**Title:** Rivers and Roads Training Program: Interagency Partnership for Resilient Infrastructure and River Protection in Vermont and Massachusetts

**Abstract text:** The Rivers and Roads Training is an interagency partnership for resilient infrastructure and river projection. This panel will highlight the work that has been completed in Vermont and Massachusetts and the impact it has on resiliency.

The VT Rivers & Roads is now in its 11th year. These trainings are a collaboration between VT Rivers Program, VT Fish & Wildlife, and VT VTrans that explains the workings of rivers and how to design, construct and maintain roads and bridges to create greater river stability, maintain habitat, and more flood resilient transportation infrastructure. The trainings provide an opportunity for students to learn the most basic of river and road related concepts, trough the Tier 1; to more detailed concepts and design considerations in the Tier 2 and Tier 3 trainings. Making the training a mixed format of learning by hearing, seeing, and hands-on, the class gives students a chance to learn in an interactive way that has been well received. The trainings have provided VT a more knowledgeable workforce around transportation and river related conflicts and ways of successfully reducing those conflicts to have successful transportation projects and healthy river systems; along with achieving water quality and flood resiliency goals.

The Massachusetts Rivers & Roads Training Program was initiated by MassDOT and its partners in 2018 to advance an understanding of fluvial geomorphology across the transportation sector, to create a more resilient transportation network, and protect rivers. Through classroom and field trainings, attendees have learned about river shape and processes, and resilient infrastructure design. Training courses illustrate how to reduce future damage through innovative assessment and design practices where river-road conflicts exist. Over 300 trainees have attended the courses including MassDOT designers, construction engineers, hydraulics engineers, and environmental personnel; municipal public works, planning, and conservation staff; consulting engineers, scientists, and planners; environmental agency staff; and members of non-governmental organizations. Due to the COVID-19 pandemic, in-person trainings have been postponed; however, MassDOT has developed an online video mini-series to continue delivering training content. This workshop will provide an overview of the Rivers & Roads Training Program and show the first training videos of a proposed series that is under development. A training field guide is also under development to aid in common measurements such as bankfull channel width and stage of channel evolution.

## Provide a description of the event's structure (e.g., speaker sequence, presentation titles, role of audience participants) (200 words)

Panel format with multiple speakers detailing the River and Roads Program in Vermont and MA. In addition, multimedia videos will enrich the audience knowledge base and create a dynamic panel.

(editor's note, this description could have benefited from more detail)