



U.S. Department of Transportation  
Federal Highway Administration



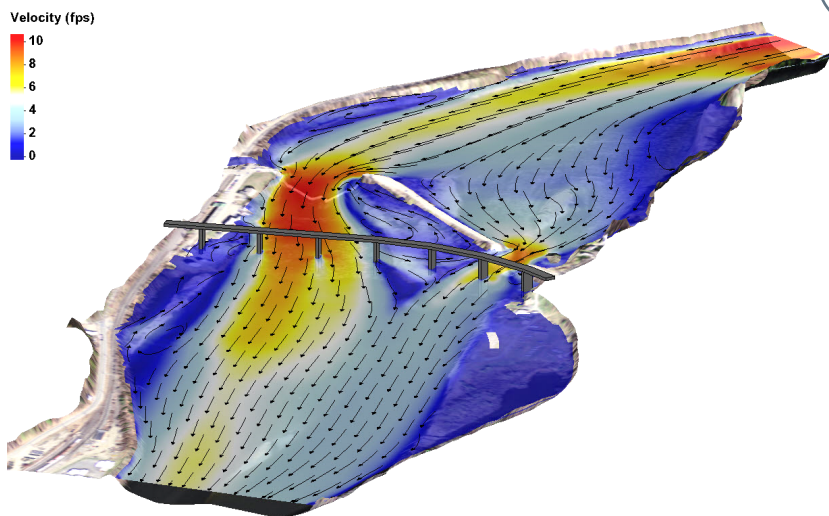
national  
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# Hydraulic Design of Safe Bridges

NHI Course 135090

[Christine] stock.adobe.com

Welcome to the forefront of safety and efficiency with the National Highway Institute's (NHI) comprehensive course, "Hydraulic Design of Safe Bridges." This course equips managers, designers, and reviewers with essential knowledge and skills in hydraulics design, focusing on bridge hydraulic analysis, scour elevation, and design considerations to ensure the integrity and longevity of bridge infrastructure. Topics include hydraulic design considerations, regulatory requirements, modeling methods, special analyses for tidal waterways, scour evaluation, sediment transport, and more. Participants will engage in group activities, knowledge checks, hands-on exercises, and an end-of-course assessment to test their understanding and mastery of the content. Join us to explore innovative solutions and sustainable infrastructure.



**Register Today**

Visit: <https://www.nhi.fhwa.dot.gov/training/host.aspx> to learn more about hosting this training.



## TARGET AUDIENCE

This course is designed for transportation agency personnel at the Federal, State, and local levels, including transportation hydraulic engineers, project managers, policy decision makers, and consultants involved in bridge design. It is beneficial for those involved in project and program management, project planning and development, hydraulic design, bridge design, and quality control/assurance reviews.



## LEARNING OUTCOMES

Upon completion of this course, participants will emerge with the understanding to:

- List the ways hydraulic design affects bridge performance and public safety.
- Review the hydraulic design considerations and regulatory requirements important to bridge projects.
- Use hydraulic model results to determine whether a project meets capacity design criteria.
- Label a diagram of the typical workflow for scour and stream stability evaluation and design at a bridge crossing.
- Discuss additional considerations and analyses that contribute to the design of safe bridges.

For inquiries, contact NHI at [nhicustomerservice@dot.gov](mailto:nhicustomerservice@dot.gov) or call 877.558.6873.

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