

f versus U relationship plotted on log-normal paper could be approximated to a straight line from the peak value of f to that at the transition flat bed, and an empirical relationship for this region may be of the form proposed by the writer. But even then some of the scatter in observed values would be due to variables not accounted for, such as slope, Froude number, Reynolds number, etc. An empirical relationship in terms of hydraulic mean radius R and the mean particle size would be very useful for the designer, particularly if the scatter is as small as shown on the writer's graph. But, it contributes little to the understanding of the mechanism of resistance in alluvial channels.

NEWS

FULLBRIGHT SCHOLARS

Three Fullbright research fellows are at present in New Zealand studying some aspect of hydrology.

Dr R. E. Dils, Professor of Watershed Management of Colorado State University, is attached to the Tussock Grassland and Mountain Lands Institute. He will study the problems of catchment management and natural drainage.

Professor D. B. Lawrence, of the University of Minnesota, is attached to Lincoln College and will study the advance and recession of glaciers in New Zealand.

Dr E. Deevey, Professor of Biology at Yale University, is attached to Canterbury University and will study how lake development has been affected by climatic changes.

FROM SOIL CONSERVATION AND RIVERS CONTROL COUNCIL

Staff Changes

Mr H. Drost, District Hydrologist, Whangarei, has been transferred to Hamilton to become the District Hydrologist of the Hamilton Hydrological Survey. In his previous position he supervised the Hamilton office for some three years. A transfer had

become desirable because of the extensive work required in the Hamilton District; but he will continue to control the Whangarei office.

Mr I. Simmers, formerly Hydrologist with the Rangitikei Catchment Board, has taken up the position of District Hydrologist, Dunedin Hydrological Survey. This, it is hoped, will lead to an improved staffing position all round in the Dunedin office.

Mr J. Delaney, Technical Officer, Hydrological Section, Head Office, retired on 13 November. Mr Delaney arranged the compilation and printing of all hydrological publications and the many favourable comments received on our publications are in no small measure due to the meticulous care Mr Delaney bestowed on his work. The Council wishes him a happy retirement.

Procedures

Some important hydrological procedures have been issued recently or are about to be issued:

- No. 29 — Automatic Water Level Recorders: Instruction for Chart Changers — E. J. Speight.
- No. 30 — Inspection of Gauging Stations — E. J. Speight and C. Toebe.
- No. 31 — Installation and Maintenance of Fischer and Porter Water Level Recorders — E. J. Speight.
- No. 32 — Interpretation and Correction of Automatic Water Level Recorder Charts — W. B. Morrissey.
- No. 38 — Interpretation and Correction of Fischer and Porter Water Level Recorder Tapes — W. J. Fraser and W. B. Morrissey.

These procedures complete the instructions on the handling of charts and tapes for water level recorders. Subsequent training in these procedures will no doubt eliminate inaccuracies and poor records which, although diminished greatly in recent years, still persist in some areas.

A preliminary draft bulletin has been issued on "Definitions and Measurements of River Channels in New Zealand" by A. P. Campbell and G. Caddie. Methods are given by which the inter-relationships may be established between channel characteristics, discharge and size of bed material. Also, indications are given of methods for the collection of other data for practical application to problems of design and maintenance.