

**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 10<sup>th</sup>, & ALL DAY APR. 11<sup>th</sup> & 12<sup>th</sup>, 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



Missouri Department  
of Natural Resources

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.





**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](mailto:waho@jeffcomo.org)

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**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](mailto:stormwater@jeffcomo.org) fax: (636) 797-6227



