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-- News Release --

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For Immediate Release

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Design Manual for Environmentally-Friendly Streambank Erosion Control Wins International Award

Steamboat Springs, Colo. – A comprehensive CD manual of technological information developed to aide highway engineers and others challenged with designing and installing environmentally-friendly practices for stabilizing the banks of streams and rivers has been honored for its ability to help reduce channel and bank erosion while enhancing riverine environments.

Development of this tool, Environmentally-Sensitive Streambank Stabilization (E-SenSS), was led by John McCullah, president of Salix Applied Earthcare, Redding, Calif., and Donald Gray, professor emeritus Geotechnical Engineering, University of Michigan.

It has received the 2005 Excellence in Technology Award from the International Erosion Control Association. This annual award recognizes a new practice, design approach or process that combines technology and environmental considerations to reduce erosion and sediment and to improve air and water quality. The award will be presented to McCullah during formal ceremonies at the annual IECA conference in Dallas, Tex, Feb. 22, 2005.

The design manual on CD reflects three years of development, including literature research, site visits and case study reviews and the analysis and evaluation of surveys sent out to all state departments of transportation. The result is a compilation of 44 different streambank stabilization techniques for use next to highways, near infrastructure, or in stream restoration projects.

Some of the technique case studies were implemented in Redding as part of local stream restoration projects.

The research team and a panel of experts from transportation departments determined the techniques considered to be environmentally-sensitive. These are innovative erosion control practices that increase habitat for plants, wildlife and aquatic

species, improve the visual attractiveness of roadsides and waterways and create sustainable streambanks and riverine systems.

Funding for the research was provided by the National Cooperative Highways Research Program.

“Historically, the engineer has had limited tools to apply to eroding banks,” says McCullah, a Certified Professional in Erosion and Sediment Control (CPESC). These include techniques such as riprap, rock-filled gabion baskets, or concrete-lined channels. Although these tools providing superior bank stabilization, they offer no environmental benefits and often resulted in habitat loss. E-SenSS now provides the engineer/designer with more tool choices, like vegetated riprap, rock vanes and live brushlayering. The biotechnical techniques described in E-SenSS provide a win-win opportunity – the ability to design and build structurally-sound bank protection that simultaneously provides habitat enhancements such as cover, shade, in-stream habitat and vegetative reinforcement that grows stronger with time.”

The electronic manual contains guidelines for designing and installing different types of erosion control structures and methods, design drawings and construction and installation specifications for erosion control practices in AutoCAD and Microstation format and extensive photos of project examples. An extensive reference list and relevant research papers are provided on the CD.

The E-SenSS CD also includes a new software program, Greenbank, to help designers select techniques best suited to specific site conditions. Greenbank was developed by Douglas F. Shields, Research Hydrologist, Oxford, Miss.

Salix staff members contributing to the project include Daria Hoyer, Laurie Barnes, Kaila Dettman, and Traci Montrose.

The IECA, founded in 1972, is a non-profit professional organization with members in 39 countries around the world who are dedicated to minimizing accelerated soil erosion.

This is the 14th year of the annual IECA Environmental Excellence Awards program.

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