

# Summary Bio

Nigel Connell  
Water Resource Consultant



**Nationality**  
New Zealand

**Language**  
English  
Indonesian



## Key Qualifications

Diploma of Hydraulic Engineering, International Course for Hydraulic Engineers, Delft, Holland, 1966  
Bachelor of Engineering (Civil), University of Christchurch, 1964

## Professional Affiliations

Member of Institution of Professional Engineers New Zealand  
Member of New Zealand Hydrological Society

## SPECIALISATION

Hydraulic Structures Engineering  
River Engineering  
Hydrology  
Hydraulics of Canals and Spillways  
Sediment Transport

## SUMMARY BIO

Nigel Connell is a Civil Engineer and Dam Safety Specialist at Damwatch Services Ltd and is based in Wellington. The firm specialises in dam safety and dam engineering and works with a wide range of clients in New Zealand and Australia. 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 design, dam safety management, dam safety deficiencies, their remediation and associated dam engineering issues.

Nigel has over 30 years experience in the field of civil engineering, specialising in water resource development. In 1964 Nigel worked two years with the Lower Hutt City Council in water supply design and contract administration. On completion of post-graduate study in Holland in 1966, he joined Pencil Engineering consultants in London designing pumping stations for water and sewage. In 1968 he moved to Canada and after 2 years with the Corporation of the City of London, Ontario, supervising Industrial Subdivision development he joined Crippen Consultants in British Columbia. He rose from design engineer to Manager of the hydrotechnical department responsible for Hydroelectric identification through detailed design and commissioning, water resource studies, river basin management, river control and feasibility through detailed design of tropical irrigation schemes.

In 1982 Nigel returned to New Zealand and joined Tonkin and Taylor Ltd bringing hydrotechnical expertise to the Wellington office of that firm. Work during this period included detailed design of the spillway for Maitai dam (39m high) in Nelson.

In 1989, Nigel commenced operating as an independent consultant in water resource development, often affiliating with larger consultancies for specialised input. He did the hydraulic design for decommissioning Morten dam (17m high) in Wainuiomata, flood control remedial works on the Ruamahunga River in the Wairarapa, and was team leader on three ADB funded irrigation projects in Indonesia involving major diversion structures and canal networks.

Nigel was seconded to PT Inco, Sulawesi, Indonesia, for three years for commissioning a major hydro dam, safety review of 8 sediment dams, flood estimates and design of a tailings dam spillway using a rock lined spillway.

Nigel joined Damwatch in 2002, working in dam safety with extensive input into dam remediation, particularly investigation, design and implementation of cut-off walls under Arapuni (an 80m high concrete dam).