

Hydrologic Modeling Inventory Model Description Form

Name of Model:

Stochastic Event Flood Model (SEFM)

Model Type:

Stochastic Rainfall-Runoff Computation Model

Model Objective(s):

Develop magnitude-frequency curves for flood peak discharge, runoff volume and maximum reservoir level

Agency and Office:

MGS Engineering Consultants Inc.

Technical Contact and Address:

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Model Structure or Mathematical Basis:

Stochastic Inputs Generator (Fortran, Visual Basic, Excel) compatible with HEC-1, can be modified for use with lumped or distributed rainfall-runoff models

Model Parameters:

Spatial Scale Employed in the Model:

User option

Temporal Scale Employed in the Model:

User option

Input Data Requirements:

Analysis of historical data, hydromekological, hydrological hydraulic

Computer Requirements:

Pentium

Model Output:

Flood hydrographs

Parameter Estimation / Model Calibration:

Analysis historical data/ historical floods

Model Testing and Verification:

Historical floods/historical flood frequency curves

Model Sensitivity:

Dependent upon spatial and temporal scales selected by user

Model Reliability:

Dependent upon success in calibration

Model Application / Case Studies:

Several case studies

Documentation:

Technical support manual

Other Comments: