



## 2017 Montana Floodplain Resource Seminar

July 17-20, 2017

Helena College

The Floodplain Resource Seminar offers free training on various topics to Montana's floodplain professionals and others interested. All sessions will take place at Helena College. Snacks and beverages will be provided. The "Target Audience" listed for each session in order to assure you make the best use of your time.

**Anyone may register for the sessions offered Monday and Tuesday at the link below, although only those who apply through ASFPM may take the CFM Exam. Registration for the 2D Modeling course is by invitation only; engineers interested in this course must contact Bree Caldwell (see below).**

Registration for Monday and Tuesday sessions: <http://tinyurl.com/2017-MTResource>

### Monday, 7/17

#### **Joint Stream Restoration Workshop**

8:00am – 5:00pm

Room 125

**Target Audience: Anyone involved with stream permitting**

**CECs: To be announced**

#### **Presenters/Working Group**

Bob Flesher – DNRC Conservation District, 310 Program

Eric Roberts – Fish, Wildlife, and Parks, Lewis & Clark County District

Jason Garber – Dept. of Environmental Quality, 318/401 Programs

Renee Lemon – Fish, Wildlife, and Parks, Special Projects (Subdivision, etc.)

Jonathan Ferree – Fish, Wildlife, and Parks, 124 Program

Robert Cole – US Army Corps of Engineers, 404 Program

Larry Schock – DNRC Regional Engineer, Floodplain Permits

Ryen Neudecker – Blackfoot Challenge, Grant Coordinator

Kim Snodgrass – WET, Private Project Engineer

#### **Description**

This joint workshop will introduce attendees to in-state stream restoration contacts and stakeholders. A general overview of various types of stream restoration projects and various project components will be discussed. Presenters will provide regulatory requirements for stream restoration projects and specific case studies will be highlighted. Attendees will be able to network with other stream restoration professionals and pick up a few tips and tricks to navigate the permit application process for these types of activities.

## Tuesday, 7/18 (Concurrent Tracks)

### FEMA Risk MAP Track

#### ▶ **FEMA Topics: Using FEMA Products, LOMR and Appeals Submittals**

8:00am – 5:00pm

Room 125

**Target Audience: Anyone involved with floodplain mapping**

**CECs: To be announced**

#### **Presenters**

TBA – DNRC Floodplain Program

TBA – FEMA Region VIII

#### **Topics**

- How to use FEMA products including: NFHL, DFIRM Database, and Non-Regulatory products
- Technical data requirements for appeal submittals
- Technical guidance for LOMRs including a review of what technical elements FEMA looks for in a submittal

### CFM Exam Track

#### ▶ **NFIP Overview for Exam Takers**

8:00am – 12:00pm

Room 123

**Target Audience: Those taking the CFM Exam (but anyone may sit in)**

**CECs: To be announced**

#### **Presenters**

Michelle Phillips – DNRC Floodplain Program

Traci Sears – DNRC Floodplain Program

#### **Description**

This is an interactive review session covering various aspects of the National Flood Insurance Program. This class provides a unique opportunity for participants to ask specific questions about the CFM Exam and will include floodplain topics that appear in the Exam.

#### ▶ **CFM Exam**

1:00pm – 4:00pm

Room 123

**Target Audience: Only those who have applied to ASFPM to take the exam**

**CECs: 0**

#### **Exam Proctor**

Michelle Phillips – DNRC Floodplain Program

## Description

This is the exam for the professional certification of floodplain managers provided by the Association of State Floodplain Managers (ASFPM). Application for the CFM Exam is made through ASFPM and is separate from 2017 Floodplain Resource Seminar registration. Please be sure to both register for the Floodplain Resource Seminar session and apply to take the exam with ASFPM.

**Exam takers must apply to ASFPM by July 3, 2017 at the link below.**

<http://www.floods.org/index.asp?menuid=405&firstlevelmenuid=180&siteid=1>

## Wednesday, 7/19 and Thursday, 7/20

### ► 2D Hydraulic Modeling on FEMA Floodplain Mapping Projects

8:00am – 5:00pm

Room 125

**Registration by invitation only. Contact Bree Caldwell if you are interested in attending.**

Contact: [bcaldwell@mt.gov](mailto:bcaldwell@mt.gov) or 406-444-0826

**Target Audience: Engineers involved with floodplain mapping**

**CECs: To be announced**

#### Presenters

TBA – DNRC Floodplain Program

TBA – FEMA Region VIII

#### Topics

- High-level discussion and pros and cons comparison of commonly used 2D model platforms
- An introduction, overview, and background of 2D modeling using HEC-RAS 5.0
- Guidance on HEC-RAS 5.0 2D model development, refinement, and execution
  - How to import a terrain surface into the model, acceptable data formats, and acceptable data quality for FEMA modeling and mapping
  - Hydrology overview and methods applicable for use in HEC-RAS 5.0 (gage data, hydrographs, precipitation data, rain on grid)
  - Guidance on model development, including mesh creation and refinement, breaklines, Manning's roughness coefficients, and other key model input parameters
  - Executing model runs and techniques for model calibration
  - GIS applications, including importing data, developing floodplain maps, and databases
- Guidance on when to use a 1-D, full 2-D, or a 1D/2D model
  - Discussions on approaches for bridges, culverts, and lateral weirs
  - Data needs for each modeling approach
- Case studies and applications where 2D modeling has been used on FEMA floodplain mapping projects
- Focus on FEMA standard and guidance and best practices throughout the training