Committee Secretary Senate Murray Darling Basin inquiry

Dear Sir

Since our November 2010 submission to Sen Heffernan, we visited the Central Arizona Project in USA to obtain more back up detail on our plans for a North to South water transfer project to supplement water needs of the Murray Darling Basin. The Arizona canal has many design features that can be introduced to our earlier described option of linking a canal between the Burdekin Falls dam and Charleville to the Warrego River to move water south towards the Darling and then to the Murray at Wentworth . (See attached, canal and river route options3.jpg). As you can see from cost factors at bottom of schematic this option would work out at about one third the cost of delivering water down the same route by main canal. Where water is to be stored and delivered is also approximately outlined in the above schematic, further details of inputs, outputs, challenges etc are outlined in abc water overview 24ver3.doc

The 600km lined Arizona canal, delivers seasonal water from the Colorado river to agriculture and cities in a very hot climate with less than 2% annual water loss. A combination of low interest construction and operations finance over 50 yrs from the Federal administered USBR have enabled the Arizona canal to supply economic water to agriculture and cities for 25 years. Since the canal was introduced the population has doubled to 7 million illustrating the importance of water in generating major growth. Much of the Arizona canal flows through flat and flood prone land, and their developed expertise in the design of dams, levees , aqueducts, cross flow, over-chutes etc, would be very useful to pass on to Australian engineers and industry groups showing interest in our project. We have already passed on our plans to the Queensland Flood Commission of Enquiry. We believe a more even year round flow of water to the Wivenhoe dam near Brisbane could allow dam levels to be maintained at lower levels when peak rains threaten Brisbane. Also Arizona developed expertise in re- direction of flash flooding to areas of safety could be valuable in solving Lockyer and Toowoomba Valley flooding issues.

World food prices have recently reached all time high levels, and are expected to gradually increase as global population growth increases food demand. This is all happening when reduction of carbon emissions is gathering world wide attention and it is logical to expand Australian agriculture on carbon farming principles to improve ground cover to biosequestrate soil carbon, and enable wide scale production of bio-fuels. This, when combined with using northern water to replace the need for future desalination in 4 states will lead to tangible reduction of atmospheric CO2 while generating healthy returns for investors.

With the Murray Darling Basin planning to purchase approx \$7.5 Bn of water buybacks, now is the time to consider our \$3.7bn approach to developing water infrastructure that will help meet the demands of future boom markets, ie "food and carbon reduction issues". When water is sold at prices indicated in item 2c of overview, it is possible for a Federal public private partnership to gain 20% annual returns on capital, \$30Bn of multiplier benefits, plus a 7% reduction of carbon emissions. Additionally, our plans are built around introducing risk management strategies that will reduce losses of human and/or physical capital.

As can be seen from schematic the main and subsidiary canal option, supplies water to a large range of existing farm regions and should be expanded over time. The lower cost Warrego option moving water to Wentworth runs through excellent agricultural land that has not yet

been as widely developed until stream-flow gets close to the Murray. If approved, this option will make a valuable low cost, quick start in proving the viability of N- S water transfer projects while enabling the introduction of new water to improve MDB environment

We look forward to presenting our approach in person, to personnel involved in the development of economic water infrastructure for Australia's future.

Terry Bowring Director T Bowring and Associates Pty Ltd,