



Bioremediation at Blackstone River Canal With Optional Meadow Tour

Tuesday, August 6, 2013

10:00 AM - 12:00 Noon

Grafton, MA

\$20.00 ELA Member or \$25 Non-Member

The Blackstone River Corridor in central Massachusetts was the birthplace of the American industrial revolution; the river powered the mills and nearby canals were used for transport. The Blackstone River and adjoining canals transported raw materials and manufactured goods between the industrial centers and left behind a legacy of pollution.

The Fisherville Mill Canal is one example of the pollution, contaminated for decades by #6 fuel oil. In May 2012, an ambitious and innovative cleanup project began. Through an extensive collaboration including municipal, public, private, and academic partners, John Todd Ecological Design began a bioremediation project to clean the water by removing hydrocarbons and nutrients with natural processes.

The Bioremediation Process

At the bottom of the canal, oil contaminated sediments and canal water circulate through a bio-filter. The water is then pumped into the greenhouse through a radical new design called the Eco-machine where it is sprayed on fungal mycellium beds and then flows into a series of six aquatic cells, each comprising a highly diverse aquatic eco-system.

Throughout the year, the Eco-machine functions as an ecological incubator providing a sufficient density of life forms to digest the oils and transform the ecology of the canal to a healthier state. Water from the Eco-machine flows back to an artificial floating marsh-like eco-system known as a Canal Restorer



comprised of plants that grow above and below the surface of the canal, providing habitat for a variety of micro-organisms which remove additional contaminants. The system treats five hundred gallons of water per day and preliminary test results show up to 75% reduction in petroleum contaminants in the treated water.

Join tour guide, John Todd for a walk along restored sections of the Blackstone River Canal and Towpath to learn about this amazing bioremediation project and the promise that this technology has for future ecological restoration.

Optional Side Tour: River Bend farm is a MA DCR property that maintains a successful meadow, an interesting mixture of shrub lands and grasses and represents a good example of successful meadow maintenance.

Registrations are limited! [Use This Link to Register Online Now.](#)

For more information email ela.info@comcast.net or Call (617) 436-5838

John Todd, Ph.D. is the Chief Scientist & Chairman at John Todd Ecological Design. Dr. Todd is an internationally recognized inventor and a pioneer in the design and construction of ecological wastewater treatment systems. Dr. Todd designed the Eco-Machine and Canal Restorer.

CEUs are being sought for this presentation.