RULE CURVE LIST PROGRAM

PROGRAM: RCLIST.EXE

INTRODUCTION. This program reads a TABOUT file (the binary output file) created by the HYSSR program and writes the rule curves for requested projects to an ASCII file that can be printed. The program will either print two rule curves for each project: the First Year Critical Rule Curve (CRC1) and either the Base Energy Content Curve (BECC) or the Assured Refill Curve (ARC); or all six rule curves for each project: the Mandatory Rule Curve (MRC), the BECC or the ARC, the CRC1, the Second Year Critical Rule Curve (CRC2), the Third Year Critical Rule Curve (CRC3), and the Fourth Year Critical Rule Curve (CRC4). See the Glossary for further definition of these rule curves. These rule curves may be printed in various types of units (see Input Section), with or without corresponding elevations.

INPUT. The RCLIST program executes in batch mode, so it requires a control file named **C:\HYSSR\CONFILES\RCLIST.CON**. This control file defines the names of the input data file, the output file, the Study Characteristics file, and the TABOUT file. A sample control file follows:

```
* C:\HYSSR\CONFILES\RCLIST.CON
*
*  Unit 5 is the input data
*  Unit 6 is the output data
*  Unit 7 is the Study Characteristics file
*  Unit 14 is the HYSSR output file (TABOUT)
*
*    FORMAT  T4,I2,T7,A26,T34,A11,T46,A7,T54,A10,T65,I4
*
*_____________________________________________________________
*UNIT FILE NAME                    FORMAT      STATUS  ACCESS  RECL
*_____________________________________________________________
   5 C:\HYSSR\DATA\RCLIST.IN      FORMATTED   OLD
   6 C:\HYSSR\DATA\RCLIST.PRN     FORMATTED   UNKNOWN
   7 C:\HYSSR\STCHAR93.STY        UNFORMATTED OLD
  14 C:\HYSSR\DATA\TABOUT.93      UNFORMATTED OLD     DIRECT   104
*_____________________________________________________________
```

The input data file specifies which rule curves will be printed, the units for these rule curves, and which projects should have rule curves printed. The input data uses the Standard HYSSR record format of 80 column

records, each beginning with either "01" or "10" in columns 1 and 2. Record code "01" contains information about the basic run options. The options are defined as the following:

OPTION	DEFINITION	DEFAULT
"STY"	Study year for output - use 4 digits (e.g. use 1999 for OY 1999 – 2000)	none
"BCP"	Beginning of critical period both year and period (e.g. 2811)	none
"ELV"	To suppress printing of elevations	print elevation
"MRC"	To print asterisk beside BECC values which are greater than MRC	no asterisk
"ARC"	Print ARC instead of BECC	print BECC
" RC"	Print the six rule curves MRC, BECC or ARC, CRC1, CRC2, CRC3, CRC4	CRC1 and BECC or ARC
"KEY"	Indicates units of storage for the rule curves	CONTENT (KAF)

If the value for the **"KEY"** option equals **0** (zero) or no "KEY" option is present, the rule curves will be printed in units of storage content (**CONTENT (KAF)**). KEY values and their respective rule curve units are as follows:

KEY VALUE	RULE CURVE UNITS
0	CONTENT (KAF)
1	CONTENT (KSFD)
2	DRAFT (KAF)
3	DRAFT (KSFD)
4	USABLE (KAF)
5	USABLE (KSFD)
9	print ELEVATION (FEET) only

Record code "10" defines the projects (by external project number) which require rule curves to be printed. There must be only one project number per record. The external project number must appear in columns 8-10. Also any change to a project's Storage Upper Bounds (SUB) from the value in the Study Characteristics file may be entered on record code "10". The identifier "SUB" must appear in columns 21-23, and the desired SUB value in KAF must be in columns 24-32. This is done when a SUB has been changed in the HYSSR regulation, but the change has not been made in the Study Characteristics file. The SUB used for the RCLIST program should be the same SUB used in the HYSSR regulation. A sample input file follows:

SAMPLE INPUT:

```
01                  STY     1999BCP     2811MRC          RC
01                  KEY        1
10       3          SUB   5870.0
10      31
10      19
10      10          SUB   3561.0
```

OUTPUT. The program creates an output file containing 133 characters across the page. This file may be printed when the program has completed execution. A sample output is found on the next page.

PROGRAM EXECUTION ON THE PC. To execute the RCLIST program, have a copy of **RCLIST.EXE** in the local **C:\HYSSR\PGM** subdirectory. Now type **RCLIST** while in the **C:\HYSSR\PGM** subdirectory and the program will execute using the datasets named in RCLIST.CON. This control file must be in the local **C:\HYSSR\CONFILES** subdirectory and changed to meet the data file naming conventions being used. The existing format of the control file may not be altered.