SIEN HYDROLOGY PROGRAMS

The five computer programs were developed for the SIEN Hydrology study are saved in the folder sien\_hydro\_programs. All of the programs were written for the MATLAB operating system. A standard MATLAB license will be required to run them, however, no additional MATLAB tool boxes are needed. Each program begins with a comment line or two that describes what the program does. All of the programs use the same input; a text file of four columns listing the month, day, year, and daily mean discharge, in cubic feet per second, for the complete water years of gaging station record. The daily values file, MRHq.txt, for the Merced River at Happy Isles is included in the sien\_hydro\_programs file as an example. The text file was generated from the excel spreadsheet file MRHq saved in the attached sien\_hydro\_strflw folder. The flow duration program, fldur.m, was run for the Happy Isles record to generate the output file, MRHq\_fld, also included. The first five executable lines of each program are the same; they identify the input file (without the .txt extension) and define the variables of the four columns. An output file name will also need to be provided.