



### **EPP 232 – Streambank Soil Bioengineering Technical Training**

**Course Summary:** This streambank soil bioengineering technical training is an introduction to Bioengineering treatments. Included is a brief review of stream dynamics, hydrology, hydraulics, and sediment transport; riparian vegetation concepts, principles for implementing bioengineering treatments, riparian plant propagation, and plant identification. The workshop includes the presentation of a variety of streambank soil bioengineering practices with instructor provided firsthand account of their design and installation. Workshop photographs depict applications across the United States, Canada, Afghanistan, and Guatemala. Material and concepts presented in the workshop are intended for a variety of participants from the beginner to intermediate levels of experience. The course is not recommended for those with extensive experience working in riparian zones utilizing bioengineering principles. Some basic engineering equations are presented in the review portion, but there are no complex derivations or lengthy discussion of the equations. There is considerable discussion of riparian plants, how they grow, and how to propagate them since plants are the tools used to increase the strength and structure of the soil and in turn to reduce streambank erosion.

**Duration:** 2 days.

**Topics:**

- Best management practices.
- Fish habitat improvement.

- Floodplain restoration techniques.
- Plant propagation techniques.
- Riparian plant identification.
- Stream channel stabilization.
- Streambank soil bioengineering treatments.
- Streambank and shoreline protection.
- Using riparian vegetation, both woody and herbaceous.

**Fee:** All instruction and program facilitation, resource manual, transportation to/from the field (if applicable), morning coffee/tea; a certificate of completion for this offering is provided.

**Available Professional Credit:** 1.5 CEU, 15 PDH.