Part 2: My introduction to groundwater

Interviewee: Dr Hugh Thorpe

Interviewer: Dr MS Srinivasan

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"After a 2-1/2 year stint in Thailand, where I taught at Khon Kaen university on a Colombo Plan assignment, I came to New Zealand and joined the Water and Soil Division of Ministry of Works and Development. I was actually in contact with a lot of catchment boards around the country, but in addition to that within the Water and Soil Division of Works they actually had a little research group led by Kees Toebes, and within the Power Division there were Steve Thompson and Richard Ibbit who were working on hydrological data handling and processing systems. I provided technical oversight on the work of catchment boards, because at that stage the government was providing a lot of subsidy money to catchment boards for the various river works. Given that the government was putting a lot of money in, they wanted to make sure the work was well done, and so there had to be some technical oversight."

"I enjoyed that work well enough. But then it became apparent that groundwater was a matter of growing interest, and it was really just by chance that I got into groundwater because I was mid-career at this stage. In my 40s, a job came up. It was intensely political a dispute between the Hawke's Bay Catchment Board and the Hastings City Council. The Hastings City Council (HCC) wanted to extend its urban boundaries westwards over the unconfined aquifer. But the catchment board said that HCC shouldn't do that because of its potential to pollute their own water supply, as the hydrogeology of that area is actually very similar to Christchurch. It got to a political stalemate with these two local bodies fighting each other, so as often happened in those days they went to the Minister of Works and Development and said we've got a problem."

"The Minister wrote to the MWD and said there's this groundwater problem up there, solve it. I had no background in groundwater at all. Hardly anybody did in those days. This was 1976. But at that stage the Water and Soil Research had a new research director. Another scientist, Mike Taylor was officially in charge of issues related to water quality, and my role was in relation to water quantity, and this was a groundwater pollution issue essentially. So Mike Taylor was supposed to be leading the programme to solve the problem. But the research director came in one day and said to me, "We're going to do this work Hugh, and I want you to write a letter to the minister to tell him that we'd have it solved in nine months." I said to him, "This is a big job, there's no way we can do this in nine months," and he just said "write the letter", and I thought I'm not going to be involved, so I sat down and wrote the letter. It went off to the minister saying Ministry of Works will have this problem solved in nine months. I thought poor Mike Taylor, he's got a terrible job there. However about two weeks later the research director came back to me and said, "Mike Taylor is too busy Hugh, you're going to have to do it". In those days, the cooperation between government agencies was much easier than it is now, and so we pooled together whatever scientific expertise we had in groundwater. We had the geological survey, the Institute of Nuclear Sciences, and Bruce Hunt, who was a groundwater mathematician at the University of Canterbury plus others. We all got around a table."

The research director turned on all the resources. Money was no object. If we needed more people, they were recruited. We spent about a quarter of a million dollars in nine months, big money in those days, and we had established several research sites up on the unconfined aquifer. We drilled holes like mad all over the place. Wasted a significant amount of money and time because of our inexperience. We actually did complete the job in nine months, to the hour. I was responsible for writing the final report, and I was working like crazy. The deadline was 5 o'clock on the 30th of June 1977, and I slid the report into the letterbox in Wellington at 5 o'clock on the 30th of June 1977. I got some kudos from that, but I was working with a really good team of people, and the guys who did the field work up in

Napier put in a huge effort and did a great job. And I learned a huge amount about groundwater in the space of nine months, and I thought, I like this, this is really interesting."

"The research director kept me under a lot of pressure to meet the deadline.

Subsequently there was a rumour that he had a bet with the chairman of the catchment board for two bottles of whisky that we would get it done. Well, he won, but he did not touch spirits himself so I don't know where it went. Hopefully to the guys up in Napier!"

"The other interesting thing about the Heretaunga Plains job was that to my knowledge it was the first multi-disciplinary groundwater investigation ever done in New Zealand. And I suspect it's the largest and most intense one ever been done in New Zealand still, and it was just a unique combination of circumstances which allowed us to do that, because as I say people were happy to cooperate in those days."