VIII.3.3-STAGE-Q STAGE DISCHARGE CONVERSION OPERATION

Identifier: STAGE-Q

Operation Number: 23

Parameter Array: The FORTRAN identifier used for the parameter array for this Operation is PO. The contents of the PO array are:

Position	Contents
1	Operation version number (integer value)
2-6	Name for gaging station or forecast point where Operation is applied
7	Conversion indicator (integer value): 1 = stage to discharge 2 = discharge to stage
8-9	Stage time series identifier
10	Stage time series data type code
11	Stage time series data time interval (integer value) (units of HR)
12-13	Discharge time series identifier
14	Discharge time series data type code
15	Discharge time series data time interval (integer value) (units of HR)
16-17	Rating Curve identifier
18	Carryover source indicator (integer value): 0 = default carryover used (all zeroes) 1 = initial carryover read from input

The size of the PO array is 18.

Carryover Array: The FORTRAN identifier used for the carryover array is CO. The contents of the CO array are as follows. Default initial carryover values are all zeroes.

Position	Contents
1	Previous stage prior to the start of the run (M)
2	Previous discharge prior to the start of the run

Position	Contents
	(CMS)
3	Rate of change in stage/discharge per time interval prior to the start of the run
4	Number of missing values prior to the start of the run (integer value)

Subroutine Names and Functions:

Subroutine	Function
PIN23	Input cards and stores values in PO and CO arrays
PRP23	Print information in PO array
PRC23	Print information in CO array
EX23	Execute the Operation
FSTQCO	Compute and saves carryover during Operational save carryover run
COX23	Perform carryover transfer
PUC23	Punch information in PO and CO arrays
TAB23	Make entry into Operations Table

Subroutines PIN23, ZPRP23, PRC23, COX23 and PUC23 have the standard argument lists for these subroutines as given in Section VIII.4.3.

SUBROUTINE EX23 (PO,CO,QDATA,HDATA,LOCPTR,T1)

Function: This is the execution routine for the STAGE-Q Operation.

Argument List:

Argument	Input/ Output	Type	Dimension	Description
PO	Input	R*4	18	Parameter array
CO	Both	R*4	4	Carryover array
QDATA	Both	R*4	Variable	Discharge data time series array
HDATA	Both	R*4	Variable	Stage data time series array
LOCPTR	Input	R*4	Variable	Loop Rating Curve routine work space
T1	Input	R*4	Variable	Loop Rating Curve routine work space

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SUBROUTINE TAB23 (TO,LEFT,IUSET,NXT,LPO,PO,LCO,TS,MTS,NWORK,NDD,LWORK
                 ,
                 IDT)
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Function: This is the Operations Table entry routine for the STAGE-Q Operation.

Argument List: The arguments for this subroutine are similar to the arguments for the Operations Table entry subroutines for other Operations. A description of the arguments is contained in Section VIII.4.2-TAB.

Operation Table Array: The contents of the TO array are:

Position	Contents
1	The number of this Operation
2	Location in the T array of the next Operation to be executed
3	Location of the parameter array for the Operation in the P array
4	Location of the carryover array for the Operation in the C array
5	Location of stage data in the D array
6	Location of discharge data in the D array
7	Location of Rating Curve identifier in the P array
8	Location of work space for pointers in the D array
9	Location of work space for times in the D array