VIII.3.3-FFG FLASH FLOOD GUIDANCE OPERATION

Identifier: FFG

Operation Number: 32

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

Position	Type	Contents
1	I*4	Version number for this Operation
2-3	R*4	Flash flood guidance area identifier
4-8	R*4	Flash flood guidance area description
9-10	R*4	Operation identifier for rainfall-runoff Operation
11-12	R*4	Operation name for rainfall-runoff Operation
13-14	R*4	Operation identifier for snow Operation (blank if none used)
15-16	R*4	Operation name for snow Operation
17-18	R*4	Basin boundary identifier
19	R*4	Duration indicator: 0 = 1, 3 and 6 hours 1 = 1, 3, 6 and 12 hours 2 = 1, 3, 6, 12 and 24 hours
20	I*4	Operation number of snow Operation: 0 = not used
21	I*4	Operation number of rainfall-runoff Operation
22	R*4	Record number in the Preprocessor Parametric Data base of FFG parameter record
23	R*4	Number of words in the FFG parameter record
24	I*4	Location of minimum and maximum threshold runoff in PO array: 0 = minimum and maximum runoff not supplied by user
25-29	R*4	Unused (set to zero)
PO(24)	R*4	Minimum threshold runoff (when default 0.10 inch not desired)

Position	Type	Contents
PO(24)+1	R*4	Maximum threshold runoff (when default 2.50 inches not desired)

Subroutines Names and Functions: The subroutines associated with this Operation are:

Subroutine	Function
PIN32	Input card images and stores values in the PO array
PRP32	Print information in PO array
EX32	Execute the operation
PUC32	Output card images with information from PO array which may be used by the PIN32 routine
TAB322	Make entry into Operations Table
WRST32	Print messages for status codes returned from routine WPPREC
PEDY32	Compute PED and Y for API-CONT Operation
RCON32	Retrieve the data needed to run API-CONT Operation
RCIN32	Retrieve the data needed to run API-CIN Operation
RHAR32	Retrieve the data needed to run API-HAR Operation
RHFD32	Retrieve the data needed to run API-HFD Operation
RMKC32	Retrieve the data needed to run API-MKC Operation
RSAC32	Retrieve the data needed to run SAC-SMA Operation
RSNO32	Retrieve parameters and carryovers for SNOW-17 Operation
CAPI32	Compute runoff using API-CONT Operation
SAC32	Compute runoff using SAC-SMA Operation
SNO32	Compute melt using SNOW-17 Operation
DEL32	Delete a FFG parameter record

Subroutines PRP32 and PUC32 have the standard argument lists for these routines as described in Section VIII.4.3.

SUBROUTINE PIN32(PO,LEFTP,IUSEP,P,MP,PARRY,LARRY)

Function: This is the input subroutine for the Flash Flood Guidance Operation. This subroutine inputs card images for the operation, fills the PO array and creates or updates the FFG parameter array.

Argument List:

Variable	Input/ Output	Type	Dimension	Description
PO	Output	R*4	Variable	Parameters and other information
LEFTP	Input	I*4	1	Maximum space available for PO array
IUSEP	Output	I*4	1	Amount of space used by PO array
P	Input	R*4	Variable	Parameter array
MP	Input	I*4	1	Size of the P array
PARRY	Output	R*4	Variable	Work space
LARRY	Input	I*4	1	Maximum amount of space available for PARRY array

SUBROUTINE EX32 (PO,PS,CS,PR,CR,TASN,TARR,RSTS,FFG)

Function: This is the execution subroutine for Operation FFG.

Argument List:

Variable	Input/ Output	Type	Dimension	Description
PO	Input	R*4	Variable	Parameters and other information
PS	Input	R*4	Variable	Snow Operation parameters
CS	Input	R*4	Variable	Snow Operation current carryover
PR	Input	R*4	Variable	Rainfall-runoff Operation parameters
CR	Input	R*4	Variable	Rainfall-runoff Operation current carryover
TASN	Input	R*4	Variable	Air temperature time series needed for snow Operation
TARR	Input	R*4	Variable	Air temperature time series needed for rainfall-runoff Operation
RSTS	Input	R*4	Variable	Rain-snow elevation time series used for SMA-SAC Operation
FFG	Output	R*4	Variable	Dummy array to hold FFG parameter data

SUBROUTINE TAB32 (TO,LEFT,IUSET,NXT,LPO,PO,TS,MTS,LWORK,IDT)

Function: This is the Operations Table entry subroutine for Operation FFG.

Arguments 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	Operation number
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 snow Operation parameters: 0 = not used
5	Location of snow Operation carryover in the C array: 0 = not used
6	Location of the rainfall-runoff Operation parameters
7	Location of rainfall-runoff Operation carryover in the C array
8	Location of the temperature time series used by the snow Operation in the D array: 0 = not used
9	Location of the temperature time series used by the rainfall-runoff Operation in the D array: 0 = not used
10	Location of rain-snow elevation time series in the D array: 0 = not used
11	Location of work space to hold FFG parmeter array