

INTERNATIONAL COMMISSION ON IRRIGATION AND DRAINAGE 2ND ASIAN REGIONAL CONFERENCE

14th – 17th March 2004

**THEME: IRRIGATION IN A TOTAL
CATCHMENT CONTEXT - SHARING THE RIVER**



ICID•CIID



**VENUE: Moama Bowling Club,
Moama NSW**

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Keynote Presenters

ANGUS DUNCAN



Angus Duncan is President and CEO of the Bonneville Environmental Foundation in Portland, Oregon. The Foundation, organised in 1998, operates as a non-profit business, marketing the output of wind, solar and other renewable energy plants to businesses, utilities, groups and individuals. BEF then reinvests its net revenues in new renewable energy generation and watershed restoration activities.

Angus Duncan served as President and Senior Fellow of the Columbia/Pacific Institute (CPI). CPI has

participated in government and industry policy debates addressing critical energy and environmental management issues in the Columbia River Basin, contributing analysis and alternative approaches to these issues from a best-public-policy perspective that employed both market-based and regulatory tools.

Mr. Duncan conceived and proposed "Solar Ashland", a project with the City and Municipal Utility of Ashland, Oregon, to develop a Pacific Northwest entry in the President's Million Rooftops Solar Initiative.

DR. SHIGETAKA TANIYAMA



Dr. Taniyama, holds a Ph.D. degree from University of Tokyo, Japan. Dr. Taniyama has worked as Executive Director in Water Resources Development Public Corporation, Deputy Director General, Director General, and Director in Agricultural Structural Improvement Bureau - Ministry of Agriculture, Forestry and Fishery in Japan. Dr. Taniyama is a member of several professional societies, as also of overseas technical cooperation

agencies. He has contributed several papers and books in the field of water quality, design and construction of rock filled dams and rural development etc. Dr. Taniyama has participated in several ICID Conferences and is member of ASRWG and PFC.

Dr. Taniyama is presently Advisor of the Japanese Association of Rural Sewerage Cooperation and also President of the Japanese Association of ICID.

DON BLACKMORE



Don Blackmore has been Chief Executive of the Murray-Darling Basin Commission since 1990. Prior to that he was Deputy Chief Executive for six years and worked for 15 years as a Civil Engineer with the Rural Water Commission in Victoria.

He was also Deputy Chair of the Land and Water Resources Research and Development Corporation - a position that he held from 1990 to June 1999.

He has been a Commissioner on the World

Commission on Dams who have a mandate to review the development effectiveness of large dams and criteria for the future investment in dams.

He became a Fellow of the Institute of Engineers Australia in 1995 and a Fellow of the Academy of Engineering and Technological Sciences in November 1998.

In May 2000 he was awarded the degree of Doctor of Science (honoris causa) by La Trobe University.

He has recently been appointed Deputy Chair of the CRC for Plant Based Solutions to Dryland Salinity and Chairman of their Research Committee.

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DAY 1: Sunday 14 March 2004

4.00 PM Registration at Official Conference Motel – name to be advised

7.30 PM – 8.30pm Welcoming Ceremony: Echuca Wharf, Port of Echuca

DAY 2: Monday 15th March 2004**Plenary Session**

Chairman: Stephen Mills, Chairman, ANCID

8.40 AM: Welcome and Introduction: Stephen Mills

9.00 AM: Official Opening: The Hon Warren Truss MP, Minister for Agriculture, Fisheries and Forestry

9.30 AM: Keynote Speaker: Angus Duncan, President and CEO of the Bonneville Environmental Foundation in Portland, Oregon.

Taking an Overview of Catchment Management and Where it is Going.

10.30AM Partner's Program; Explore the Historic Shopping Area of Echuca, do some Shopping, visit Echuca Wharf Museum, and visit Australia's unique Wildlife.

10.30 A.M – 11.00 AM: Morning tea

11.00 AM – 12.00 PM Stream 1: Session 1

Chairman: Member of Chinese National Committee

Topic: What is Catchment Management in Various Country's Experience

Total Catchments Management: The Nigerian Experience - Professor Francis Adeniji, University of Maiduguri, Nigeria

Integrated Management of the Tarim River Basin, Xinjiang, China - Clive Lyle, Overseas Projects Corporation of Victoria, Australia

Information System on Justification of Irrigation Systems Reconstruction - Dr Irina Yurchenko, All-Russia Research Institute of Hydraulic Engineering and Land Reclamation, Russia

12.00 PM – 1.30 PM: Lunch

1.30 PM – 3.00 PM CONCURRENT SESSION: Stream 1: Session 2

Chairman: Member of Indian National Committee

Topic: Legal Frameworks for Catchment Management within a National and International Situations

Exploration of South-to-North Water Transfer Project and Strategy on Water Resources Allocation in Huang-Huai-Hai River Basin - Pei Yuansheng, Chinese National Committee on Irrigation and Drainage, China

Flood Management in India: Community Participation is Inevitable - Neelmani Verma, Babasaheb Bhimrao Ambedkar University, India

Saving Water Throughout Central Utah - Heath Clark, US Department of the Interior, USA

Understanding the Influence of Irrigation Systems on Water Sharing Issues in a Catchment Context - Maurits Ertsen, Delft University of Technology, The Netherlands

1.30 PM – 3.00PM CONCURRENT SESSION: Stream 2: Session 2

Chairman: Member of Thai National Committee

Topic: What is a Fair Share of the River for all Users?

The Efficient Management of Water Resources in the Oueme Catchment: Prospective Aspects - Kouassi Sebastien Dohou, Universite De Calavi, Benin

Basin Wide Water Management Initiatives Stimulates Century Old Irrigation Industry in Semi-Arid Southern Alberta, Canada - Upali Hippola, UTH Engineering, Canada

Development of a Management Model for a River Basin Which is Dominated by Irrigated Agriculture - Dharmasiri De Alwis, Mahaweli Consultancy Bureau, Sri Lanka

Participatory Approach for Management of Water Resources of Katepurna Sub-Basin in Maharashtra State-India - Sanjay Madhukar Belsare, Irrigation Department Govt. of Maharashtra, India

Failure of Catchment Area Treatment – Causes and Remedies – Based on Our Experience of Projects on River Tpai in India - Dipak Naik, DD & Associates, India

Vulnerability of Sourcing Irrigation to Sharing Water: A Case Study - Mukhles uz-Zaman, Bangladesh Water Development Board, Bangladesh

3.00 PM – 3.30 PM: Afternoon tea

3.30 PM - 4.30 PM CONCURRENT SESSION: Stream 1: Session 3

Chairman: Member of Japanese National Committee

Topic: What are the Needs of Environment?**Case Studies in Catchments with High Irrigation or Drainage Requirements**

Solving of Ecology Problems Caused by Irrigation in Volga-Basin - Sofia Issaeva, All-Russian Research Institute of Hydraulic Engineering and Land Reclamation

Evaluation of Stream Temperature Change with Reservoir Management in Nam Ngum Basin - Koshi Yoshida, Japan Science and Technology Corporation, Japan

Achieving a Sustainable Irrigation Region – Eight Years of the Murray Land and Water Management Plans - Alex Marshall, Environment Manager, Murray Irrigation Limited, Australia

Is it Possible to Secure Environmental Sustainability and Economic Viability of Irrigation Systems in Australia and Asia? - Dr Shahbaz Khan, CSIRO, Australia

3.30PM– 4.30PM CONCURRENT SESSION: Stream 2: Session 3**Chairman:** Member of Indonesian National Committee**Topic: Reclaimed Water – Better Technologies****Variation of BOD Pollution Rate Within Hadous Drain Catchment of Egypt - Ayman Mostafa El-Degwi, Cairo University, Egypt****Reclaiming Poor Quality Water – Commercial Innovations - Geoffrey Croke, PSI Delta, Australia****Effects of using treated Municipal Wastewater in Irrigation of Potatoes – Payam Najafi, Khorasgan (Isfahan) Azad University****6.30PM Optional Twilight Riverboat Cruise on the Murray River with finger food included****Day 3: Tuesday 16 March 2004****7.00AM Conference Breakfast: Guest Speaker at conference venue****8.30 AM: Keynote speaker: Dr Shigetaka Taniyama – President, Japanese Association of ICID,
Distribution of Catchment Water, Especially for Agricultural Use, in the Asian Monsoon Region: The Japanese Experience****9.00AM: Partner's Program; Eureka its Gold- visit to the historic gold mining city of Bendigo. Ride the 'talking tram, visit Central Deborah Gold Mine, Bendigo Pottery and explore the unique city of Bendigo.****9.00 AM - 10.30 AM: Stream 1: Session 4****Chairman:** George Warne, Murray Irrigation Ltd, NSW**Topic: Supplying the Needs for Water Supply and Removal from Farmers –Doing it Smarter****A comparison of salinity trends in the irrigated Lockyer Valley, Queensland, and the Upper Roper Catchment, Northern Territory - Ms Tho Tien, Queensland University, Australia****System-Wide Water Management in Dan Hoai Irrigation Scheme, Vietnam - Dr Biju George, The University of Melbourne, Australia****Privatisation Driving Efficiency - Bill Hetherington, Murray Irrigation Ltd, Australia****Water Use for Paddy Cultivation and Suggestions for Improvements – A Comparison of Two Irrigation Blocks in Mahaweli System H of Sri Lanka- Thushara Wickramaarachchi, Water Resources Secretariat, Sri Lanka****Model Development for Estimating Irrigated Water At Kandal Province, Cambodia - Hiroaki Somura, National Institute for Rural Engineering, Japan****Integration of Remote Sensing Data into a Distributed Hydrological Model for Irrigation Command Area Management- Dr Rajendra Singh, Indian Institute of Technology, India****9.00 AM – 10.30 AM CONCURRENT SESSION: Stream 2: Session 4****Chairman:** Member of Taiwan National Committee**Topic: Keeping the river clean****Technologies based on Indigenous Knowledge and their Validity. A Case from Semi-Arid Environment of Nepal - Rabindra Osti, Ritsumeikan University, Japan****Integrating EM Survey, Soil Sampling and Watertable Data to Manage Subsurface Drainage for Salt Discharge Reduction: A Case Study - Dr Evan Christen, CSIRO, Australia****Factors Affecting the Role of Irrigation Drains as Sources or Sinks of Phosphorus - Kirsten Barlow, Primary Industries Research Victoria****An Assessment of the Regional Surface Water Quality in the Harvey Irrigation Area – Implications for Regional Environmental Sustainability - Mark Rivers, Department of Agriculture, Western Australia****Understanding Saltload Processes of the Murray River Between the Confluence of the Darling River (NSW) and Remark (SA) - Christopher Biesaga, Department of Primary Industries, Australia****10.30 A.M – 11.00 AM: Morning tea****11.00 AM to 12.00PM: Stream 1: Session 5****Chairman:** Member of Bangladesh National Committee**Topic: Competing Demands for Water in the Catchment – Economic and Social Issues****Development of Interstate Water Trading in the Murray-Darling Basin, Australia - Clarke Ballard, Ballard Consulting, Vic****Water Pricing in Bangladesh: A Pro-Poor Framework with Illustration- Nityananda Chakravorty, Bangladesh Water Development Board, Bangladesh****Development of a Salinity and Water Quality Management Plan for the Victorian Mallee - Ian Ballantyne, Department of Natural Resources, QLD****11.00 AM to 12.00 PM: Stream 2: Session 5****Chairman:** Denis Flett, Goulburn-Murray Water Ltd, Vic**Topic: Technology to Support Monitoring and Management of the Catchment and its Waterways****California's Cooperative Snow Surveys Program - Maurice Roos, CA Department of Water Resources, USA****Tracing Organic Pollutants in Overland Flow and their Sources - Dr Leigh Clemow, Primary Industries Research Victoria****Optimising Phosphorus Retention on Irrigated Pastures - Dr David Nash, Primary Industries Research Victoria****Flood Plain Management – By Implementing a National Water Dispatching Centre with the Application Software Named NWDCS - Homayoon Sabbaghzadeh, Payamafzar Research & Engineering Company, Tehran****12.00 PM Lunch****1.00 PM: Technical tour (Optional):** NSW field tour of the irrigation district operated by Murray Irrigation Ltd, includes rice growing, irrigation and drainage infrastructure, aquaculture and catchment management

6.15 PM Pre-Dinner Drinks

7.00 PM Conference Dinner at Conference venue

DAY 4: Wednesday 17 March 2004

Plenary Session

8.30 AM: Keynote speaker: Don Blackmore, Chief Executive, Murray-Darling Basin Commission

9.00 AM: Partners Program; Aboriginal Culture highlights in the Barmah Forest and an environmental river cruise.

9.00 AM to 10.30 AM: Stream 1: Session 6

Chairman: Member of Malaysian National Committee

Topic: Where can Major Distributors and Users of Water Make Savings?

Measurement, Remediation and Management of Seepage from Open Channels – Anthony Brinkley, Sinclair Knight Merz

Historical Analysis of Water Flows in the Rio Dulce Catchment - Maurits Ertsen, Delft University of Technology, Netherlands

Adapting 100 Year Old Infrastructure to Meet the Needs of Today's Irrigators and Regulators - Clive Luscombe, Goulburn-Murray Water, Australia

Teesta River Water Sharing: A Case Study in Teesta Barrage Project - Mohammad Nural Islam, Local Government Engineering Department, Bangladesh

An Integrated System for Assessment, Monitoring and Reporting Horticultural Water Use Efficiency from the Valve Unit to the Catchment Boundary - Daniel Meldrum, Department for Environment and Heritage, Australia

9.00 AM to 10.30 AM: Stream 2: Session 6

Chairman: Jeff Parish, Central Irrigation Trust

Topic: Technology, part 2 continued from 5th session

Creation of a Predictive Model for Salinity Risk in the Murray Valley Irrigation Region (NSW) - Paul Lamble, Department of Geospatial Science, RMIT University, Australia

Disposal of Drainage Effluent in Evaporation Ponds of Pakistan - Ijaz Javed, IWASRI WAPDA, Pakistan

Impacts on Groundwater Systems in Border-Check Irrigation Areas - Matt Bethune, Department of Primary Industries, Australia

Groundwater Flow, Salinity Processes and Irrigation Development in the Champone District, Lao PDR - Dr William Milne-Home, University of Technology Sydney

Strategies for Saving of Water in Irrigation – An Experience of Maharashtra State India - Suresh Vithal Sodal, Irrigation Department (Maharashtra), India

Pakistan's Biggest Underground Water Reservoir – A Case Study of Pakistan – Muhammad Amin, WAPDA, Pakistan

10.30A.M – 11.00AM: Morning tea

11.00 AM to 12.15 PM: Stream 1: Session 7

Chairman: Stephen Mills, Chairman, ANCID

Topic: What are Critical Things Needed and a View of the Future for Catchment Management?

Irrigation in a Variable Landscape: Soil Hydraulic Properties Information and its Application - Dr Brijesh Mehta, Department of Primary Industries, Australia

Flooding Negotiation Model of Cambodia and Vietnam in the Mekong River - Hajime Tanji, National Institute for Rural Engineering, Japan

Selection of Policy Instruments to Achieve Change - Fiona Johnson, Victorian Department of Primary Industries, Australia

12.15 PM to 12.45 PM Resolutions from the Conference

12.45 PM: Lunch

1.45 PM **Technical tour (Optional):** To Victorian irrigation areas, irrigation drainage, groundwater control and catchment management.

7.00 PM Conference windup dinner at Conference Venue

DAY 5: Thursday 18 March 2004

Post Conference Tours

- ◆ Up into the Snowy Mountains to Canberra: Visiting the Mitta Mitta Valley, Dartmouth Dam, Snowy Mountains Hydroelectric scheme and Canberra.
- ◆ Down the MightyMurray Valley visiting irrigation areas of Torrumbarry and Sunraysia in Victoria and Renmark and Berri in South Australia