Hydrology

Introduction

This document contains the following hydrology tables:

- rainfall intensity-duration-frequency coefficients
- 24-hour rainfall depth versus frequency values for Texas counties and
- frequency factors (K values) for statistical analysis of stream gauge data.

Rainfall Intensity-Duration-Frequency Coefficients

The following coefficients are for use in the department's Rainfall Intensity Equation (Equation 5-5). They are listed by county for various frequencies. The *Rainfall Intensity-Duration Frequency Coefficients* information can be accessed through the EBDLKUP.xls file. Note that the coefficient "d" is the same for the 5-year, 10-year, 25-year, and 50-year frequencies.

24-Hour Rainfall Depth Versus Frequency Values for Texas Counties

The following tables provide 24-hour rainfall depths (P) in millimeters for each county in Texas and for various frequencies. We abstracted these values from the National Weather Service Technical Paper Number 40, and they may be used in NRCS runoff curve number methods outlined in Section 7 of Chapter 5. The 24 Hour *Rainfall Depth Versus Frequency Values for Texas Counties* can be viewed by opening the P24LKUP.xls file.

Frequency Factors (K Values) for Statistical Analysis of Stream Gauge Data

Frequency Factors (K Values) for Statistical Analysis of Stream Gauge Data available at FREQFRAC.xls contain K values for use in Equation 5-37 for skew coefficients, G, from -9.0 to 9.0 and exceedance probabilities, P, from 0.9999 to 0.0001 (also listed as Frequency, F). For further information, refer to "Guidelines for Determining Flood Flow Frequency," Bulletin #17B of the Hydrology Subcommittee, 1982, of the Interagency Advisory Committee on Water Data.