

Summary Bio

Murray Gillon
Dam Safety Specialist



Nationality
New Zealand

Language
English



Key Qualifications

Master of Engineering, University of Christchurch, 1971
Bachelor of Engineering (Civil), University of Christchurch, 1969

Professional Affiliations

Fellow of Institution of Professional Engineers New Zealand
Chairman (1994-2000) ICOLD Reservoir Slope Stability
Technical Committee
Member (1990-94) ICOLD Materials for Fill Dams Technical
Committee
Member (1990-2000, 2002-2004) NZ Society of Large Dams
Management Committee
Member of New Zealand Geotechnical Society
Member of New Zealand National Society of Earthquake
Engineering

SPECIALISATION

Dam Safety Engineering
Dam Engineering
Geotechnical Engineering

SUMMARY BIO

Murray is the Managing Director of Damwatch Services Ltd and is based in Wellington, New Zealand. The firm specialises in dam safety and dam engineering and works with a wide range of clients in New Zealand, Australia, Philippines and Fiji. Damwatch undertakes the surveillance of over 50 hydro dams in New Zealand and conducts dam safety reviews for a wide variety of dams. Damwatch also advises on dam safety management, dam safety deficiencies, deficiency remediation and associated dam engineering issues.

His qualifications include a Master's degree in Civil Engineering in the field of Soil Mechanics. He is a Fellow of IPENZ and has been active in ICOLD Technical Committees, most notably chairing the Reservoir Slope Stability Committee to successfully conclude the preparation of an ICOLD Bulletin on Reservoir Slope Stability. He was a member of the Management Committee of the New Zealand Society of Large Dams for 15 years.

Murray has over 30 years experience in the fields of geotechnical and dam engineering. In 1970 he joined the Power Division of the Ministry of Works and Development (MWD) where he worked on the construction of a 90m high concrete gravity arch dam and associated tunnels and intakes. In 1972 he moved from construction to the investigation and design of thermal and hydro power stations. He had the primary technical responsibility for several large dam projects including the repairs to the Matahina Dam following the 1987 Edgecombe earthquake and the completion of the Clyde Dam (102m high gravity dam), including treatment of 18 large rock slides requiring 20 km of tunnels, 100 km of drainage drilling and 5000 instrumented points.

In 1992 Murray was invited to join the Electricity Corporation of NZ to both complete the Clyde Dam Project and to oversee their Dam Safety Programme. He continued to lead the Clyde Dam Project design team in the reservoir filling and commissioning stages. Under his leadership the ECNZ Dam Safety Programme was consolidated and rated World-Class standard by international reviewers. Murray had the lead technical role for ECNZ in the \$60M rebuilding of the Matahina Dam (86m high rockfill dam) in 1998 for active earthquake faults in its foundation and the stabilisation of the left abutment of the Karapiro Dam (67m high arch dam). He also had a major role in the design of the 10km long, 10m diameter second Manapouri tailrace tunnel. From 1996 to 1999 Murray also led the ECNZ Technical Specialist Group.

Following the split of ECNZ in 1999, Murray has led the establishment of Damwatch as a recognised dam safety and dam engineering consultant in New Zealand and Australia. As Managing Director and the lead technical specialist, Murray has active participation as the lead safety reviewer for a wide range of dams in New Zealand and Australia. He has also worked as a peer reviewer or expert panel member in a wide range of dam upgrades and special studies in

New Zealand, Australia and China. His work in New Zealand has included safety evaluations of dams built across active faults and the development of the applicable safety criteria. He is widely recognised for his expertise and experience in internal erosion in embankment dams.

Murray has authored over 30 technical papers on dam related topics and was the international peer reviewer for the ANCOLD Guidelines on Dam Safety Management published in 2003.