

## Restoring urban streams: the legal, social and ecological complexities

Dave Owen, an associate professor at the University of Maine School of Law, spoke Monday October 19th in Nutting Hall at UMaine about urban stream ecological degradation and the often ineffective laws used for remediation. Laws such as the Clean Water Act and the Endangered Species Act were not written to deal specifically with the multifaceted issues of urban streams, Owen explained. Previously an environmental consultant, Owen explained why urban streams become degraded. In urban areas the flow of water changes and habitat connectivity decreases, altering hydrology, water quality and biodiversity. Research suggests the percentage of impervious cover (i.e. paved roads, parking lots, buildings) significantly alters biotic integrity, and stream ecology declines even in watershed with low levels of impervious cover. Consequently, streams are degraded in the areas where almost everyone lives. To address the degradation, Owen highlighted several new regulatory approaches, including impervious cover total maximum daily loads, use of “residual designation authority,” and watershed-scale permitting. According to Owen, these reforms could, “produce a better diagnosis of the issues, involve more people and provide more efficient solutions.” Questions remain, however, about the effectiveness of these approaches, both individually and in combination. Owen concluded by posing questions about the value of urban stream restoration. “Is the amount of effort that these projects require a sensible allocation of resources?” For Owen, there may be a need for prioritization of urban stream restoration efforts.