

# CEI NEWS

## Culvert Engineering

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### CEI Presents at Baystate Roads Workshops on Improving Stream Crossings

Comprehensive Environmental Inc. (CEI), in partnership with Tighe & Bond, developed a workshop module on "*Designing Improved Stream Crossings - Engineering Standards & Guidance*" for a series of workshops produced by the Baystate Roads Program. CEI's David Nyman, P.E. presented the module in Westfield (March 2013) and Pittsfield (June 2013). The presentation highlighted engineering design considerations for meeting stream crossing standards, while providing for a sustainable structure design. Topics included cross-section configuration requirements, vertical alignment, streambed materials and placement, and stability analysis.

The module was a component of a full-day workshop focused on making stream crossings safer and more resilient in the face of future storms. Many crossings fail, in some cases repeatedly, due to their inability to pass high flows and the debris and sediment carried by streams during flood conditions. Crossings designed to meet the Massachusetts Stream Crossing Standards, which are designed to accommodate wildlife passage, also have greater capacity to convey water flows and associated sediment and debris loads.

A team of experts on wildlife passage, fluvial geomorphology, regulatory requirements, planning and funding, and flood management presented a comprehensive workshop on addressing resilient, ecologically sound culvert design.

Future workshops are planned for October 2013 in the eastern region of Massachusetts. Watch the Baystate Roads website for further details: <http://baystateroads.eot.state.ma.us>.

For a copy of Mr. Nyman's presentation or for more information on CEI's culvert engineering services, please contact David Nyman, P.E. at 508.281.5160 [dnyman@ceiengineers.com](mailto:dnyman@ceiengineers.com).