

Description

Subroutine RUTE26 computes the Modified PULS routing.

Inflow into a reservoir is routed over uncontrolled spillways, gated spillways with gates fully open or through sluiceways. The routing may start at the beginning of the time interval or during the time interval and may end during the time interval. When the slope of the storage versus outflow relation is less than 0.5 (storage in units of mean discharge for the time interval), more than one routine step is required for the time interval and the subroutine computes the required number of routing steps. When the routing step is less than the time interval, storages for the routing procedure are converted to units of mean discharge for the routing time step.

Calling Sequence

CALL RUTE26 (FRAC1,FRAC2,SBGN,QOKBGN,QOSBGN,PEAKO,PKPOS,O,SOH,WORK)

Argument List

<u>Argument</u>	<u>Input/ Output</u>	<u>Type</u>	<u>Dimension</u>	<u>Description</u>
FRAC1	Input	R*4	1	Fraction of time interval before routing begins; FRAC1 is computed in routine FRAC26 or set in routine OVER26
FRAC2	Input	R*4	1	Fraction of time interval over which routing occurs; FRAC2 is computed in routine FRAC26 or set in routine OVER26
SBGN	Input	R*4	1	Storage at beginning of first routing step in the time interval in units of mean discharge for the time interval
QOKBGN	Input	R*4	1	Non-spillway outflow at beginning of first routing step in the time interval; computed in routine OVER26
QOSBGN	Input	R*4	1	Spillway discharge at beginning of first routing step in the time interval; computed in routine OVER26
PEAKO	Output	R*4	NUMPKO	Array of peak outflows above a

<u>Argument</u>	<u>Input/ Output</u>	<u>Type</u>	<u>Dimension</u>	<u>Description</u>
				specified test value that occur between outflows at regular time interval points; this array is needed only if the number of routing steps within the time interval is greater than one; these peak values are substituted for the nearest time interval outflows after all outflow values have been computed
PKPOS	Output	R*4	NUMPKO	Array of position numbers that define where the corresponding PEAKO values will be placed in the instantaneous outflow time series
O	Input	R*4	NOSOH	Discharges for spillway discharge versus storage above spillway crest plus discharge/2 relation; discharges may be sluice discharges if routing is through sluice
SOH	Input	R*4	NOSOH	Storage above spillway crest plus discharge/2 values for O versus SOH relation; storage must be in units on mean discharge for the time interval; the first value for both O and SOH must be zero
WORK	Input	R*4	NOSOH	Work array

Dimension variables are in common block RESV26.