VI.3.3B-SYSTEM-DEFINE-AREA PROGRAM PPINIT DEFINE AREA PARAMETERS (MARO)

Purpose

The AREA parameter group is used to define or redefine parameters for the following area types:

o Mean Areal Runoff (MARO)

Input Data

The general format of the DEFINE command is described on page VI.3.3B-DEFINE. The input described here immediately follows the DEFINE command.

Card	<u>l</u> <u>Field</u>	Requir <u>Optior</u>	red/ nal 1/	Format	Description
The	following	input	is used	to define	MARO area parameters. $\underline{2}/$
1	1	R		A	'MARO'
	2	R		A8	Identifier
	3	R	#	A20	Description
	4	R	#	R	Latitude (decimal degrees) associated with the area
	5	R	#	R	Longitude
	б	R	#	A{I})	Grid point address of each grid point in the MARO area: <u>3</u> / 'GPA ({address})'
	7	R	#	A({I})	Rainfall-runoff relation number associated with each grid point: <u>4</u> / 'RRN ({number})'
	8	R	#	A	Identifier of 6 hour precipitation station assigned to the area <u>5</u> /
	9	R	#	A({I,I})	Three selected MDR boxes that surround the area: <u>6</u> / 'MDR(3*(row,col))'
	10	0	#	A({A4})	Indicator to not generate MAPG and/or MAPI time series for the area (default is to generate both MAPG and

Required/CardFieldOptional 1/FormatDescription

MAPI): <u>7</u>/

'NOTS({type})'

Notes:

- $\underline{1}/$ A '#' indicates that the parameter value can be changed when redefining an area.
- $\underline{2}$ / If an area type is being redefined, all the required parameters for the type must be entered. The optional parameters need to be entered only if they are being changed. Only those parameters with a '#' next to the required/optional indicator can be changed.
- <u>3</u>/ The grid point address is a three or four digit number where the first one or two digits are the degree box number (one degree latitude by one degree longitude is a degree box), the next digit indicates tenths of a degree north of the SE corner of the box, and the last digit indicates tenths of a degree west of the SE corner. The allowable degree boxes are defined using the DEFINE GRID command. Grid points near area boundaries may be included in more than one area.
- <u>4</u>/ The allowable rainfall-runoff relationship numbers are defined using the DEFINE RFROCNST command.
- 5/ The first order station is used to time distribute daily MARO values when none of the grid points within the area or the surrounding MDR boxes can be used. Any station with a 6-hour reporting time can be used. The station should not have a grid point address that is within the area.
- 6/ The MDR boxes are used to time distribute daily MARO values when none of the grid points within the area can be used. The centroid grid point of the selected MDR boxes cannot be one of the grid points assigned to the area.
- <u>7</u>/ Besides MARO time series, a Mean Areal Precipitation based on a Grid analysis (MAPG) and a Mean Areal Antecedent Precipitation Index (MAPI) time series can be generated for an area. The MAPG is a 6-hour time series, while MAPI is a daily time series. The MAPG and MAPI time series will typically not be used in the forecast component, but are generated for use by external display programs.