

Oral History Program: Biographical Notes

David ANDERSON (1923 -)

Civil Engineer

Birth & Family: Born 24 August 1923 in Banbridge, Northern Ireland, United Kingdom, eldest of five children. Father a Presbyterian Minister from Coleraine, mother from Londonderry. Both graduated from Trinity College, Dublin, with 1st Class Honours, he in Classics and Philosophy and she in Science, and each won a University Gold Medal.

Married Margaret Butler in Nairobi 17 December 1949. Five children.

Education: ???

Qualifications: BA Degree (Hons), BAI (*Do we know what this is?*) Degree with 1st Class Honours in Civil Engineering 1945, Dublin University.

Memberships: FIEAust.; American Society of Civil Engineers.

Awards:

Work History: In 1945 Anderson was offered a position with the Public Works Department, Kenya, East Africa, working as Assistant Engineer on hydrological and water resources investigations and the designing of water supply projects.

Returned to London 1950, and successfully applied for a position with the Snowy Mountains Hydro Electric Authority as an hydrologist. After arriving in Sydney with his wife in December 1950, Anderson began work in the Hydrology Section of the SMA in O'Riordan Street, Sydney. Using limited data and resources, Anderson worked on information on river and spring flows in the Snowy Mountains area and also began developing design floods for dams and spillway design purposes.

In 1951 Anderson was chosen to go to the Snowy Mountains to begin building new stream gauging stations, basing himself at Island Bend. The SMA used Leopold Stevens gauges which were operated by weights, like a grandfather clock, running for up to 3 months at a time without the chart being changed.

Seventy of these stations were built in the next 2 or 3 years, and 100 completed by 1957, many in very difficult rugged locations, such as Dead Horse Creek where all goods including timber, tools, sledgehammers, corrugated iron and bags of cement had to be taken in by packhorse.

To staff these stations, Anderson recruited from among the migrant staff, and trained those with university degrees and skiing experience to operate the gauging stations as hydrographers; this endeavour proved very successful. In mid 1952 he began formal training courses in Cooma for these keen and enthusiastic staff, and also wrote the course notes that became the basis of 3 volumes of Field Hydrographic Notes.

In October 1953 Anderson commenced in-service training with the United States Bureau of Reclamation. Initially with the Hydrology Branch in Denver, he also attended a snow survey school in Idaho, and spent time on the construction of the Folsom and Palisades Dams in California and Idaho, concluding with several weeks in the Estimates & Cost Analyses Branch in Denver.

From 1954 until 1957 Anderson was based in Cooma as Field Investigation Engineer and responsible for field hydrological activities in the Snowy Mountains, co-ordinating these with other field investigation activities such as diamond drilling and surveying. Part of the objective was to minimise proliferation of camps and roads. Anderson took part in the first investigations of the Alpine Way, and also spent some time on project planning for the Snowy–Murray part of the scheme.

In 1957 Anderson joined the Scientific Services Division and became Supervising Engineer of the Authority's Engineering Laboratories which provided geological, geotechnical, hydraulics, and materials investigation and testing services to the design and construction divisions, as well as operating the Authority's still and movie photographic services, and providing model making facilities. Anderson was also responsible for prioritising work and keeping within budget; he organised the NATA (National Association of Testing Authorities) registration of most of the testing facilities, and later organised the opening of the Tumut 1 Power Station by the Prime Minister, Robert Menzies, on 31 October 1959.

Anderson became Engineer for Tunnels and Aqueducts design in 1964, and was involved in the completion of Murray 1 and 2 pipelines, the latter being completely designed by the Engineering Laboratories, with gravity anchorages, which Anderson preferred to the post tension anchorages used in Murray 1.

In 1967 Anderson accepted a position with the Electricity Commission of NSW as Chief Civil Engineer. He moved to Sydney where he worked on civil and structural design work for Liddell, Wallerawang, Vales Point and Eraring Power Stations. He also lectured at the Sydney University School of Civil Engineering on behalf of the Commission.

In 1976 Anderson joined the Hunter Water Board as Chief Engineer, with responsibility for all engineering and operational activities, including direction and supervision of around 1200 staff, and was involved in a major review of the Board's overall strategy and objectives. He also represented the Board on a number of State committees.

From 1983-1986 Anderson was Consultant to the Hunter District Water Board, and from 1986-1990 was a Member of the Review Panel on rehabilitation of dams and other structures for Melbourne and Metropolitan Board of Works. During 1983-1997 he was a Nominee of Hunter Water Board and subsequently of the Institution of Engineers, Australia on the Dams Safety Committee of NSW; he served as deputy Chairman from 1981-1990, and Chairman from 1990 until retirement from the Committee in 1997.