Save the date

JOINT COMMITTEE ON FISHERIES ENGINEERING AND SCIENCE

2019 Webinar Series

Tuesday, October 8, 2019
12:00 PM Eastern Time

PRESENTER BIOGRAPHIES

Matt Collins is a hydrologist and geomorphologist for the NOAA Restoration Center's Northeast region. He manages a monitoring program that evaluates habitat restoration project outcomes. Matt also provides technical support for fish passage and wetland restoration projects throughout the Northeast United States and elsewhere, specializing in fluvial sediment dynamics and flood hydroclimatology. Recent work explores climatic changes in the flood regimes of Northeast U.S. rivers and associated implications for fisheries resources and restoration project design.

WEBINAR INFORMATION

Date: Tuesday, October 8, 2019
Time: 12:00 PM ET, 11:00 AM CT
10:00 AM MT, 9:00 AM PT
Duration: 60 Minutes
Webinar Platform: Microsoft Skype

EVALUATING A 1-DIMENSIONAL SEDIMENT TRANSPORT MODEL: SIMKINS DAM REMOVAL CASE STUDY

Matt Collins
Restoration Center, National Marine Fisheries Service
National Oceanic and Atmospheric Administration
Gloucester, MA

Sediment transport models are frequently used for dam removal planning to inform sediment management options and communicate potential outcomes to stakeholders. 1-dimensional models are particularly appealing because they are comparatively simple to develop and run, and thus relatively low cost. Yet, the costs for 1-dimentional models can vary considerably depending on the level of detail required for input data. We had an opportunity to validate a 1-dimensional sediment transport model for the Simkins Dam removal in Maryland, USA, by comparing model predictions with detailed post-removal monitoring data. We also developed a hindcast model for the site using detailed cross-sections from the pre-removal monitoring campaign to test whether it performed better than the original forecast model that was based on simplistic representations of channel geometry from remote sensing data and rapid field reconnaissance. In this presentation, I will review our validation study and hindcast model results, which together suggest that simplified data collection for model inputs enables timely, cost-effective, and generally accurate predictions at the reach scale to support decision making.

SAVE the date.
We will send complete sign up details on September 23.

The Joint Committee on Fisheries Engineering and Science is hosting a free webinar series as part of its mission to engage scientists and engineers on topics related to fish passage. The Committee consists of members of the American Fisheries Society Bioengineering Section (AFS-BES) and the American Society of Civil Engineers Environmental and Water Resources Institute (ASCE-EWRI). It was established in January 2011 to foster communication between the two groups, provide opportunities for engineers and biologists to share relevant knowledge and learn from one another, and to collaborate on projects related to fish passage.