

HARVEY BANKS KINNISON

1890 - 1959

HARVEY BANKS KINNISON was born in Hopkins, Missouri, July 21, 1890. He spent the early years of his life in the West. He attended the University of Idaho, obtaining his B.S. in Civil Engineering in 1914. In 1916 he married Anita Taylor in Eugene, Oregon. Mr. Kinnison died on March 14, 1959. He leaves his wife; two sons, Hallard Banks, and Philip Taylor; and one daughter, Mrs. Edward Jones.

He started his engineering work as District County Engineer of Bonner County, Idaho. Later he was chief of party for the Colony Holding Corporation, Atascadero, California. In 1918 he joined the United States Geological Survey, which he served for the rest of his life. He was located first in Texas, then in Kansas, then in Massachusetts, where he became District Engineer in 1926. He served as District Engineer for the Boston District until November, 1956, when he was transferred to California, where he was Branch Area Chief for the western states with headquarters in Menlo Park, California. With this appointment he became one of the four branch chiefs of the Water Resources Division of the Geological Survey in the country, having charge of its activities in the Western States, Alaska, and the Hawaiian Islands.

As District Engineer of the Boston District, Mr. Kinnison made a very marked contribution to the whole subject of hydrology in New England. Very soon after he was appointed, the 1927 Vermont flood occurred. This was the first of the large, recent floods in the northeastern United States and as such was one of the floods that led to the whole system of flood control in New England. It also was the start of modern analysis of the hydrology of floods. His Water Supply Paper on the New England flood of November, 1927, was an extremely careful and valuable analysis of this flood and was first of this kind of flood paper published by the Geological Survey.

Mr. Kinnison's work in the Geological Survey's office in Boston extended over a period of 30 years, during which time the department

grew from a small office employing a few people to its present size with a total personnel of 24.

Aside from the various publications of the Survey, Mr. Kinnison also wrote many papers on stream flow hydrology covering both drought and flood conditions, descriptions of the various floods, and analyses of flood formulae. These were published in the Boston Society's Journals during the period from 1930 to 1948. His paper on "Stream Flow Data, Its Collection and Use," published in 1931, was awarded the Desmond-Fitzgerald medal.

His greatest contribution to the science of flood hydrology was a paper which he wrote assisted by B. R. Colby entitled "Flood Formulas Based on Drainage Basin Characteristics," published in the Transactions of the American Society of Civil Engineers in 1945. This was an analysis of floods in New England rivers resulting in a classification of floods of various frequencies based on the flood characteristics of their drainage area based on topographic features. Since the publication of this system of analysis, it has been widely used in New England in determining floods for the design of dams, bridges, and culverts. It was the first of flood analyses which gave a method of using the physical data of a river for its flood-producing characteristics.

Mr. Kinnison joined the Boston Society of Civil Engineers in 1926, served as a director 1947-49, vice president 1945-47, and was president in 1947-48. He served as a member of the Committee on Floods, beginning with the one after the 1927 flood. He was a member of the John R. Freeman Fund Committee. He was also a member of the American Society of Civil Engineers, the American Geophysical Union, and the New England Water Works Association.

Until he left for California, he made his home in Melrose, where he was active in various community affairs such as the Y.M.C.A. and the Boy Scouts, and particularly for five years in the construction of the new Melrose Highlands Congregational Church.

From his work with the Geological Survey, Mr. Kinnison was, of course, widely known by hydraulics engineers throughout all New England. No one who had contact with him could fail to be impressed by his great ability in his special line of work, and even more than that, by his willingness to give help in the way of information in any situation, even beyond the requirements of his office. Those who had dealings with him know how clear and direct was

his attitude on all engineering problems so that one was always sure of his interested cooperation in any case where his help was requested, and such assistance was always given with an authority and an experienced judgment that made it all the more valuable. His was a great contribution to the theory and practice of hydrology in New England.