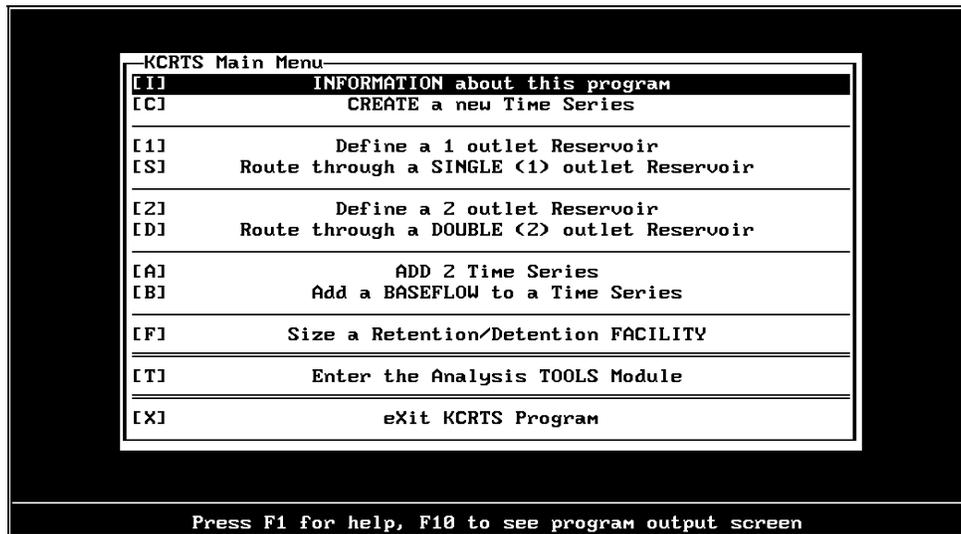


## 1. MAIN MENU DESCRIPTION

Start the program using one of the three methods described below. The Main Menu box should appear on the screen:



Activation of any of these routines will start from the Main Menu. Menu items can be selected by highlighting the item and pressing enter, or by pressing the letter shown in brackets to the left of the item title. The following is a brief description of the options listed on the menu (Figure 1). All menu choices are described in detail in subsequent sections.

### 1.1. INFORMATION ABOUT THIS PROGRAM [I]

Pressing the I key displays program information.

### 1.2. CREATE A NEW TIME SERIES [C]

This routine scales and sums the unit-area runoff files for the pervious and impervious land segments specified by the user to create a single composite runoff time series representative of the drainage area. This menu item can be selected by pressing the C key.

### 1.3. DEFINE A 1 OUTLET RESERVOIR [1]

This routine creates a stage-storage-outflow table based on user specified values. The reservoir may have more than one release structure; however, all surface discharges are combined in a single stage-outflow relationship to be used within the single outlet routing routine. This menu item can be selected by pressing the 1 key.

### 1.4. ROUTE THROUGH A SINGLE (1) OUTLET RESERVOIR [S]

This routine creates an outflow time series from a user-specified inflow time series file and single outlet reservoir file (lake, pond, detention pipe, etc.). This routine is based upon the level pool routing technique described in *King County Surface Water Design Manual*. This menu item can be selected by pressing the S key.

### 1.5. DEFINE A 2 OUTLET RESERVOIR [2]

Same as Define a 1 outlet Reservoir, but modified to accommodate a split outflow from the reservoir, where the flows are directed to two different discharge locations. The user specifies one stage-storage and two stage-outflow relationships for the reservoir. This menu item can be selected by pressing the 2 key.

### 1.6. ROUTE THROUGH A DOUBLE (2) OUTLET RESERVOIR [D]

Same as Route through a SINGLE outlet Reservoir, but modified to create two outflow time series based on an inflow time series being routed through a reservoir with dual discharge locations. This routine is based upon the level pool routing technique described in *King County Surface Water Design Manual*. This menu item can be selected by pressing the D key.

### 1.7. ADD 2 TIME SERIES [A]

This routine scales and/or sums multiple time series together creating a single combined time series. The input time series are created by one of the time series program routines. Phasing relationships between the time series can be adjusted by inputting travel times (in even increments of the timestep) to a common point. This menu item can be selected by pressing the A key.

### 1.8. ADD A BASEFLOW TO A TIME SERIES [B]

This routine adds a constant baseflow to a time series created by one of the time series program routines. The baseflow is added to every timestep of the time series. This menu item can be selected by pressing the B key.

### 1.9. SIZE A RETENTION/DETENTION FACILITY [F]

This routine provides an approximate design for a retention/detention facility based on user-specified information. The facilities that can be sized include Retention/Detention Ponds, Retention/Detention Tanks, Detention Vaults, and Gravel Infiltration Trenches. Refer to the Section 7 for more information. This menu item can be selected by pressing the F key.

### 1.10. ENTER THE ANALYSIS TOOLS MODULE [T]

This is a collection of routines that analyzes time series created by one of the time series program routines. The routines include Extract/Plot Hydrographs, Compute/Plot/Compare Flow Durations, Compute/Plot Peaks and Flow Frequencies, and Compute Volumes of a Hydrograph. This menu item can be selected by pressing the T key.

**1.11. EXIT KCRTS PROGRAM [X]**

This option ends the program and returns the computer to the DOS prompt. This menu item can be selected by pressing the X key.

**1.12. CLOSE EXEC FILE...CONTINUE INTERACTIVE**

This option appears only when operating in the EXEC record mode. When selected, the program will continue interactively but further commands will not be saved to the EXEC file. When running the EXEC file, this EXEC file stops execution at this point, but continues running KCRTS in interactive mode. See The Getting Started section for information on the use of EXEC files.