

**BELEWS CREEK INNOVATIVE STREAMBANK STABILIZATION
SEMINAR & HANDS-ON CONSTRUCTION WORKSHOP**
Hillsboro, Missouri
April 10-12, 2012

INSTRUCTOR:

Dave Derrick graduated with a B. S. Civil Engineering degree in 1978 from Villanova University, Villanova, Pennsylvania and has been employed continuously at the U.S. Army Corps of Engineers Research and Development Center since June of 1978 where he holds the position of Research Hydraulic Engineer with the Corps of Engineer's Engineering Research & Development Center's Coastal & Hydraulics Laboratory (ERDC-CHL).

Derrick specializes in innovative, environmentally compatible, and cost-effective approaches and methodologies to river and stream bank stabilization; stream investigation and analysis using principles of fluvial geomorphology; development of function-based project design goals; facilitation and conflict resolution; sediment transport; navigation channel improvement effects of river training structures; innovative construction methodologies for stream stabilization works; river and stream training structure inspection, monitoring, and performance analysis; and physical movable-bed modeling. Mr. Derrick has also been involved in dam removal projects, karst topography (sinkhole) situations, arid dry-wash stabilization/revegetation, and salmon and trout stream restorations. His knowledge and practical experience ranges from the Mississippi River to very smallest of streams. He was a physical movable-bed modeler at ERDC for 19 years.

Each year Mr. Derrick teaches a number of 1 to 5 day classes on stream investigation, stabilization and restoration for a multitude of aquatic resource clients, reaching an audience of 500 to 900 people annually.

IN HOUSE SEMINAR PORTION, 7:30 AM-10:00 AM, APRIL 10, 2012:

During this short seminar, Mr. Derrick will introduce the methodology and procedures used in, planning, analyzing, and ultimately designing the long-term sustainable stream stabilization project that will be built. Come participate in the Innovative, environmentally sensitive, and cost-effective approaches to channel restoration that will be constructed utilizing a hands-on approach on the local stream stabilization project.

Location: Hillsboro Civic Center, 10345 Business 21, Hillsboro, Missouri (see attached Map).

Sign in: 7:30 a.m. -7:45 a.m., Tuesday, April 10, 2012

Cost: No Cost

Materials: Any necessary class notes and job site maps will be distributed at sign-in.

CONSTRUCTION DATES (WORKING "HANDS-ON") PORTION, 11:00 AM ON APRIL 10th, & ALL DAY APR. 11th & 12th, 2012:

Required gear: hard hat & reflective vest. Recommended gear: field clothes, work gloves, boots, hipboots, or waders and rain gear. Participants will be given the opportunity to do actual physical work on the project, so please come prepared. Construction will take place rain or shine.

Location: The project site, Belews Creek, is located south of the Civic Center on Business 21 to traffic light in Hillsboro - Main Street/Highway BB, west on Highway BB three (3) miles to left on Klondike Road then 1/4 mile to project site, 6007 Klondike Road, Hillsboro, MO.

Sponsors: All heavy equipment, equipment operators, soil, erosion control materials, rock and vegetative materials will be provided by Jefferson County and the Belews Creek Watershed Partnership and funded through the Missouri Department of Natural Resources under US-EPA Section 319 of the Clean Water Act.

This seminar will provide participants with an excellent opportunity to observe and assist in the installation of various innovative streambank stabilization techniques using rock and vegetative materials. Through the minimized use of rock and an increased use of vegetation, the goal is to protect the stream from future damage and restore the surrounding stream corridor.

Techniques to be used:

- * **Locked Logs** – Sections of trees angled downstream with stone placed on top to anchor stabilization using dormant pole plantings
- * **Stone Keys** – Curved, soil choked & planted
- * **Longitudinal Peaked Stone Toe Protection (LPSTP) with Live Siltation, and an engineered floodplain bench with Living Dikes**
- * **Bendway Weirs (BW)** – a re-directive measure will be integrated into the LPSTP in Bend #1 and stand-alone in Bend #2
- * **Live Poles** planted in Silt trenches
- * **Riparian corridor plantings**

*No meals are provided at this seminar. Make arrangements to bring your own food to the project site. Restaurants are available in Hillsboro (see attached Map).

The nearest hotel accommodations are in Festus/Crystal City (13 miles east of Hillsboro at I-55 and Highway A) and include:

Best Western Shalimar Plaza Hotel
1200 Gannon Drive
Festus MO 63028
636-937-0700

Holiday Inn Express Hotel
1802 Gamel Cemetery Road
Festus MO 63028
636-937-7100

Comfort Inn
1303 Veterans Boulevard
Festus MO 63028
636-937-2888

Drury Inn
1001 Veterans Boulevard
Festus MO 63028
636-933-2400

Super 8
1711 Highway Z
Pevely MO 63070
636-475-4900



This project is funded by the US EPA Region 7 through the Missouri Department of Natural Resources under Section 319 of the Clean Water Act.

Missouri Department
of Natural Resources





REGISTRATION FORM
BELEWS CREEK
INNOVATIVE STREAMBANK STABILIZATION
SEMINAR AND WORKING WORKSHOP
Hillsboro, Missouri
April 10 - 12, 2012

(Sponsored by Jefferson County Stormwater Management and the Belews Creek Watershed Partnership)

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Sign in: 7:30 a.m., Tuesday, April 10, 2012

Cost: No Cost

Accommodations: see attached informational sheet

Additional information: contact Bill Aho, Consultant, Jefferson County Stormwater Management at (636) 797-6225 or waho@jeffcomo.org

Please register me for the Innovative Streambank Stabilization Seminar:

Name: _____

E-mail: _____

Agency: _____

Address: _____

Phone: _____ **Fax:** _____

Please return this form by fax or e-mail (not both) no later than 5:00 p.m., March 23, 2012 to:
email: stormwater@jeffcomo.org fax: (636) 797-6227

Project Site

6007 Klondike Rd.
Hillsboro, MO

To Cedar Hill

Klondike

Baldwin Creek

Redbird

Hillsboro House Springs

To I-270/
St. Louis

Jefferson College



To I-55/
Festus

State Rd. A

Business 21

Dairy Queen
McDonalds
Taco Bell

Pioneer

Hillsboro Civic Center

10345 Business 21
Hillsboro, MO

Los Portales

Hardees

Subway

Happy China

Mo's Pizza
Munzert's

To Hwy. 30/
Cedar Hill

State Rte. 21 North

State Rd. B