply and demand options to ensure that the Lower Hunter has a sustainable and resilient water system into the future. Options under consideration include desalination, recycled water, stormwater harvesting, dams, groundwater, inter-regional water sharing as well as water conservation).

Question 10: Native Wildlife (e.g. platypus, koalas) are flourishing at Chichester through changes to land management over the past 30 years. Can a one-off environmental assessment be thoroughly able to reveal the full extent of these improvements?

Hunter Water response:

Investigations will include environmental assessments. The assessments will be undertaken by suitably qualified external experts.

Question 11: The Chichester community are striving to reconnect with the land and the natural environment and manage the land appropriately. Does Hunter Water dismiss the possibility that the Chichester community are an essential interface between the bushland and the wider community if we are to prevent another catastrophic bushfire season that we've all just experienced.

Hunter Water response:

Noted - Hunter Water appreciates community views and connections to the land.

Question 12: With Climate Change causing increased temperatures, why waste money investigating inefficient supply options when increased temperature will cause such dramatic evaporation.

Hunter Water response:

The impacts of climate variability are being considered and explored as part of the review of the Lower Hunter Water Security Plan.