

RESOP INPUT PROGRAM (RIP) USERS GUIDE

Program Documentation

This Appendix is the documentation for the Resop Input Program (RIP). The RIP program has been compiled using MICROSOFT FORTRAN.

Program Purpose and Description

This program is intended to aid engineers, soil conservationists, and technicians in the evaluation and design of ponds to provide a dependable water source for dry hydrants. This program automates the creation of input data sets for the RESOP computer program and providing an output table with yearly minimum storage volumes.

Installing the Program

The following files are required in order for the program to run.

INRESO	EXE	73760	04-06-88	2:29p
RESOP	EXE	46693	11-30-87	1:24p
RESSORT	EXE	55552	04-06-88	2:53p
RIP	BAT	237	04-06-88	2:59p

“FILE” *Rainfall file without file extension.*

The program should be installed in the RESOP sub-directory.

Running the Program

The following gives some basic information in running the RIP program. A more detailed description of these inputs can be found in Appendix A or TR-19, DETERMINATION OF STORAGE REQUIREMENTS TO MEET SUPPLY-DEMAND RELATIONSHIPS.

Change to the directory with the required program files and type RIP File (*filename or rainfall file without file extension*) and press ENTER to start the program. The following statements and questions will appear on the screen:

WELCOME TO THE RESOP INPUT PROGRAM

YOU ARE GOING TO BE ASKED A SERIES OF QUESTION

PLEASE HAVE YOUR RESOP INPUT SHEETS READY

INPUT TITLE LINE #1 (LIMIT 50 CHARACTERS) Enter job title

INPUT TITLE LINE #2 (LIMIT 50 CHARACTERS) Enter job location

1. HOW MANY STORAGE-AREA DATA PAIRS ARE YOU USING? Enter number of data pairs (A maximum of 12 data pairs can be used with 4 being the recommended minimum and must be entered from largest value to smallest value)

NOTE: All storage values are in acre-feet.

2. WHAT IS THE FIRST GREATEST STORAGE AMOUNT (ac-ft)? Enter maximum storage value
3. WHAT IS THE RESPECTIVE SURFACE AREA (ac)? Enter surface area at elevation of maximum storage
4. STORAGE AMOUNT? Enter storage value for second largest storage volume (This question will be repeated for the number of data pairs entered in question 1)
5. SURFACE AREA? Enter surface area for second largest storage volume (This question will be repeated for the number of data pairs entered in question 1)
6. ARE THESE VALUES CORRECT (Y or N)?
7. INPUT THE UPPER STORAGE LIMIT Enter maximum storage volume
8. INPUT THE STARTING STORAGE Enter starting storage volume
9. INPUT THE LOWER STORAGE LIMIT Enter storage volume for 4 feet depth of water
10. INPUT THE DRAINAGE AREA Enter area of contributing drainage basin
11. INPUT THE EVAPORATION COEFFICIENT Enter the appropriate coefficient from Appendix 1, Dry Hydrant Design Criteria
12. INPUT THE DRAINAGE AREA 30 DAY CURVE NUMBER
13. ARE THESE VALUES CORRECT? (Y or N)?
14. INPUT THE "GENERAL DATA FIELD 3" CODE (0-3) Enter 0 when no other sites above or below this site are being considered
15. ENTER THE SEEPAGE VALUES IN DESCENDING ORDER
(12 PAIRS MAX must enter at least one pair) USE 9999 TO STOP THE PROCESS)
SURFACE AREA (Ac)?
SEEPAGE RATE (in/mo)?
16. WERE THESE VALUES CORRECT? (Y or N)
17. DO YOU WANT TO USE EVAP. COEF. FACTORS? (Y or N)
ENTER FACTOR NUMBER
18. ENTER MONTHLY EVAPORATION VALUES (in.)
19. ENTER EVAPORATION FOR MONTH #
ENTER MONTHLY EVAPORATION VALUES
WERE THESE VALUES CORRECT? (Y or N)

20. ENTER MONTHLY DEMAND (ac-ft)

ENTER DEMAND FOR MONTH #

ENTER MONTHLY DEMAND AS 0 UNLESS POND WILL BE USED TO
SUPPLY OTHER USES

21. WERE THESE VALUES CORRECT? (Y or N)

22. ENTER OTHER MONTHLY + OR – FROM RESERVOIR (ac-ft)

ENTER OTHER CHANGE FOR MONTH #

ENTER 0

23. WERE THESE VALUES CORRECT? (Y or N)

24. END OF DATA INPUT

25. BUILDING FILE *FILE.INP*

After *FILE.INP* (File is the same name as the rainfall input file) has been automatically saved RIP calls the RESOP program. You will then be asked to enter the input drive ID and file name, which will be *FILE.INP*. You will also be prompted for the output drive ID and file name, which will be *FILE.PRN*

When RESOP has finished processing the input data the RESSORT program will scan the output file (*FILE.PRN*) and create a new output file called *FILE.SRT*. This file will contain the minimum storage volume for each year of record.