

The N-EWN Knowledge Series

A Continuing Education Series about Engineering with Nature



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Real-time, Cloud-based Hydraulic Modeling with HEC RAS using the Dam Screening Tool (DST)

Natural and Nature-Based Features (NNBF) are increasingly recognized as flood risk management solutions that can provide environmental, social, and economic benefits. However, there are few planning-level tools available for screening NNBF for flood risk management projects. The Dam Screening Tool (DST) is a web-based tool developed by the United States Army Corps of Engineers (USACE) Risk Management Center (RMC) to provide a rough estimate of inundation and potential life loss associated with flood events and dam failure. The DST can be used to provide a screening-level estimate of flood risk and life loss reduction benefits of NNBF. The nationally applicable tool uses publicly available data, including topography, land cover, and structure inventory, to estimate basic information about flood risk outcomes. A DST analysis consists of a simplified hydraulic model with 2D HEC-RAS and a simplified consequence model with LifeSim. The creation, execution, and post-processing of the models is completely automated and performed in the cloud. Model inputs are customizable within the web-based interface, which allows for flexibility in the scenarios that can be modeled. This webinar provides an overview of the web-based tool with focus on screening NNBF as flood risk management measures. DST may also be used for preliminary riverine or coastal flood risk analysis, emergency operations, or initial flood risk analysis for dam and levee breaches where no prior study exists.

Save the date!

Upcoming webinars will take place the 3rd Thursday of the month.

Jan. 18
12:30pm ET

Garrett Menichino, PhD, PE, CFM, ERDC-EL
Real-time, Cloud-based Hydraulic Modeling with HEC RAS using the Dam Screening Tool (DST)

Feb. 15
12:30pm ET

Liya Abera, PhD, ERDC
Tools for Life Cycle Cost Analysis and Application in Stream Restoration

Mar. 21
12:30pm ET

Monica Chasten, ERDC
Beneficial Use of Dredged Materials, USACE Philadelphia District

Register here: <https://bit.ly/3gR9ADL>

or scan:



1 Continuing Education Credit (CEC) is available to attendees

Recorded webinars will be posted online at:
<https://n-ewn.org/resources/n-ewn-knowledge-seminars/>

Presented by:



Questions? Please contact:
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