

## 2018 USSD Conference and Exhibition – A Balancing Act: Dams, Levees and Ecosystems

ONE-DAY SHORT COURSE  
 Thursday, May 3, 2018

**CUTTING-EDGE RAPID FLOOD MODELING: HANDS-ON WITH DSS-WISE™ LITE****PRELIMINARY AGENDA**

<b>Time</b>	<b>Topic</b>
08:30AM – 08:35AM	Opening Remarks (James Demby, FEMA)
08:35AM – 09:00AM	1- Introduction to DSS-WISE™ Web and DSS-WISE™ Lite <ul style="list-style-type: none"> <li>• Website</li> <li>• Group Concept</li> <li>• Quick Start (Registration, Log in and GUI)</li> </ul>
09:00AM – 09:45AM	2- Basics of 2D Dam-Break Flood Modeling with DSS-WISE™ Lite <ul style="list-style-type: none"> <li>• Overview and Approach</li> <li>• Problem Statement</li> <li>• Preparatory Work</li> <li>• DSS-WISE™ Lite Prep Tool Walkthrough</li> </ul>
09:45AM – 10:00AM	<b>SHORT BREAK</b>
10:00AM – 10:30AM	3- Scenario Setup for Reservoir-Type Simulations
10:30AM – 10:45AM	4- Scenario Setup for Hydrograph-Type Simulations
10:45AM – 11:15AM	5- Viewing and Using Simulation Results
11:15AM – 12:00PM	6- Looking under the Hood: Review of Dam Break Flow Hydraulics and Computational Engine of DSS-WISE™ Lite
12:00PM – 01:00PM	<b>LUNCH BREAK</b>
01:00PM – 03:00PM	7- Hands on Practice Session
03:00PM – 03:45PM	8- Behind the Scenes of Automated Input Data Preparation and Limitations
03:45PM – 04:00PM	<b>SHORT BREAK</b>
04:00PM – 04:30PM	9- Typical User Errors, Understanding Error Messages and Corrective Actions
04:30PM – 04:45PM	10- Advanced Tips and Techniques
04:45PM – 05:15PM	11- Roundtable Session with Questions and Feedback, and Closing Remarks
05:15PM – as needed	12- Informal discussion/interaction with participants, answers to questions, etc. (as long as necessary)

## Instructors

**Dr. Mustafa S. Altinakar**, Director and Research Professor at the National Center for Computational Hydroscience and Engineering (NCCHE) of the University of Mississippi in Oxford Mississippi. [altinakar@ncche.olemiss.edu](mailto:altinakar@ncche.olemiss.edu)

**Marcus McGrath**, Research and Development Engineer and Ph.D. Candidate at the National Center for Computational Hydroscience and Engineering (NCCHE) of the University of Mississippi in Oxford Mississippi.

**Dr. Vijay Ramalingam**, Research Scientist at the National Center for Computational Hydroscience and Engineering (NCCHE) of the University of Mississippi in Oxford Mississippi.

With opening remarks by **Mr. James E. Demby, Jr., PE**, Senior Technical and Policy Advisor, National Dam Safety Program (NDSP), FEMA

## Workshop Materials

Workshop participants will receive a link to download reference materials, including copies of the slides used by the instructors, as well as the data set to be used during the “Group Exercise” session. Participants, who are not already users, will receive a temporary password to be used for the purposes of the short course. This temporary password will remain valid for 3 days after the short course to allow participants practicing on their own.

## Personal Computer

Participants are asked to bring their own laptop to be able to participate in the group exercise session to acquire hands-on experience to set up and submit simulations. Electrical outlets and Internet service will be provided. The laptop should be Wi-Fi enabled and have a web browser (other than Internet Explorer!). There is no need to install any programs on the computer for setting up and submitting simulations.

For the post processing of the results, the participants should have a GIS software (for example ArcGIS or QGIS) and a spreadsheet software (such as Microsoft Excel) installed on their laptop. If you do not already have a GIS software on your computer, you may download and install QGIS free of charge. QGIS is an excellent software package and offers all functionalities needed to display, and post-treat the results files provided by DSS-WISE™ Lite. DSS-WISE™ Lite development team members use for their own work.

QGIS is open source software available under the terms of the GNU General Public License. The latest (development) version or long-term release versions of QGIS software is available for different platforms (Windows, Mac OS X, Linux, BSD, Android): <http://www.qgis.org/en/site/forusers/download.html>

For detailed information on QGIS, please visit the homepage at <http://www.qgis.org/en/site/>

Bringing your own computer is preferable. However, in order to provide a hands-on experience for all participants, we will do our best to team up those who do not have a laptop with those who do.