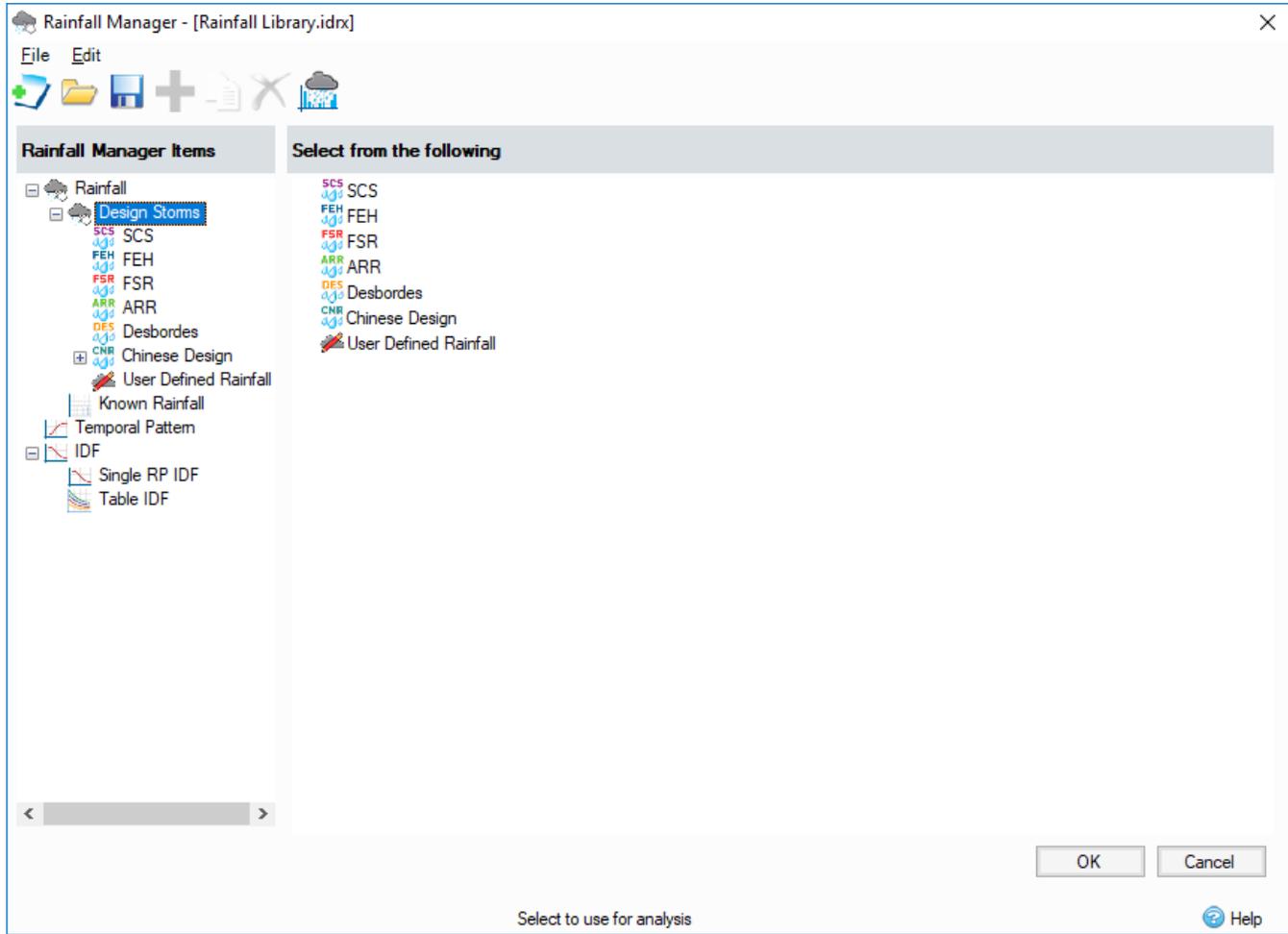


# Rainfall Manager

The **Rainfall Manager** allows management of rainfall data, including building of new rainfalls, IDF profiles or Temporal Patterns which can be used with previously defined rainfalls. Users can also save and load entire sets of rainfalls.

Rainfall Manager requires that an instance of SQL Server LocalDB is installed on the system, this will automatically be downloaded as part of the installer if it is not already present.



## **Rainfall Manager can be opened by:**

- by clicking on the Rainfall Manager option in the Tree View or
- by clicking 'Edit' button in the Analysis Criteria, Volume Calculators or Design Criteria forms.

Rainfall Manager requires a library to work with. If no library has been defined, the form will ask the user to create a new or load in an existing one. The types of library files that can be currently loaded are \*.idrx files (older \*.xprm or \*.xprx files.)

The workbench is divided in two containers: the left one contains the tree of items, the right one - items under the tree node or a specific control, if the node is a defined item.

## **A subset of rainfall can be imported by:**

Clicking File Import inside the rainfall manager. This opens the rainfall manager importer form. Here you can select rainfall items to import from one rainfall file into the current rainfall manager.

## **A set of Rainfall options are available to choose from:**



Some of the methods may not be available for your region. For more information, refer to the [Regionalisation](#) topic.

- **SCS Rainfall Method** - was developed by the [United States Department of Agriculture - Natural Resources Conservation Service \(USDA-NRCS\)](#). It generated four synthetic 24-hour rainfall distribution curves that cover all geographical regions of the United States. These curves are described in Appendix B of Technical Release 55.
- **FEH Rainfall** - The Flood Estimation Handbook (FEH) software suite implements the Centre for Ecology and Hydrology (CEH) national design standards for rainfall and river flood frequency estimation in the UK. This was published in 1999 and used rainfall from a dataset between 1961 - 1990.
- **FSR Rainfall** - The Flood Studies Report (FSR) rainfall-runoff method developed by the Institute of Hydrology (now CEH) in the UK. This was published in the mid-1970s and used rainfall from 1941 - 1970.
- **Australian Rainfall and Runoff** - Australian Rainfall and Runoff (ARR) is a national guideline document for the estimation of design flood characteristics in Australia. It is published by Engineers Australia. The coefficients entered will describe the rainfall for a particular area of the country.
- **User Defined Rainfall** - Allows one or more rainfall events to be created using a Temporal Pattern based on a given duration and an total Depth (or Average Intensity).
- **Desbordes Rainfall** - French Rainfall methodology based on a double-triangle rainfall hyetograph as proposed by Prof. Michel Desbordes (Université de Montpellier) in 1980.
- **Chinese Rainfall** - Design rainfall generated using Chicago rainfall, as proposed by C.J.Keifer & H.H.Chu in 1957.
- **Known Rainfall**- A set of rainfall records can be entered or loaded from file. These could be from other synthetic rainfall methodology outside of those listed above or even a real recorded event. Options to load from CSV, TXT and Excel formats are available for ease.
- **Temporal Pattern** - When incorporated into the **User Defined Rainfall** option will specify the shape of the resultant hyetograph
- **IDF** - Used as part of the Rational Method Design Criteria methodology for sizing of pipes and channels.