

Supplementary questions

Water inquiry

1. If water was not a concern could you estimate what the potential economic output of this area would be?

This question implies that neither the cost of water, nor the access to a reliable source of water should be considered as a constraint when responding to the question.

However, we need to preface our response by highlighting a couple of peculiarities in the Peel Valley:

- The total of all General Security licences held by irrigators is around 31,000ML. However, the Peel Water Sharing Plan limits the irrigators' annual usage to 6,100ML. Therefore, irrigators currently pay fixed charges on 24,900ML of entitlement *which they can never access*.

Our response has been based on the assumption that water is not a concern, and therefore access to the full 31,000ML of entitlement is hypothetically available to Peel Valley irrigators.

- As Members of the Inquiry have seen from our written submission, and heard from our evidence at the Public Hearing in Tamworth, the proposed water usage charge in the Peel Valley was \$54.97/ML. Our view is that this charge was both excessive and inequitable compared to all other valleys in the Murray Darling Basin.

However, in the IPART Final Determination released on 13th June 2017, the usage charge has been decreased to \$18.36/ML effective from 1st July 2018. This decision will now remove our concerns about the excessive water usage charges in the Peel Valley.

- Unlike some other valleys in the Murray Darling Basin where irrigation is used to produce one principal agricultural product, irrigation in the Peel Valley is mainly used for two agricultural pursuits – lucerne hay production and dairying – but, along with those two major uses for irrigation water, there is a multiplicity of other uses.

These include:

- Irrigating corn crops – for either grain production or silage production for either dairy or beef cattle. These products are sometimes used on-farm and sometimes sold to other producers – both locally and outside the local area
- Irrigating cereal crops (such as oats, winter wheat, triticale, etc) – for grain production, hay production, or silage production. These products are sometimes used on-farm and sometimes sold to other producers – both locally and outside the local area. These crops are also sometimes used for raising fat lambs, or green feed for fattening steers or feeding dairy cattle
- Irrigating summer crops (such as forage sorghum, millet, etc) - for silage production as well as hay production. These products are sometimes used on-farm and sometimes sold to other producers – both locally and outside the local area. These crops are also sometimes used for raising fat lambs, or green feed for fattening steers or feeding dairy cattle
- Irrigating lucerne for silage production as well as hay production. These products are sometimes used on-farm and sometimes sold to other producers – both locally and outside the local area. In some instances hay is value-added into chaff, which is either used within the local area and outside the local area. In some cases lucerne paddocks can be used for raising fat lambs during the winter months, and under controlled grazing conditions either beef cattle or dairy cattle can also be grazed on lucerne paddocks.
- Some High Security irrigation licences are used for various stages of the poultry industry, and also permanent plantings.

Given the number of individual uses of irrigation water in the Peel Valley, and the fact that any one producer may adopt several different options in the one year – differently from the previous year – it is a complex task to accurately calculate the potential economic output of the entire Peel Valley.

We have taken the view that Members of the Inquiry are seeking an overall opinion on the total value of production that is foregone due to the constraints on water, rather than a precise figure.

Therefore, for the purpose of simplifying the calculations, we have assumed that all irrigation water in the Peel Valley is used for the production of irrigated lucerne hay. Clearly, that is not the case in practice. However, the end result is an indicative value of the total potential economic output from irrigation in the Peel Valley, and also an indicative value of the potential economic output which is foregone annually as a direct consequence of the existing constraints on the access to irrigation water.

Potential annual production

Based on the usage of the full 31,500ML of entitlement, at the DPI figure for water usage on lucerne of 2.6ML/HA = 12,115HA of irrigated lucerne, at 300 bales/acre = 9 million bales @ \$10/bale = \$90 million

Recent annual production

Average actual annual water usage over last 10 years – (6,548 4,881 10,939 3,484 3,701 10,366 12,018 2,044 5,257 2,646ML) = 6,188ML, at the DPI figure for water usage on lucerne of 2.6ML/HA = 2,380 HA of irrigated lucerne at 300 bales/acre = 1.8 million bales @ \$10/bale = \$18 million

Production foregone

As a direct consequence of a reduction in the area irrigated due to either the excessive water usage charges, or the restricted access to less than full entitlement = \$72 million annually

In summary, the figure of \$72 million annually in foregone production appears to be reasonably correct, on the basis that Peel Valley irrigators are restricted to 20% of their full entitlement (namely 6,100ML out of the full entitlement of 31,000ML). If the total potential production is \$90 million annually from irrigated agriculture, then 20% of that figure is \$18 million, and the production foregone annually is \$72 million.