International **Erosion Control** Association

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For Immediate Release
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South Carolina Erosion Control Researcher Honored for Technical Paper about Product Performance Testing

Steamboat Springs, Colo. – C. Joel Sprague, Greenville, S.C., has won the 2008 Most Distinguished Technical Paper Award from the International Erosion Control Association. His paper, *Slope Erosion Testing – Identifying "Critical" Parameters*, describes how different lab testing procedures used by three laboratories to evaluate the likely performance of erosion control products in the field produced different results.

Sprague, a senior engineer with TRI/Environmental, Inc., will receive the award during formal ceremonies at the annual IECA conference, Environmental Connection, in Orlando, Fla., Feb. 19, 2008.

The award is given to one paper, presented at the conference, which contributes most significantly to advancing erosion control knowledge. It recognizes concise, clear technical writing that presents innovative solutions to erosion control problems.

The three labs that Sprague studied measure the amount of soil loss on treated and unprotected slopes caused by rainfall generated by rainfall simulators using procedures designed to closely simulate actual field conditions. Two of the labs, No. 1 and No. 3, use a standard industry protocol to evaluate erosion control product performance in outdoors test plots on actual slopes. The other lab, No. 2, tests product performance indoors on a tilting bed using a different protocol.

A number of factors, including rainfall energy and intensity, soil erodibility and slope geometry can affect the amount of erosion. "Each of the various factors can vary significantly between the indoor and outdoor testing protocols examined," he says. "This suggests that very different simulated conditions may exist between outdoor plots on actual slopes and indoor plots on tilting beds."

Sprague compared actual soil loss on the various test plots with the loss predicted by the Revised Universal Soil Loss Equation (RUSLE). He found a "reasonable consistency" between the standard industry test protocol (Labs 1 and 3) and performance in the field predicted by the RUSLE. "It was not clear if other protocols, like those used by Lab 2, correlated in a similar manner," said Sprague.

"Actual test results from other labs/protocols should be similarly compared to RUSLE to assess whether measured laboratory performance in those protocols satisfactorily correlates to expected field performance," he concludes.

About IECA

The International Erosion Control Association (IECA) is the world's oldest and largest association devoted entirely to helping members solve the problems caused by erosion and its byproduct – sediment. Founded in 1972, IECA is a non-profit organization that serves as the premier global resource for the prevention and control of erosion.

This is the 17th year of the annual IECA *Awards of Environmental Excellence* program. The *Most Distinguished Technical Paper* award recognizes clear, concise writing that presents innovative solutions to erosion control. The award is given to one paper, presented at Environmental Connection, which contributes significantly to the advancement of erosion control knowledge. For more information about state-of-the-art educational events and materials, please visit our web site at www.ieca.org.