ASCE Manuals and Reports on Engineering Practice No. 70

Evaporation, Evapotranspiration, and Irrigation Water Requirements

Second Edition

Task Committee on
Revision of Manual 70

EDITED BY
Marvin E. Jensen, Ph.D., NAE
Richard G. Allen, Ph.D., P.E.

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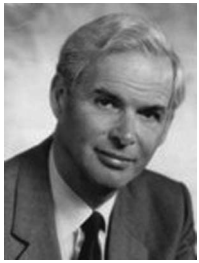
DEDICATION

In loving memory of Doris Jensen, 1929–2009, lifelong spouse, supporter, encourager, and traveling companion of Marvin Jensen.

In fond memory of William Oregon Pruitt, 1922–2009, Irrigation Engineer at the University of California-Davis, who was a primary leader in developing and advancing the concept of reference crop evapotranspiration (ET) and transferable crop coefficients, in trusting the use of energy balance equations to estimate ET, in advocating data and research quality and integrity, and in promoting education in experimental methods. Bill Pruitt, along with Dr. James L. Wright of the USDA-ARS (retired), Kimberly, Idaho, mentored many present-day practitioners on the physics of ET estimation and the requirements for accurate ET measurement. Pruitt and Wright were both longtime members of and contributors to the ASCE Technical Committee on Evapotranspiration in Irrigation and Hydrology.



In fond memory of John Lennox Monteith, 1929–2012, who influenced many Americans in the application of physical principles to describe how plants interact with their immediate environment and microclimate, with his own work leading to the evolution of the Penman combination equation into the Penman-Monteith equation, which has become a primary basis for estimating irrigation water requirements.

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