

## Hugh Thorpe

### Biographical data

I grew up in the small town of Otaki about 80 km north of Wellington where my father was a market gardener. I attended Horowhenua College finishing in 1954 and was awarded a Public Service Bursary within Ministry of Works and Development (MWD) to study for an engineering degree at Canterbury University. I completed my bachelor's degree in 1958 with 1<sup>st</sup> class honours and continued on to a Masters in Engineering in fluid mechanics under Frank Henderson, studying suspended sediment transport. At the same time I completed a Bachelor of Science in Mathematics. (There was a lot of cross crediting between engineering and science degrees so it wasn't too onerous.)

In 1961 I was awarded a Commonwealth Scholarship to do a PhD in fluid mechanics at Aberdeen University, UK, under Professor Jack Allen, finishing this in 1963 and returning to MWD in Wellington. There I ventured briefly away from water matters and did some structural design on the Thorndon overbridge, part of the Wellington Urban Motorway, spanning the rail yards and skirting the ferry terminal.

In 1965 I was posted to MWD Central: Laboratories in Gracefield where I ran the Hydraulics Laboratory for three years and then was Engineer-In-Charge for another two. We did a wide variety of work in the Hydraulics Laboratory, mostly physical modelling associated with hydropower development but some river engineering models also.

Following the external damage caused by the 1968 Wahine storm to high rise Wellington buildings I initiated design of a major wind tunnel in the laboratory. This was to test new buildings with physical scale models set in actual modelled locations so that the wind velocities around a new building could be measured but also the interaction between the new building and the existing structures in the locality.

In 1970 I was seconded to the then Ministry of Foreign Affairs and went with my family to Thailand to teach and help establish laboratories at Khon Kaen University (KKU) some 400km NE of Bangkok. KKU was a newly established

university in a much undeveloped part of Thailand. It had only been on site for two years when we arrived and consisted of just Agriculture and Engineering faculties at that time with Education begun while we were there. About 2,000 students. (Now about 30,000!)

This lasted for two and a half years and was a wonderful experience for my whole family.

On return to NZ in 1973 I was placed in Water and Soil Division of MWD doing technical administration and liaising with catchment boards throughout the country as necessary.

In 1976, by chance, I had opportunity to become involved in a major groundwater study on the Heretaunga Plains and this led to my abiding interest in this field of science.

With the appointment of a new Research Director within Water and Soil Division there was a huge restructuring of the relevant science and the establishment of science centres, primarily in Hamilton, Palmerston North and Christchurch. Groundwater was allocated to Christchurch and I was appointed team leader, moving south in 1978.

Over the next 14 years we gathered together a very competent multi-disciplinary team, covering modelling, general groundwater investigation, groundwater chemistry, microbiology and geophysics. We also initiated groundwater training courses, mostly for catchment board staff but also for other interested parties. This was to begin to remedy the great lack of groundwater expertise in NZ at that time. These courses ran for many years and still continue although mostly organised by the Australian Groundwater Centre based in Adelaide.

Restructuring of MWD beginning in 1988 led to the split of groundwater from surface water hydrology, a big mistake. Groundwater was put into what is now GNS. This culminated in 1992 with the closure of the GNS office in Christchurch and the dispersal of groundwater group members in various directions.

I was fortunate to be given a “grace and favour” office in the Civil Engineering Department at University of Canterbury and from there continued to teach, research and consult on groundwater issues for the next twenty odd years.

These days I have little direct involvement with groundwater, to my disappointment but maintain contact with the Waterways Centre for Freshwater Management. I am also a qualified RMA Commissioner and sit on hearings from time to time. I was also involved in the Canterbury Water Management Strategy for four years as a member of the Christchurch West Melton Zone Water Management Committee.

It is very satisfying to be able to apply a lifetime of accumulated knowledge and experience to practical issues of importance to the local community.