



# 2024 WORKSHOPS

The goal of the 2D workshops is to develop and provide technical training to state agencies, local officials and the local technical community to assist in the transition from 1D to 2D Flood Risk Identification and NFIP Floodplain Management.

Eight CEC's are provided for the HEC-RAS 2D and PC-SWMM workshop. Nine CEC's are provided for the Risk MAP workshop.

<http://bit.ly/MOSEMAOutreach>

## 2D Modeling - Beginner Workshop HEC-RAS 6.5

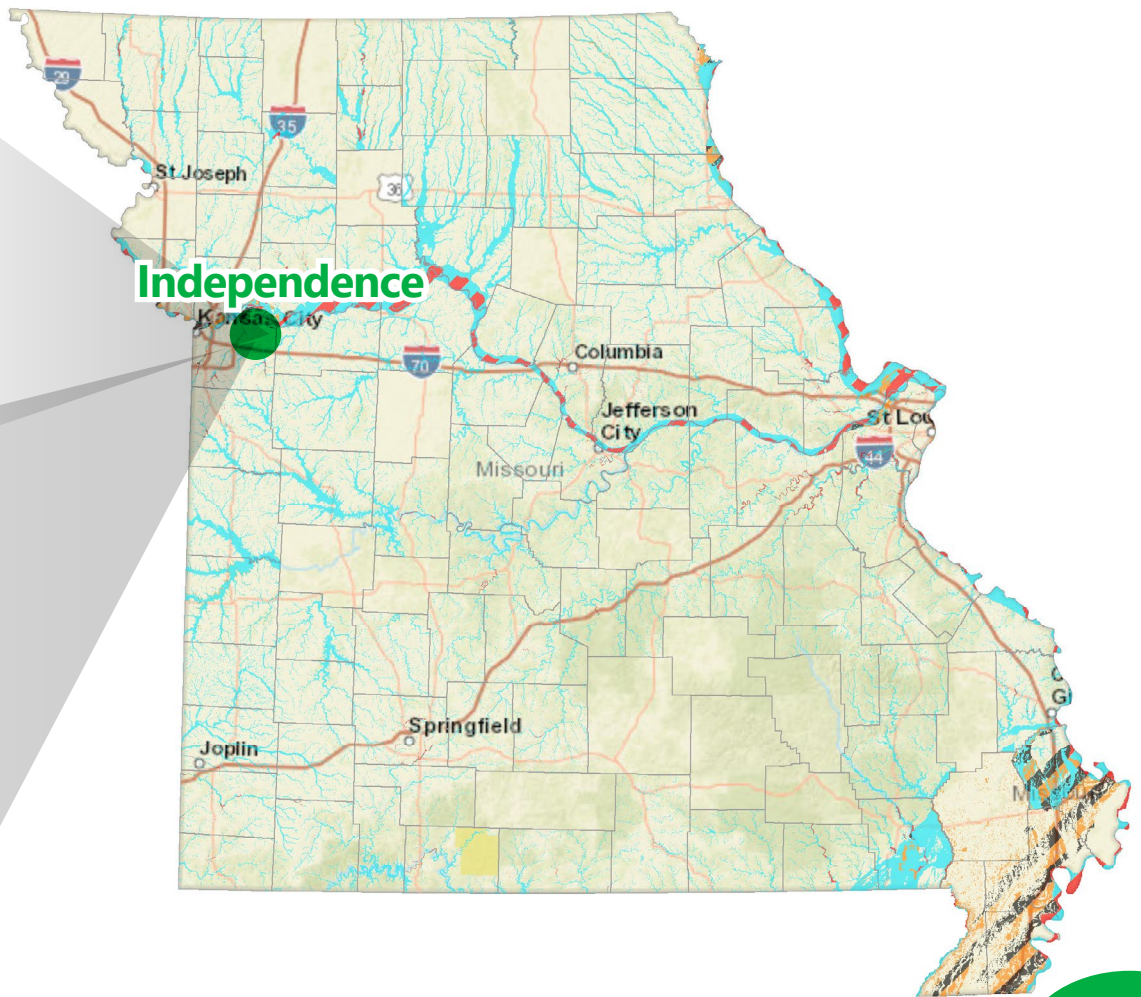
**August 20th, 8am - 4pm**

The City of Independence  
Utility Center (IUC)  
17221 East 23rd St S,  
Independence, MO 64057

## 2D Modeling - Advanced Workshop HEC-RAS 6.5

**August 21st, 8am - 4pm**

The City of Independence  
Utility Center (IUC)  
17221 East 23rd St S,  
Independence, MO 64057



**Course Dates  
Coming  
Soon!**

The PC SWMM 2D models cover areas of large closed system conveyances coupled with 2D analysis surface storage areas and conveyance paths.

The accuracy of risk identification is greatly enhanced with 2-D modeling but needs to be integrated locally to maximize its potential for effective floodplain management. During this workshop you can expect:

- Broadened knowledge of Flood Risk 2-D modeling
- Hands on experience pulling information from new 2-D models
- Continuity of synergy from Risk MAP deliverables
- Understanding of the NFIP floodplain versus the results of the 2-D hydraulic models
- Continued building of partnerships through education and utilizing comments to assist policy changes

**Training will include:**

- Description and explanation of model development hydrology and hydraulics
- User Guide for basic needs of the floodplain managers and engineers to determine floodplain management answers from existing models
- Process to modify models for 3 typical floodplain management scenarios
- Lead the development of LOMR for modifications
- Facilitate a discussion of issues and concerns for follow up post training.

The HEC RAS 6- 2D models cover areas of predominate riverine conveyances and surface storage areas.

The accuracy of risk identification is greatly enhanced with 2-D modeling but needs to be integrated locally to maximize its potential for effective floodplain management. During this workshop you can expect:

- Broadened knowledge of Flood Risk 2-D modeling
- Hands on experience pulling information from new 2-D models
- Continuity of synergy from Risk MAP deliverables
- Understanding of the NFIP floodplain versus the results of the rain on grid 2-D hydraulic models
- Continued building of partnerships through education and utilizing comments to assist policy changes

**Training will include:**

- Description and explanation of model development hydrology and hydraulics
- User Guide for basic needs of the floodplain managers and engineers to determine floodplain management answers from existing models
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DFIRM Data and Risk MAP Products to manage floodplains.

These are four-hour training workshops for communities and/or individual groups wanting to learn how to utilize their DFIRM data and Risk MAP products to manage floodplains, identify mitigation actions and advance mitigation project for their community.

Bring your computer for a hands-on experience and work along side the instructor to view your floodplain datasets. These are available via an Outreach website for ease of viewing and are also available for download for use within your communities mapping applications.

Continuing Education Credits will be obtained for the workshop's attendees through ASFPM.

**Course Dates  
Coming  
Soon!**

**To Register Contact:**

**Sydney Roberts  
SEMA**

573-526-9383

[Sydney.Roberts@sema.dps.mo.gov](mailto:Sydney.Roberts@sema.dps.mo.gov)

or visit [mfsma.org/meetinginfo.php](http://mfsma.org/meetinginfo.php)





# 2024 WORKSHOPS

Twelve laptops will be provided at each workshop. Attendees may also bring their own laptop. The workshop materials, software and licenses will be on a flash drive and attendees can keep the thumb drives. If attendees bring their own laptop, the requirements are below:

## Equipment materials:

This is an interactive workshop in which participants should bring a laptop if possible. Details below:

A computer with the following specifications:

- **HEC-RAS 6.5**

You must download, install, and activate the software prior to the workshop. We will have a copy also available but to install you will need to have administrative rights.

- **Download HEC-RAS 6.5 Setup Package and Documentation (203MB)**
- <https://www.hec.usace.army.mil/software/hec-ras/download.aspx>

The screenshot shows the HEC-RAS website interface. The top navigation bar includes links for About, Newsletters, Software, Publications, Training, Visitors, Links, and Contact. The main content area is titled 'HEC-RAS' and features a sidebar with navigation options: HEC-RAS, Features, Downloads, Documentation, Training, Known Issues, Bug Report, Suggestions, Collaborators, and Support Policy. A green arrow points to the 'Downloads' menu item. The main content area contains the following information:

- HEC-RAS 6.5 Windows:**
  - The setup package includes HEC-RAS 6.5.
  - Primary Download Site:**
    - [Download HEC-RAS 6.5 Setup Package \(203 MB\) \[Release Notes\]](#)
  - Alternate Download Site:**
    - [Download HEC-RAS 6.5 Setup Package \(203 MB\) \[Release Notes\]](#)
  - Supported Operating Systems:**
    - [Download HEC-RAS 5.0.7 Setup Package and Documentation \(385 MB\)](#)
    - > **Archived Versions:**
- HEC-RAS 6.5 Example Projects:**
  - This file contains all of the HEC-RAS example projects.
  - [Download HEC-RAS 6.5 Example Projects \(428 MB\)](#)

Hands-on exercises and potentially other software will be installed during the workshops on your laptop. Please ensure you have such rights or know the administrator's log-in procedures.

- **Microsoft Windows 10, 8, 7, Vista, or XP (SP2) operating system (Must be a 64-bit Operating System)**
- **Microsoft .NET 4.5 framework**
- **Minimum physical memory: 4 GB**
- **Minimum free disk space: 16 GB**
- **Minimum screen resolution: 1600 x 900 pixels**

We strongly recommend a 15" or larger screen, with a resolution between 1600x900 pixels and 1920x1200 pixels and text size set to 100%. This will enable the exercise instructions and the software to be displayed on the screen side-by-side.

- **Microsoft Excel (usually part of Microsoft Office)**
- **Earbuds/headphones and audio jack (for additional help videos)**
- **A 2-button mouse with wheel (strongly recommended)**

