

# Introduction to RMC-RFA Software

## DLS-114, Module 2.0



**U.S. ARMY**



**US Army Corps  
of Engineers®**

Dam and Levee  
Safety Programs

March 2026 / Version 1

GAVINS POINT DAM, SD (SOURCE: USACE)

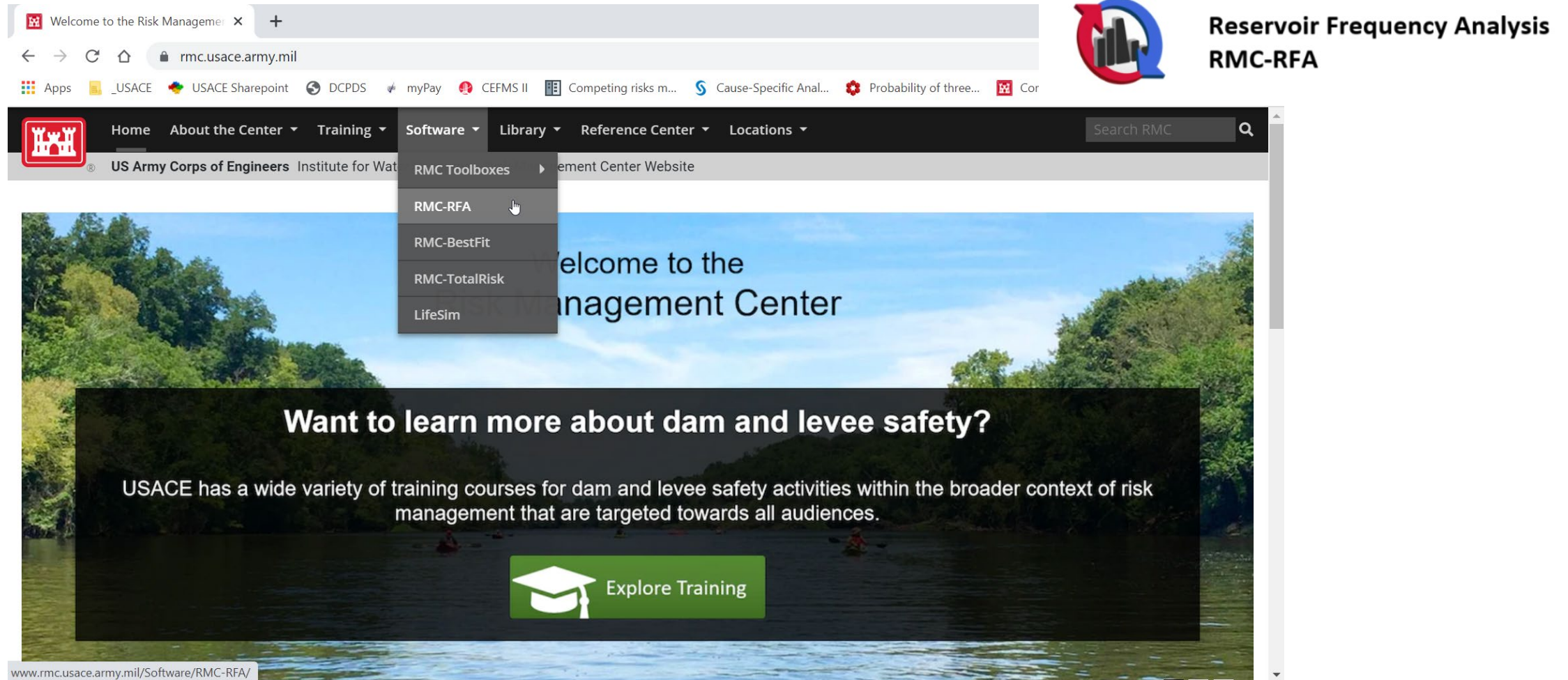
# Learning Objectives

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- Introduce the RMC-RFA software
- Provide an overview of model
  - Set up
  - Inputs
  - Analyses
  - Reservoir models
  - Simulations



# RMC-RFA Software



The screenshot shows a web browser window with the URL `rmc.usace.army.mil`. The page features a dark navigation bar with the US Army Corps of Engineers logo and a search bar. A dropdown menu under the 'Software' tab lists 'RMC-RFA' as the selected option. The main content area has a background image of a river and a dark overlay with the text 'Want to learn more about dam and levee safety?' and 'USACE has a wide variety of training courses for dam and levee safety activities within the broader context of risk management that are targeted towards all audiences.' A green button with a graduation cap icon and the text 'Explore Training' is also visible.

Welcome to the Risk Management Center Website

US Army Corps of Engineers Institute for Water Resources

Home About the Center Training Software Library Reference Center Locations

Search RMC

RMC Toolboxes

RMC-RFA

RMC-BestFit

RMC-TotalRisk

LifeSim

Welcome to the Risk Management Center

Want to learn more about dam and levee safety?

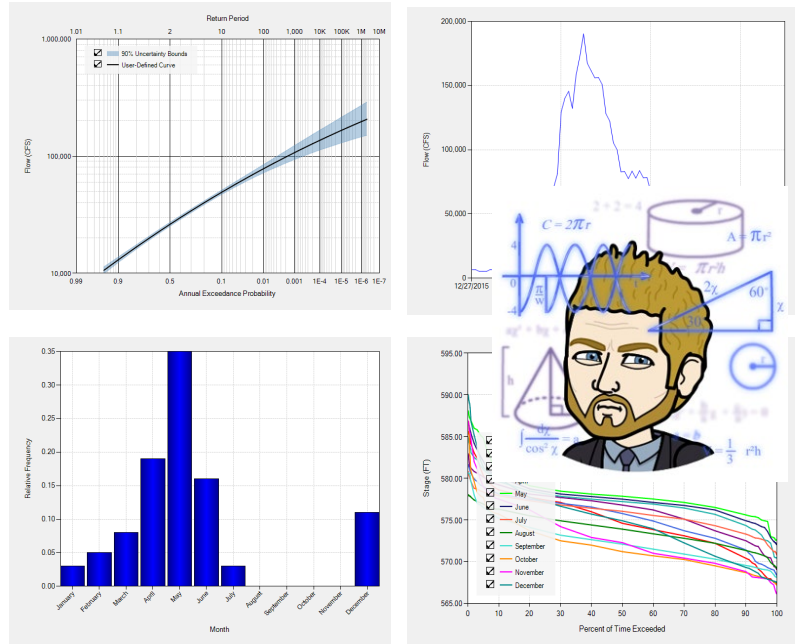
USACE has a wide variety of training courses for dam and levee safety activities within the broader context of risk management that are targeted towards all audiences.

Explore Training

`www.rmc.usace.army.mil/Software/RMC-RFA/`

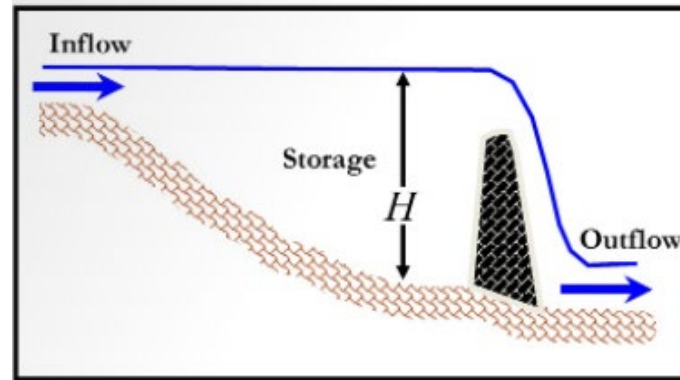


# Framework of RMC-RFA

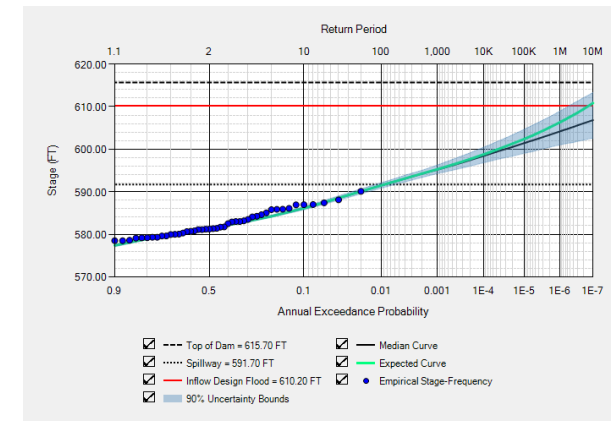


Inputs

$$I(t) - O(t) = \frac{dS}{dt}$$

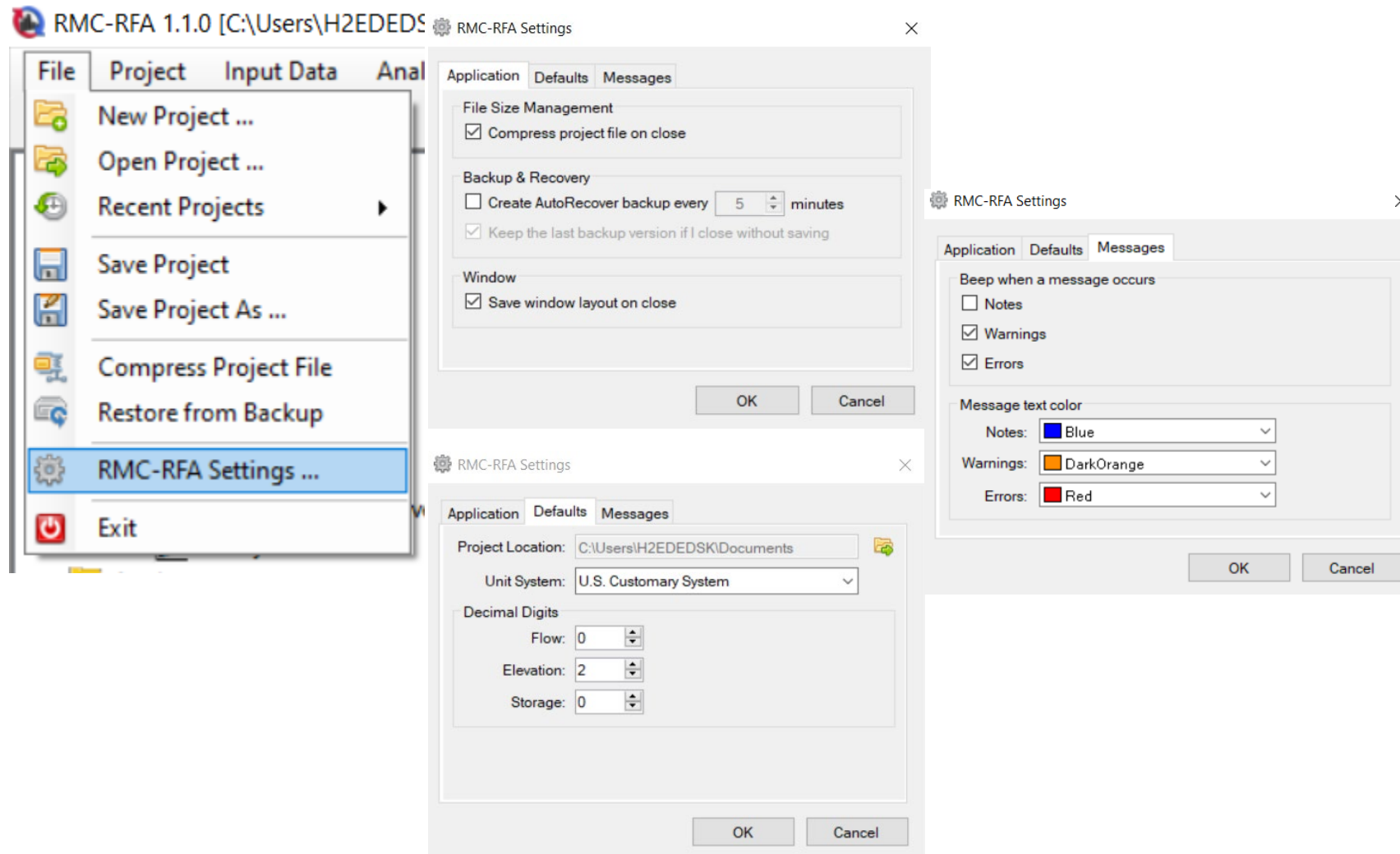


Model

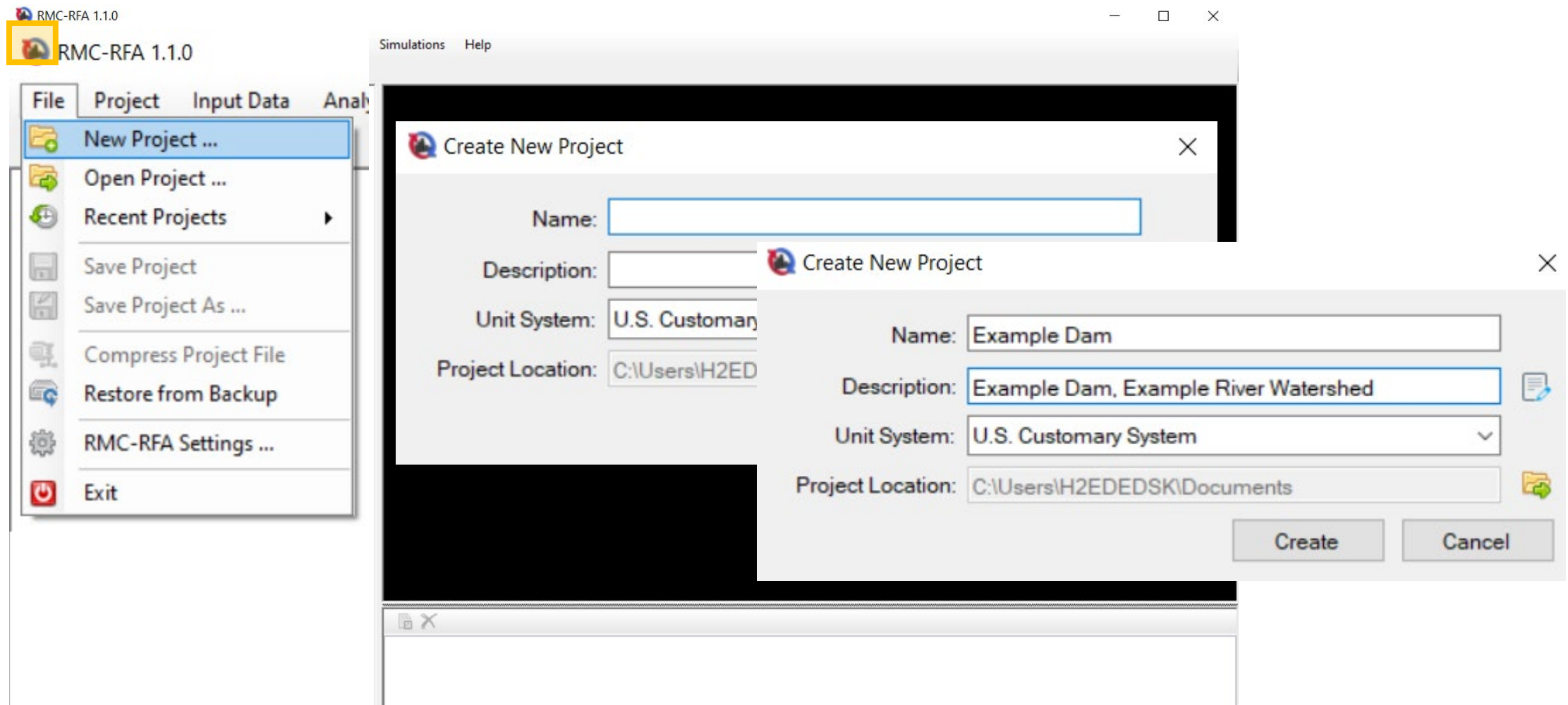


Outputs

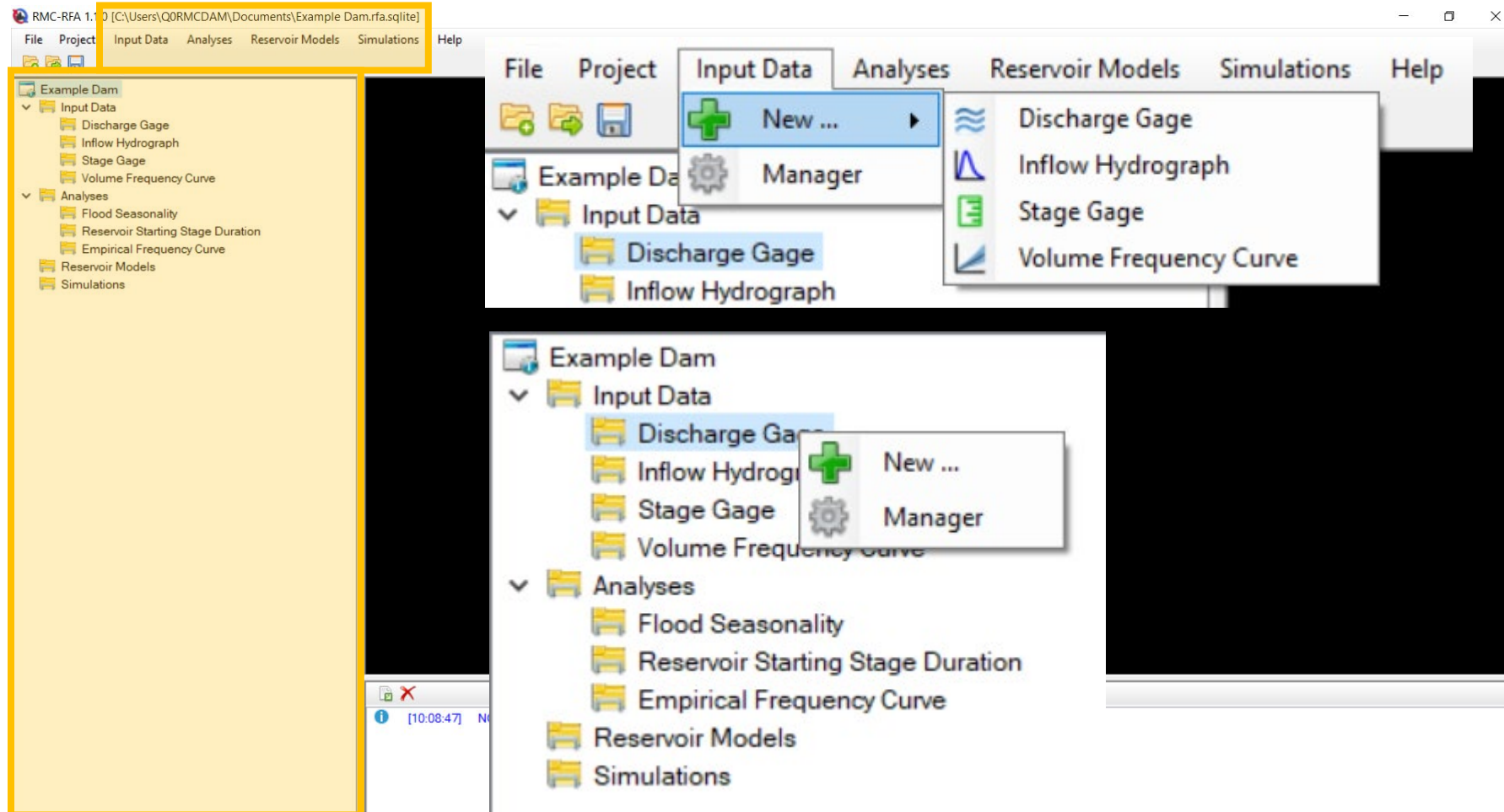
# Customization



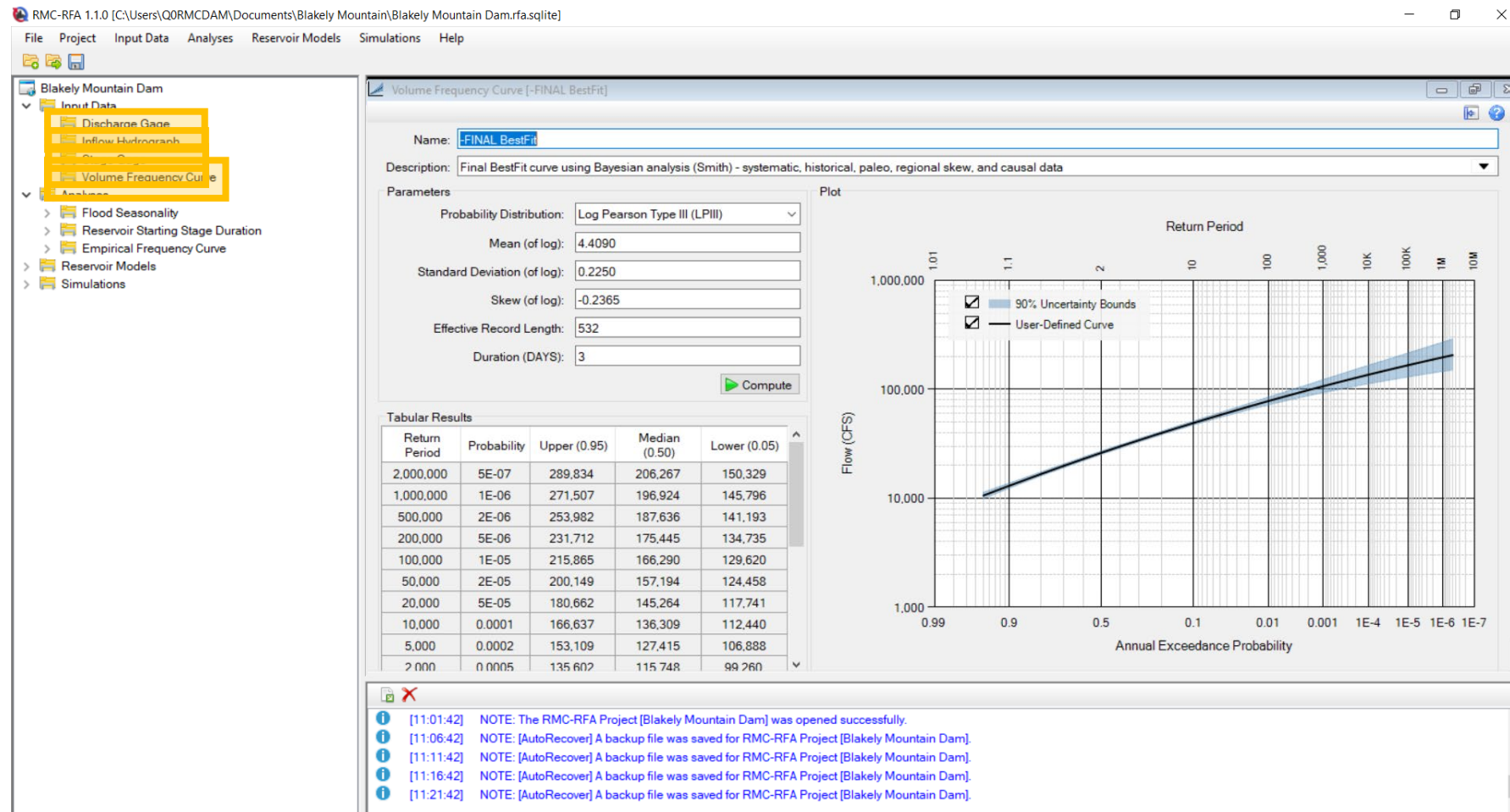
# Create a Project



# Adding Project Components

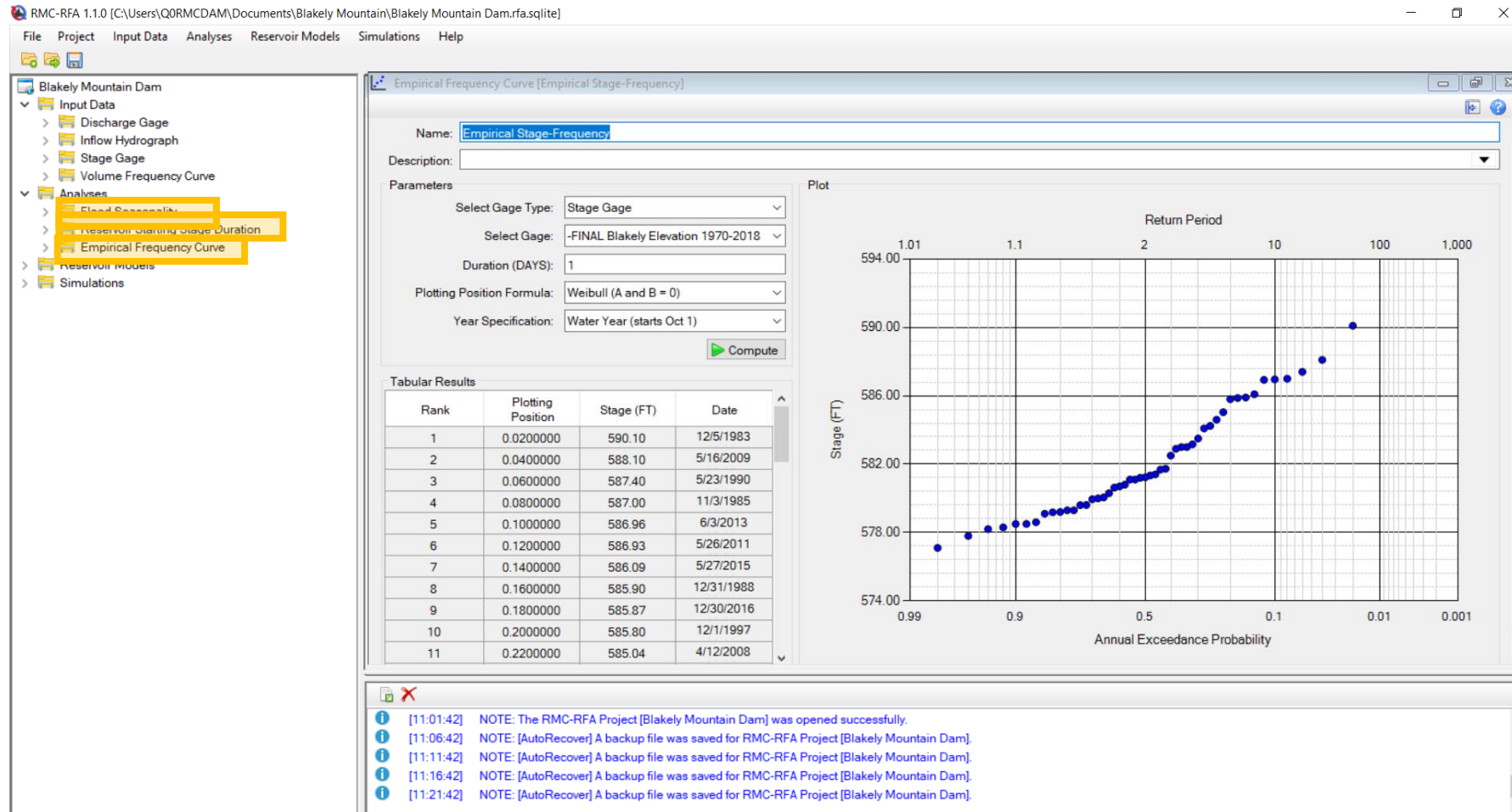


# Input Data

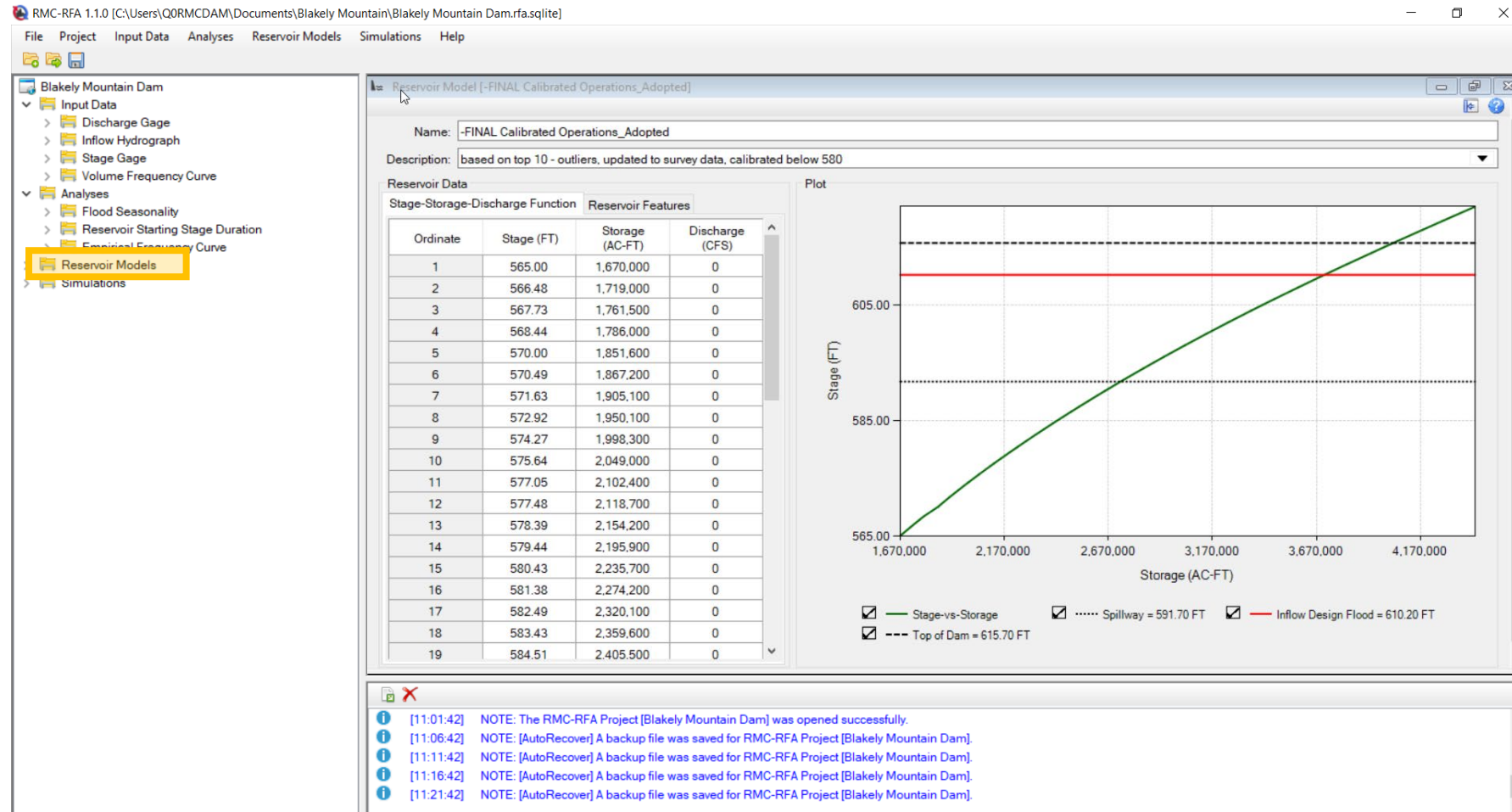




# Analyses



# Reservoir Models



# Run a Simulation

RMC-RFA 1.1.0 [C:\Users\Q0RMCDAM\Documents\Blakely Mountain\Blakely Mountain Dam.rfa.sqlite]

File Project Input Data Analyses Reservoir Models Simulations Help

Blakely Mountain Dam

- Input Data
  - Discharge Gage
  - Inflow Hydrograph
  - Stage Gage
  - Volume Frequency Curve
- Analyses
  - Flood Seasonality
  - Reservoir Starting Stage Duration
  - Empirical Frequency Curve
- Reservoir Models
  - Simulations

Simulation [-FINAL (F) BestFit Loading Curve]

Name: [-FINAL (F) BestFit Loading Curve]

Description: FINAL LOADING CURVE (full uncertainty) using BestFit VDF

Simulation Tabular Results

Sort Results By 1 of 1,000

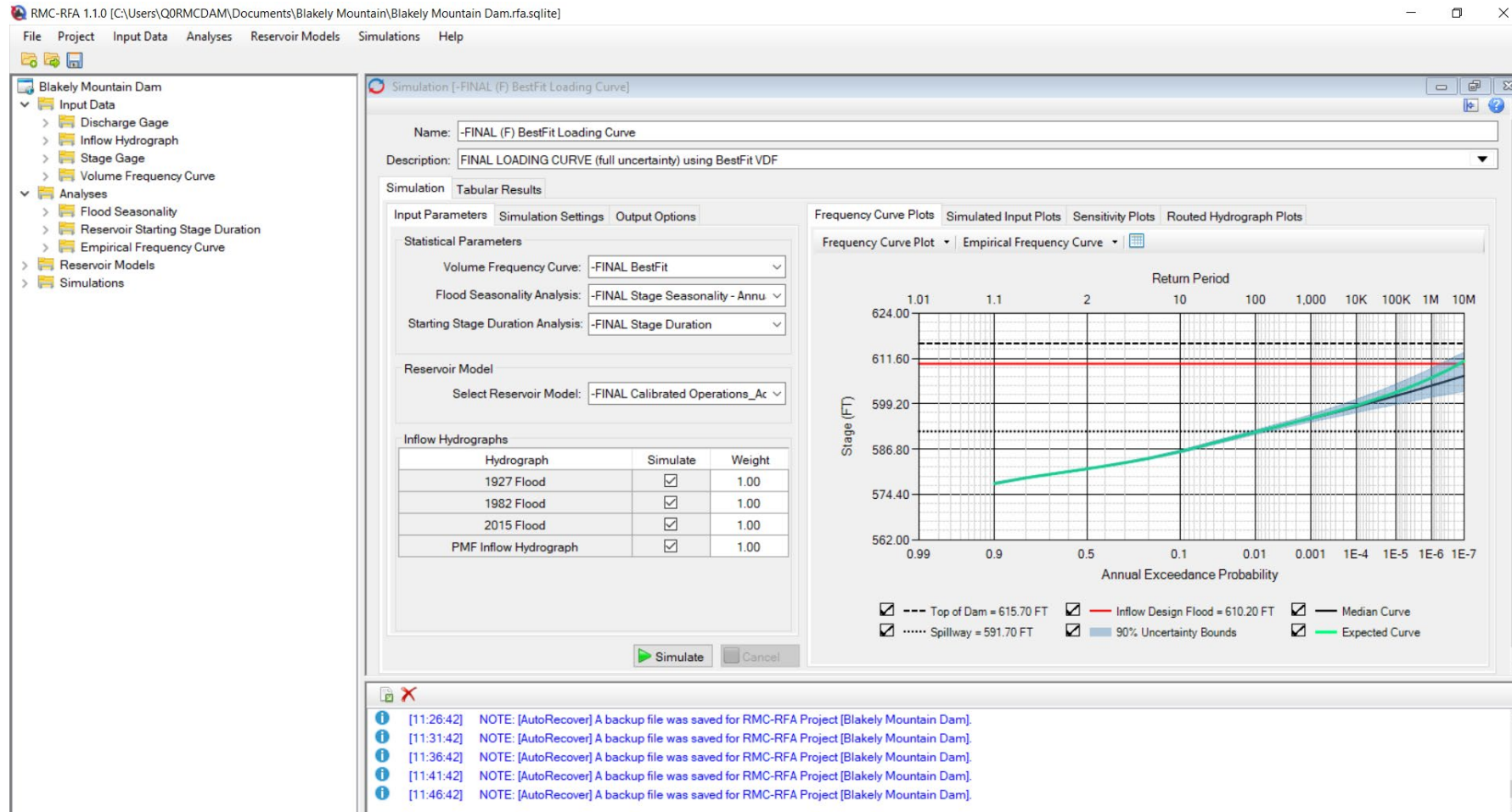
Realization	Event	Mean	Std Deviation	Skew	Inflow Volume (CFS)	Flood Season	Starting Stage (FT)	Hydrograph	Peak Stage (FT)	Peak Discharge	Discharge Volume
1	1	4.41	0.2267	-0.3121	28773	May	578.32	PMF Inflow H...	583.02		
1	2	4.41	0.2267	-0.3121	28610	April	577.03	2015 Flood	581.39		
1	3	4.41	0.2267	-0.3121	28447	March	576.26	PMF Inflow H...	581.06		
1	4	4.41	0.2267	-0.3121	28285	May	574.9	1982 Flood	579.3	0	0
1	5	4.41	0.2267	-0.3121	28122	December	575.57	PMF Inflow H...	580.36	0	0
1	6	4.41	0.2267	-0.3121	27960	June	574.5	1927 Flood	579.18	0	0
1	7	4.41	0.2267	-0.3121	27798	May	578.19	1982 Flood	582.3	0	0
1	8	4.41	0.2267	-0.3121	27635	December	569.97	2015 Flood	574.8	0	0
1	9	4.41	0.2267	-0.3121	27473	December	572.35	1927 Flood	577.14	0	0
1	10	4.41	0.2267	-0.3121	27311	May	579.67	2015 Flood	583.69	0	0
1	11	4.41	0.2267	-0.3121	27149	April	580.01	2015 Flood	583.98	0	0
1	12	4.41	0.2267	-0.3121	26988	May	577.39	1927 Flood	581.71	0	0
1	13	4.41	0.2267	-0.3121	26826	April	577.64	1927 Flood	581.91	0	0
1	14	4.41	0.2267	-0.3121	26664	July	577.92	PMF Inflow H...	582.31	0	0
1	15	4.41	0.2267	-0.3121	26503	May	578.19	2015 Flood	582.17	0	0
1	16	4.41	0.2267	-0.3121	26341	December	577.31	1927 Flood	581.54	0	0
1	17	4.41	0.2267	-0.3121	26180	December	574.15	1927 Flood	578.57	0	0
1	18	4.41	0.2267	-0.3121	26019	May	577.71	1927 Flood	581.86	0	0

Sort Results By 1 of 1,000

Sort Ascending Sort Descending

[11:01:42] NOTE: The RMC-RFA Project [Blakely Mountain Dam] was opened successfully.  
[11:06:42] NOTE: [AutoRecover] A backup file was saved for RMC-RFA Project [Blakely Mountain Dam].  
[11:11:42] NOTE: [AutoRecover] A backup file was saved for RMC-RFA Project [Blakely Mountain Dam].  
[11:16:42] NOTE: [AutoRecover] A backup file was saved for RMC-RFA Project [Blakely Mountain Dam].  
[11:21:42] NOTE: [AutoRecover] A backup file was saved for RMC-RFA Project [Blakely Mountain Dam].

# RMC-RFA





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# ? Questions

