

Media Release

Blending produced water to irrigate crops shows promise: Gloucester soil and water unchanged

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Groundwater and surface water quality remains unchanged and soil continues to improve six months into a trial of mixing produced water with fresh water to irrigate crops at AGL's Tiedmans property at Gloucester.

Independent water experts, Parsons Brinckerhoff, concluded the blended water (produced water from deep coal seams combined with fresh water) complied with the Australian New Zealand Environmental Conservation Council (ANZECC) irrigation guidelines and was suitable for irrigation¹.

Soil and crop advisors, Fodder King, reported that the soil in the irrigation trial area showed significant improvement due to the work done to prepare the ground for the winter and summer crops in 2013.

Due to drier conditions, there was a slight increase in salinity within the upper soil layers, however, Fodder King found no indication of adverse effects from the irrigation of blended water.

The Tiedmans Irrigation Trial at Gloucester started in April 2013. The first crop (triticale) irrigated with the blended water was harvested and sold to local farmers in November last year when local conditions were dry and supplementary feed was needed.

"This data shows that blending water from coal seams with fresh water for irrigation can be done effectively. The results are clear – surface water quality remains unchanged and the soil is improving," said AGL's Hydrogeology Manager John Ross.

"AGL will continue to monitor the soil closely as there has been substantial rain since the start of the year and salt is expected to move lower into the soil and weathered rock.

"A summer crop of forage sorghum did very well under irrigation last summer following from the success of the triticale in winter 2013.

"While the process of evaluating the success of the trial is still at an early stage, these results show positive signs for the water, crop and soil."

A separate report by Parsons Brinckerhoff using the latest water dating technology found that the salty water in the Gloucester Basin's deep coal seams is in excess of 300,000 years old.

"That means this water was recharged from rainfall well before the first indigenous people arrived in Australia," Mr Ross said.

"Groundwater moves incredibly slowly, and in this case, probably less than a centimetre per year. Given the location of the wells that were sampled, we suspect the water flows from east to west towards the centre of the Gloucester Basin."

The latest irrigation trial results have been published on the AGL website and given to the Gloucester Community Consultative Committee.

¹ Sampling between 1 July and 31 December 2013.



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About AGL

AGL is one of Australia's leading integrated renewable energy companies and is taking action toward creating a sustainable energy future for our investors, communities and customers. Drawing on over 175 years of experience, AGL operates retail and merchant energy businesses, power generation assets and an upstream gas portfolio. AGL has one of Australia's largest retail energy and dual fuel customer bases. AGL has a diverse power generation portfolio including base, peaking and intermediate generation plants, spread across traditional thermal generation as well as renewable sources including hydro, wind, landfill gas and biomass. AGL is Australia's largest private owner and operator of renewable energy assets and is looking to further expand this position by exploring a suite of low emission and renewable energy generation development opportunities.
