FLOODS AT ARECIBO, PUERTO RICO

By

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This report presents a record of the recurrence of the main catastrophic floods in the Arecibo River basin, in the Adjuntas Valley of Puerto Rico, from 1922 to 1960, inclusive. The data include a summary of all floods that occurred in the Arecibo River basin, which is located in the eastern part of the island of Puerto Rico.

The Arecibo River basin is characterized by a steeply rising topography, with a maximum elevation of 4,140 feet above sea level. The river flows through a narrow valley, which is bounded by steep mountains on both sides. The river is subject to rapid changes in water level, which are influenced by the precipitation patterns in the Adjuntas Valley.

The highest flood ever recorded in the Arecibo River basin was on February 19, 1960. This flood was caused by a heavy rainstorm that occurred over a two-day period, resulting in a peak discharge of 4,140 cubic feet per second. The flood caused extensive damage to the surrounding area, including the destruction of bridges and roads.

The second highest flood ever recorded in the Arecibo River basin was on November 18, 1947. This flood was caused by a heavy rainstorm that occurred over a one-day period, resulting in a peak discharge of 3,740 cubic feet per second. The flood caused damage to the surrounding area, including the destruction of bridges and roads.

The frequency of flooding in the lower reaches of the Arecibo River basin has been increasing over the past several decades. The average annual flood recurrence interval has decreased from 10 years in the 1920s to 5 years in the 1950s. This increase in the frequency of flooding is due to changes in land use and climate patterns in the Adjuntas Valley.

The Arecibo River basin is an important source of water for the surrounding area. The river is used for irrigation, drinking water, and hydroelectric power generation. The flood data presented in this report can be used to better understand the patterns of flooding and to develop effective flood management strategies for the Arecibo River basin.