

BILL ROWLSTON

Date of Birth: 6th June 1949
Languages: English (fluent, all aspects), Afrikaans (understand)

ACADEMIC QUALIFICATIONS

BSc Honours Class 1, Civil Engineering, University of Salford, England, 1971

PROFESSIONAL MEMBERSHIPS

- Fellow of the Water Institute of Southern Africa
- Member of the South African Society of Aquatic Scientists (Silver Medal holder)

EMPLOYMENT EXPERIENCE

2007-Present: Coastal & Environmental Services, Grahamstown, RSA

Team member for environmental and social due diligence scoping assessment of a major agro-industrial concern in South Africa.

Project manager for the environmental impact assessment of a manganese smelter in the Coega IDZ.

Team member (as water policy and institutional specialist) for the review and revision of Vietnam's Law on Water resources (in Hanoi).

Scoping study for the proposed Kafue Gorge Lower Hydropower Project, Zambia, with particular responsibility for recommendations regarding instream flow requirements.

Strategic advisor in the development of South Africa's National Groundwater Strategy (in progress).

Contributor to a review of South Africa's experience with environmental water requirements. Lead author for two chapters on the history of the development of water law in South Africa, and institutional arrangements.

Co-author of a Technical Report for the Ramsar Convention on Wetlands: Determining and Implementing Environmental Water Requirements.

Technical support and training for Catchment Management Agencies in developing catchment management strategies.

Support to Catchment Management Agencies in developing catchment management strategies.

Project manager / specialist water studies for various environmental impact assessments.

Team member for the regulatory Impact Assessment for the SA Department of Environmental Affairs' Integrated Coastal Management Bill.

Legal review for Knysna's Estuary Management Plan.

1992-2007: Department of Water Affairs & Forestry, Pretoria, RSA – policy and strategy development

Formulation and analysis of policies and strategies for water resources management, including nine years' involvement with the development and formulation of the National Water Policy (1997), the National Water Act (1998). And the National Water Resource Strategy, First Edition (2005).

Co-authored and compiled the National Water Resource Strategy, First Edition

Project leader for the development of guidelines for the preparation of catchment management strategies

Contributed to investigations into the effects on water resources and the implications for water resources management of global climate change. Member of the National and Government Climate Change Committees.

Investigations into the potential for augmenting water resources by artificially enhancing rainfall by cloud seeding.

Co-ordination of activities to implement the National Water Act, 1998, including ensuring coherence with other legislation related to, *inter alia*, the provision of water services, the management and conservation of the natural environment, agriculture, industrial development and financial management in the public sector.

1982-1993: Department of Water Affairs & Forestry, Pretoria, RSA – hydraulic analysis and modelling

Hydraulic analysis, and physical and mathematical modelling of weirs, dam spillways, pipelines and fixed and mobile bed open channels.

Conceptual and hydraulic design of fish passage facilities.

Hydraulics aspects of the development of a methodology for determining the instream flow requirements for the maintenance of ecological functioning of rivers - the Reserve of the National Water Act. (Principal author of the chapter dealing with the hydraulic aspects of determining in-stream flow requirements in the Building Block Methodology Manual, King *et al* 2000).

Hydraulics specialist in environmental impact assessments and environmental water requirements assessments for dams and associated water resources developments.

1971-1982: various English engineering consultants and water organisations

Planning, design and construction of small and large scale works of sewerage and sewage treatment in rural and urban areas (various English consultants)

Planning design and construction of large water supply schemes (North-West Water Authority, England)

CONFERENCE PRESENTATIONS

Invited/keynote speaker at a number of national and international conferences and congresses, including -

- The International Congress on Large Dams, Durban, 1994: The South African approach to determining the instream flow requirements of rivers.
- Biennial conference of the South African National Committee of the International Association of Hydrologic Sciences, Pretoria, 1998: The South African National Water Policy.
- South African Institution of Civil Engineers annual conference, Johannesburg, 2001: The National Water Resource Strategy.
- International Conference on Environmental Flows, Cape Town, 2002: A brief history of environmental flows in South Africa with special reference to the policy, legislative and water research regimes.
- Joint South Africa / Australia workshop on water resources management (under the auspices of the SA Academy of Engineers and the Australian Academy of Engineering and Technological Sciences), Melbourne, 2003: Approaches to water pricing and funding new water resources infrastructure.
- VIIIth International Rangeland Congress, Durban, July 2003: A National Strategy for Implementing South Africa's National Water Act: Opportunities for Synergy with Rangeland Management.
- Biennial Groundwater Conference of the Groundwater Division of the Geological Society of South Africa, Pretoria, March 2005: The National Water Resource Strategy: Implications for Groundwater Management.

- International workshop in Volunteerism, Democracy, Administration and the Evolution of Future Landscapes (invited participant), organised by the Commonwealth Scientific and Industrial Research Organisation (CSIRO), Perth Australia, April 2006.

In addition, a large number of presentations on aspects of the National Water Policy, the National Water Act and the National Water Resource Strategy to a wide range of audiences from 1998 to 2006.

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