

## Friday Forum #8

### *Water: Supply and Storage Looking forward*

Friday, 14 March , 9am – 12 noon

MWH Office, Deans Ave, Christchurch

#### Speakers:

**Dr John Bright, Aqualinc**

**Dr Terry Heiler, Irrigation NZ**

**Professor Derrick Moot, Lincoln University**

**John Bright** is Managing Director of Aqualinc Research Ltd. Over the past seven years he has been involved with strategic water studies for several regions, including Canterbury. He has also overseen the development of the Canterbury groundwater model and is contracted to Lincoln Ventures Ltd to lead two groundwater research projects that address groundwater quality and groundwater allocation issues.

**Dr Terry Heiler** is currently Chief Executive Irrigation NZ Inc. – representing irrigation interests of 3500 members by way of advocacy with central and local government; and development of new technical tools to improve performance.

Ex CEO of NZ Agricultural Engineering Institute at Lincoln; ex Director Landcare Research International consultant – 40 projects in 20 countries

**Dr Derrick Moot** is a Professor of plant science at Lincoln University. His major research focus is on the use of lucerne and other plant species for non-irrigated pastures. He has a PhD in Crop physiology and did his Post Doctoral studies in the UK where he worked on the impacts of climate change for cereal production.

#### Sustainability Forums

The NZSSES hold regular forums, aimed at exploring different engineering and science sectors, and their approach to sustainability. It is hoped that problems with understanding and implementing sustainability principles will be identified and discussed, from which the NZSSES will aim to facilitate research projects to further explore the issues and provide feedback to its members.

#### Topics so far:

- Future thinking and Frontier Design (February 2008)
- Carbon Trading (October 2007)
- Sustainable Transport: Cars and Congestion (August 2007)
- Talking and Walking Sustainability Conference (February 2007)
- Governance and Sustainability (September 2006)
- Consultants and Sustainability (May 2006)
- Industry and Sustainability (September 2005)
- Local Government and Sustainability (June, 2005)

The forums are morning sessions and comprise brief presentations from guest speakers followed by questions and answer time, or a facilitated discussion afterwards. A summary and way forward is given at the end to help develop practical ways of improving the uptake of sustainability principles.

## NZSSES

The New Zealand Society for Sustainability Engineering and Science is a learned society focused on achieving sustainability by identifying, understanding and accepting the responsibility for engineers and scientists to manage resources and ecosystems for both current and future generations.

The NZSSES is a Technical Interest Group of the Institution of Professional Engineers of New Zealand and a Affiliated Organisation of the Royal Society of New Zealand.

## Forum No 8: Water: Supply and Storage

Programme – 14 March 2008

9am	<b>Welcome, outline of the forum and its objectives</b>	<b>John Peet</b> NZSSES
9.15am - 9.45am	<b>Meeting Canterbury’s thirst for water – what would it take to do it?”</b> Consumptive water use in Canterbury accounts for the lion’s share of NZ’s total consumptive water use. Growth in demand for water from all sectors of the Canterbury economy is likely to continue to grow at current rates. This talk will give an overview of potential water demand, the region’s capacity to meet this, and what it will take to meet as much of the potential demand as is practical. <b>Questions (5 mins)</b>	<b>John Bright</b> <b>Aqualinc</b>
9.50 am - 10.20 am	<b>Implementation Modalities for Large Scale Water Storage Projects</b> A real challenge for getting storage projects implemented is not just technical – major issues include resource consenting under the RMA for community initiatives; and particularly the problem of making costly storage investments financially viable and bankable. Some of these issues have been addressed in recently completed NZ projects and are confronting large projects now being considered, like Central Plains. The talk will be a “heads up” for planners, consultants and communities with an interest in storage and the future. <b>Questions (5 mins)</b>	<b>Terry Heiler</b> <b>Irrigation</b>
10.20 am	<b>Morning tea</b>	
10.40am 11.10am	Dr Moot will present on the <b>biological drivers of plant growth and development</b> and will talk about the implications of irrigation and predicted climate change for pasture and crop production with particular reference to the Canterbury environment. <b>Questions (5 mins)</b>	<b>Derrick Moot</b> <b>Lincoln University</b>
11.15am 12 noon	<b>Panel Discussion / Debate / Wrap up</b> <b>FINISH</b>	

### Registration / Information

<b>Fee</b>	<ul style="list-style-type: none"><li>○ Free for members of NZSSES</li><li>○ \$40 incl. gst for non members</li></ul>
<b>More information?</b>	<i>Details on <a href="http://www.nzsses.auckland.ac.nz">www.nzsses.auckland.ac.nz</a></i>
<b>To Register</b>	<i>Email to <a href="mailto:vicky@nzsses.org.nz">vicky@nzsses.org.nz</a></i>