Dear Senator Xenpohon,

in the recent climate policy inquiry hearings you asked a question on notice related to the impact of forestry on water flows and availability, I would like to provide a comment in response. There have been some studies into the impact of reforestation on catchment water flows - most notably through the former CRC for catchment hydrology. Reports from this CRC would be available somewhere.

Also thought I would like to highlight the issue of confused Government policy in relation to water and climate/ ETS. Our formal submission to the inquiry discusses this point also, but the national water initiative seek to improve water use and delivery efficiency, in part through changing the water delivery technology away from gravity based flood irrigation methods to higher technology and greater precision delivery systems. In variably though increased delivery technology requires a higher energy input. Gravity flood systems have a very low energy requirement and therefore low carbon footprint. Drip and spray irrigation systems firstly have a high footprint in their embedded energy for the manufacture and installation of the pipes and pumps and then a further lifetime requirement for electricity or diesel to operate.

Thus we need to ensure that the tension between higher water use efficiency and the ETS are not in conflict and in particular that farmers are not discouraged from increased water use efficiency through the imposition of the ETS which will increase the costs of the higher energy systems making them less viable. Ideally the solution is to ensure to encourage systems that rely on solar or hydro power or other green sources of energy and these need to be encouraged. If they are not available then some "shielding" or other support will be necessary to ensure continued adoption of these improved irrigation systems.

Regards Bryan Clark