# Engineering With Nature Project Fact Sheet



#### **Title**

Large Wood National Manual: Guidelines for Planning, Design, Placement, and Maintenance of Large Wood in Fluvial Ecosystems; Restoring Process, Function, and Structure

#### **Background**

Research interest in the multiple significant roles large wood plays in fluvial ecosystems has exploded in past decades, but restoration practice has only recently begun to use it in quantity, and primarily only in the Pacific Northwest. A meeting between the Environmental Laboratory and the Bureau of Reclamation in 2011 determined that research and guidance on using large wood in river and floodplain restoration represent top national priorities. EL and BOR have formed a partnership to produce a comprehensive, state of practice guidance manual.

## **Objectives**

- Develop a risk-informed planning and design guide
- Integrate passive, assisted, and active techniques
- Raise awareness of large wood roles and techniques
- Document current research needs.



Wood as dominant structural element; Mission Wilderness, MT

## Approach

Following the 2011 interagency meeting, a workshop with leading national researchers, practitioners, and academics produced a research agenda and a suggested structure for a planning and design manual. An RFP was developed and released, and a senior five person editing team selected and/or invited twenty-four authors to contribute. Ten chapters were produced and put through a four step editing and peer review—first, contracted technical editors; second, other members of the author team and senior editing team; third, a core set of high-profile invited reviewers; and fourth, broad agency and a larger peer review. Authors responded, and then chapters were sent back out for the same four part technical peer review as well as executive review. Both the EWN and EMRRP programs supported this effort.

#### Outcomes

- 50 page workshop report and research roadmap (completed): http://www.usbr.gov/research/projects/detail.cfm?id=3775
- Webinar given and posted on EL Gateway (completed): <a href="http://cw-environment.usace.army.mil/exchange.cfm?Option=Webinar&Type=Past&CoP=Env&Id=76&ICS=No">http://cw-environment.usace.army.mil/exchange.cfm?Option=Webinar&Type=Past&CoP=Env&Id=76&ICS=No</a>
- Final draft of national manual will be posted on EL and BOR sites early June, 2015

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