

ATTACHMENT 3

Submission to Northern Australia Land and Water Taskforce (16-09-09)
Office of Northern Australia
GPO box 592 Canberra ACT 260,
Attention: Barbara Wheeler, (Secretariat)

I believe the taskforce efforts to look at opportunities for new sustainable economic development based on water is one of the most important initiatives government is involved with. As you are aware from email data T Bowring and Associates Pty Ltd have been looking at a project referred to as a “Multi State Water Transfer Project” which largely addresses the many issues the northern taskforce is addressing. This project broadly describes opportunities to move northern water to areas of need in the northern and southern regions of S/E Australia. As climate drying impacts on Australia recent CSIRO modeling of rainfall projections across the country indicate reductions in normal rainfall patterns are expected first in the south and lastly in N/Qld which is expected to hang on to or slightly increase rainfall over next 100 yr.

Very few in the southern states from Canberra down will argue that climatic drying could not be having an effect on city water, inland towns, agriculture and occasional bushfires. What they are not too sure of, is how climatic drying will effect our future environment, food supplies, forms of energy, fuels we should be using, or systems available to offset various industry CO2 emissions that are causing climatic change.

In the long term can new systems involving northern water provide answers to cover our needs?, yes, we have plenty of it, but it is all in the wrong locations. Water is a national asset owned by all Australians and it should be a national priority, devoid of the vagaries of various state governments. Most people understand that future food is dependent on water , what people don't know, is that peoples of Israel have over the decades been devising solutions to better use irrigation water for food. The minister of agriculture in Israeli governments has always been appointed by the country's farming community. If they don't think he is doing a good job they put in someone else to set up programs that help and expand their agriculture and exports. Efficient water use is one of their priorities and most irrigators in our country know where to buy and how to use Israeli equipment/pipe etc to reduce crop water usage. We are not pushing Israeli industry, all we are saying is that concentrated expertise is needed to better utilize what water we have. The reason many irrigation farmers are still growing crops using high water usage technologies is that they are never sure if sufficient water will be available to pay back expensive irrigation plant. We also are not saying that government should be electing farming oriented ministers of agriculture, but when it comes to how to best manage our northern water we should consider what can be achieved with a lead from trained water resource managers.

Over many years our government recognizes that inland Australia through mining and agriculture has been carrying our economy. As climate change impacts more emphasis is being given to mining, and farming is seen as a backward industry that

is living off welfare and utilizing too much water that city residents need. Our gov't realize that our balance of payments is now being hit hard by purchase of middle east oil, and our natural gas reserves are likely to be a valuable option for internal transport as well as useful exports, until it runs out. Currently over half Australian annual CO2 emissions come from mined products, when carbon charges are introduced, mining profitability will be adversely impacted. What many do not realize is with our large land resource we can economically move bulk northern water around the country to grow crops that will generate significant carbon offsets by processing crop wastes such as straw into bio-fuels and base load power. What also is not realized is the large potential for offsets from soil carbon when crops are selectively grown on good land where annual water and fertilizers are made available annually. Phosphorous is one fertilizer element that can significantly aid soil carbon build up and fertility. With phosphorous mines about to be developed in the NT (when water needs for production is made available) we should be careful on how we use or export this vital but fast diminishing element in future agriculture.

How we profitably move water, to areas of need is the subject of our Multi State Water Transfer Project. We have costed out capital and operating costs to provide water to one simple but vital crop to meet world food demand and that is, "wheat". Our preliminary estimates are that 7500 GL of N/Qld water could produce \$21 bn of revenue and \$4.5 bn taxes from crop sales, bio-fuels energy and carbon offsets. Where do we get this water from? we access it by taking about one third of selected river flow to sea which in N/Qld and the Gulf is about 170,000 GL pa, and in the NT 83 000 GL pa into the Timor sea. How do we do this? water is stored in dams close to sea and moved into recharge aquifers (to reduce evaporation). Where can we see these operations? Take a flight to the western states of USA, they use these systems for cities and farms. Is it economic?, when our dollar is at parity with US dollar it is cheaper for super-marts to bring in frozen vegetables from US regions using these systems than to grow and process them here. We have the opportunity to expand our grain industry by \$42bn pa without hardly touching the massive volumes of water going to sea in NT and Qld. Do we have markets for this production? you bet, the GRDC predict wheat demand of 100 million TPA of grain by 2020, the NT and N/Qld can cover half that. Do we know how to produce, process and market crops to produce this output.? Yes the agronomy is well known but not well practiced, new processes are in production around the world, and future markets will start to gather impetus in the next 10 years as China & India urbanize "Ahh -but what about the environment" what happens to that in the next 100 yrs?. We cant see too much problem in taking about one third of individual river flows in terms of keeping fish & fisheries viable, in fact, we may help the Qld great barrier reef park by partially reducing silt that is polluting its tributaries. USA scientists invented environmental science and one can be sure that advice we will get on construction and operation of canals etc will strongly consider solutions to minimize installation environment impacts. We have openly stated that if we move water south at least 20% of eg a 7500 GL pa flow will be used for environmental flows, wetlands etc, or 40% if a 3750 GL canal is built. These allocations are similar to the Environment objectives of current water buybacks. These buy-backs are important but expensive.

Northern water from infrastructure will cost the tax-payer about one third of what is being spent on buy backs now. Thankfully, unlike current southern purchases reliable volumes of water from the north will not diminish from climatic drying.

What are the main factors under consideration that makes distribution of northern water more viable than previous initiatives? Briefly they are, capturing water just before it goes to sea, holding long term storage water in recharge aquifers to reduce evaporation, and moving water by canal instead of pipe to markedly reduce capital expenditure without greatly increasing water losses from evaporation and seepage..

How successful have these technologies been elsewhere.? The growth of California was built on early construction of canals that enabled population and industries to expand across their fertile land. As climate change impacts more storage of water in their aquifers is under way, and more attention being paid to reducing water usage.

What other infrastructure and national initiatives can benefit from new water?. The proposed NBN is designed to be delivered to 90% of the Australian population with the aim of enhancing growth through improved education, medicine and business. Transmission via fibre optic cable is the plan and communication specialists have recognized that fibre used to control canal water movement, could also be used as a backbone infrastructure for the NBN, particularly within inland areas. The NBN Co will be contacted in near future. They too recognize their future inland and coastal clients will need water as well as communications. After coastal cities have run out of desalinated water capacity, northern water can be delivered at 1/3rd desal prices.

Who is expressing interest in building or investing in infrastructure needed.? large groups in the cement industry have put in expressions of interest. They see water as promoting growth which can expand their industry not only in Australia but in other world regions where climatic drying could generate concrete canal business. They too are interested in carbon offsets to reduce impact of CO2 generated during cement manufacture. We expect other industries such as mining could see benefits from being involved or investing in an industry that can generate carbon offsets. Eg the steel industry have shown an interest in char made from mallee eucalypts as a substitute for coke. Sounds unlikely? ? Brazilian steel makers are already doing it!

What guarantees do we have that water will not be used inefficiently and we end up with a new set of M DB water problems such as salinity etc?. We expect corporate groups could be big users of new water. Examples of companies such as Southcorp in the Barossa valley, have told grape producers if they don't use low water usage irrigation they will not take their grapes. Most people in the agri/food sector know about the risks of inefficient water usage and we expect industry experts as well as regulators will ensure that northern ground and surface water usage will be used wisely to protect the interests of future communities environment and industries.

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