

IX.3.3B-SYSTEM-FHYDEX SUBROUTINE FHYDEX

Description

Subroutine FHYDEX uses the hydraulic properties of the cross-section to determine the discharge associated with a given stage (or visa versa) that lies beyond the range (above or below the endpoints) of the Rating Curve.

Calling Sequence

CALL FHYDEX (GIVEN,CONVRT,HGUESS,ICONV,NRANGE,IBUG)

Argument List

<u>Argument</u>	<u>Input/ Output</u>	<u>Type</u>	<u>Dimension</u>	<u>Description</u>
GIVEN	Input	R*4	1	Value to be converted: - stage if ICONV=1 - discharge if ICONV=2
CONVRT	Output	R*4	1	Computed discharge or stage associated with the given value
HGUESS	Input	R*4	1	If ICONV=2 then first estimate for use in Newton-Raphson iteration to compute stage
ICONV	Input	I*4	1	Conversion indicator: 1 = convert stage to discharge 2 = convert discharge to stage
NRANGE	Both	I*4	1	Counter for number of times extrapolated Manning N values went out of range .01<N<.30
IBUG	Input	I*4	1	Debug indicator: 0 = do not print debug information 1 = print debug information