

# Summary Bio

Peter Amos  
Dam Safety Specialist



## Nationality

New Zealand  
Republic of  
Ireland (dual  
nationality)

## Language

English



## Key Qualifications

Chartered Professional Engineer (CPEng) NZ, 2003  
Chartered Engineer (CEng) UK, 1996  
MBA (Technology Management), Deakin University, Australia, 2002  
Bachelor of Engineering (Civil), University of Canterbury, NZ, 1984

## Professional Affiliations

Member of Institution of Professional Engineers New Zealand  
Member of Management Committee of NZ Society of Large Dams  
Member of Institution of Civil Engineers (UK)

## SPECIALISATION

Dam Safety  
Geotechnical Engineering for dams and landslides  
Hydraulic Structures Engineering  
Structural and Seismic Engineering  
Civil and Structural Engineering for underground structures

## SUMMARY BIO

Peter Amos is a Civil Engineer and Dam Safety Specialist at Damwatch Services Ltd and is based in Wellington. Peter joined Damwatch in 2000 and currently leads the dam engineering team at Damwatch. He is currently Project Manager for a major investigation and remediation project for a deteriorating foundation seepage condition at Arapuni Dam (80m high concrete gravity dam) in New Zealand involving

- Groundwater investigations
- Grouting high pressure flow
- Construction of 95m deep cutoff walls through dam while in service

Peter was a principal author of civil engineering documentation for the resource consent application for the \$1.2 billion Project Aqua hydro canal development in New Zealand. Recently Peter has recently been the leader of comprehensive dam safety inspections of four hydro dams. He investigated the:

- Feasibility of raising an existing 50 metre high earth dam by 6 metres.
- Engineering concept for a 73m high RCC dam and power station

Peter's seismic assessment and design experience includes:

- Design of seismic of 13m high gantries for vertical lift spillway gates at Whakamaru
- Peer review of the seismic assessment and upgrade design of 42m high 5.6m dia. Cosseys valve tower
- Peer review of seismic strengthening of gatelifting bridges Ohakuri/ Roxburgh and spillway channel.

Peter was responsible for the detailed design and specification of 80m long tunnel, intake tower and 800m long delivery pipeline to Horseshoe Bend Power Station.

Peter has over 19 years experience in the field of civil engineering, specialising in dams and heavy civil engineering. He was involved in the commissioning of Matahina Dam (86m high rockfill dam) following the repairs to the dam after the 1987 Edgecombe earthquake and lake filling and commissioning of the Clyde Dam (102m high concrete gravity dam). Peter was the technical leader specifying user requirements during the development of the comprehensive monitoring system for more than 4000 instruments installed in the Clyde landslides and dam.

After a couple of years in London (UK) as Senior Design Engineer on the design and construction of two new underground railway stations, Peter returned to New Zealand as Project Manager and Design Engineer on the design of hydro structures, managing dam repairs, and carrying out dam safety inspections and investigations.