NATURAL RESOURCE SERVICES PTY LTD

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The Secretary
Senate Rural and Regional Affairs and Transport
Parliament House
Canberra ACT 2600

3 April 2007

Dear Sir/Madam,

Re: Inquiry into Additional Water Supplies for South East Queensland Traveston Crossing Dam Information

Purpose

The purpose of this letter is to provide information for the Senate Inquiry.

I am motivated to write this letter because I have very found memories of working and playing on the Mary River and want the character and environmental value of this river preserved. However, these are emotive and technically unquantifiable reasons for preserving the natural heritage of the Mary River and although they are valid reasons to oppose the development I offer the following submission.

It is understandable that the growing population in Brisbane has greater needs than the few who live and depend on the river and those who recognize the value of the Mary River ecosystem and its significant natural heritage. It may also be argued that the environmental degradation and loss of habitat for several plants and animals; some that are commercially significant and others that are unique and on the endangered species list, is regrettable.

I am writing to suggest that this significant loss of valuable habitat and environmental degradation is <u>unnecessary</u>, because there are other realistic and practical solutions to Brisbane's water needs. One alternative that should receive serious consideration is solar desalination. This consists of combining two commercially available and proven technologies; parabolic trough power plants for generating electricity and steam and a multi-effects desalination plant.

Natural Resource Services Pty Ltd is currently working on such a project at Point Patterson in South Australia for Acquasol Australia Ltd. This project passes concentrated seawater through a solar thermal power plant, the heat drives steam turbines to generate electricity and feed hot seawater into a multi effects distillation plant. The outputs are power (electricity), dematerialized water and salt which is already pre-sold. A review of this project was recently published by CSIRO Australia, www.publish.csiro.au/?act=view_file&file_id=EC134p4.pdf

I strongly recommend to this inquiry that real (read commercially viable) alternatives for generating water in an environmental and socially friendly manner are available

with existing technologies used around the world. All it takes is but to look and think more imaginatively. This is an opportunity for Queensland to be right on South Australia's heels for developing such water generating technology on an urban scale.

The advantages of solar desalination technology is that once the infrastructure is in place, the running costs would be very low compared to reverse osmosis or maintaining dams, which incidentally are still dependent on rain. The latter point seems very pertinent to this inquiry because the underlying premise for building the dam is to shore up Brisbane's need during a drought.

Other relevant advantages are that the system uses "clean" electricity and generates salt as a valuable bi-product. Please also consider that saline water does not necessarily have to come from the sea; it could come from saline groundwater, effluent ponds or land desalination programs.

Yours sincerely

Joe Mifsud Managing Director Natural Resource Services Pty Ltd