Complex water resource systems have been developed to ensure a continued safe and reliable water supply, however, due to climate variations these systems can be stressed and lead to water shortages and other problems. While many aspects of climate variations and their impact on water resources have been presented and published, the information is greatly dispersed and lacks a general overview. This report, Climate Variations, Climate Change, and Water Resources Engineering, provides a broad overview of this important topic. It highlights the current knowledge about climate variations and change, discusses the impact on water resources systems, characterizes its predictability, and provides examples of its use in water resources management, planning, and design. This information is supplied through ten detailed case applications that examine the value and potential of climate information in water resources investigations. The first book to address climate issues from the water resources engineering perspective, this report will be beneficial to water resources planners and managers, flood and drought preparedness agencies, irrigation district managers, and any others that rely on water resources budgeting, planning, and systems operations.

Climate Variations, Climate Change, and Water Resources Engineering



Climate Variations, Climate Change, and **Water Resources Engineering** 









**Edited by** Jürgen D. Garbrecht, Ph.D. Thomas C. Peichota, Ph.D., P.E.

