LTDLE factors and water recovered by efficiency measures

There were many similar themes and commonly asked questions during the recent call for submissions relating to amended long-term diversion limit equivalence (LTDLE) cap factors. The responses below are provided in relation to the issues raised.

What is 'up water'?

The term 'up water' is used to describe a component of the agreement between the states and the Commonwealth regarding implementation of the Basin Plan.

When the Basin Plan was established a water recovery target of 2750 gigalitres was chosen. Some jurisdictions proposed the water recovery target could be amended if the same environmental outcomes could be achieved with less water through projects that entailed additional works or rule changes. Implementing such projects would mean that a smaller volume of water than that specified in the recovery target would achieve the environmental outcomes.

In response, the sustainable diversion limit (SDL) adjustment mechanism was put in place. It allows the recovery target to be reduced by up to 650 gigalitres of 'down water'—water that reduces the 2750 gigalitre target—where projects are set up to deliver the same outcome using less water.

There was an alternative view that the 2750 gigalitre recovery target was too low, and more water needed to be recovered for the environment. This water was meant to be recovered through the use of water efficiency projects.

For these projects, the idea was that increased efficiency in water use would let water users maintain their existing level of productive output while using a smaller amount of water. As the water recovered through efficiency would increase the recovery volume, it was called 'up water'.

You can find further information on the following web pages:

theland.com.au/story/5178580/littleproud-wades-into-basin-plans-most-controversial-issue

mdba.gov.au/basin-plan-roll-out/sustainable-diversion-limits/sdlam

How will LTDLE factors be used with efficiency projects?

Each project will be assessed from first principles to determine the average annual amount of water saved as the result of new infrastructure or other measures, over a repeat sequence of the historical climate record. The long-term average amount of water saved will then be divided by the LTDLE factor to give the number of unit shares to be transferred. The volume of savings and the type of entitlement will determine the type of entitlement the project will recover.

As an example, Murray Irrigation Limited might choose to line a channel. A geotechnical study then finds that this would reduce seepage losses by 10 gigalitres per year for every year that the channel is filled.

The entitlement type is conveyance entitlement, for which the LTDLE factor is 0.918. So to have the project funded, Murray Irrigation Limited would end up transferring 10 / 0.918 = 10.89 gigalitres of conveyance entitlement to the project funder.