

Alexander M. Hackman
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Education:

University of Vermont, Rubenstein School of Environment and Natural Resources, Burlington, VT.
Master's of Science in Natural Resources - Watershed Science and Aquatic Ecology (2007).

- Thesis: Impacts of Urbanization on Stream Ecosystem Metabolism in Vermont ([link](#))
- Emphasis: Aquatic ecology, land-water interactions, whole-stream metabolism, nutrient uptake, hydrology, fluvial geomorphology, watershed assessment, stormwater management, environmental sampling techniques.

Tufts University, Somerville, MA.
Bachelor of Arts in Environmental Studies and Political Science (1994).

- Graduated *Cum Laude* in both majors; emphasis on physical sciences and public policy.

Professional Experience:

Restoration Specialist / Project Manager (2007-present)

[Division of Ecological Restoration](#), Massachusetts Department of Fish & Game, Boston, MA.

- Manage large and complex river and wetland restoration projects, provide scientific review, technical assistance (e.g. design, permitting, monitoring, fundraising, outreach, budgeting, planning), and coordinate large partner teams.
- Provide policy and programmatic support for proposed holistic watershed-scale restoration, 'process-based' approaches to restoration, and contaminated sediment assessment and management; provide technical assistance for a wide range of river restoration projects (emphasis on dam removal projects).
- Provide training (i.e. Instructor at annual Dam Removal Project Manager Training Class) and outreach (e.g. talks to watershed associations, municipal boards, etc.) about issues affecting aquatic resources and restoration responses.

Research Assistant (2003 - 2007)

University of Vermont, Redesigning the American Neighborhood Project, Burlington, VT.

- Planned, managed, and performed multiple stream assessment projects (EPA Grant #525809) and original research involving whole-stream metabolism monitoring, stream gaging, water quality assessments, benthic macroinvertebrate and stream geomorphic/habitat surveys, and solute injection experiments (to evaluate nutrient uptake rates and groundwater dilution).
- Managed field staff, developed budgets, purchased, tested, maintained and decommissioned field equipment, collected and analyzed field data, constructed stream gauges, performed hydrologic profiles, constructed rating curves, communicated with stakeholders [citizens, agency staff, research community], presented findings in public, taught classes, and advised on numerous field investigations.

Environmental Analyst / Code Enforcement Coordinator (2001-2003)

Town of Mammoth Lakes, Community Development Department, Mammoth Lakes, CA.

- Revised and implemented the code compliance program for the Town of Mammoth Lakes (pop. 8,000). Conducted compliance assistance and enforcement related activities related to all aspects of local government, including zoning, building, public works and engineering. Primary author of award-winning outdoor lighting ordinance.
- Interacted extensively with property and business owners, developers, contractors, engineers, attorneys, other regulatory agencies, the local planning commission and town council, and staff from all internal departments.
- Designed and implemented an erosion and sediment control program, authored a construction management plan for a major development project, managed air quality monitoring and wood-burning restrictions, and participated in all local environmental issues, including stormwater management, development project reviews (CEQA), wetlands delineation, and hazardous materials management.

Research Associate II (2000)

Sierra Nevada Aquatic Research Laboratory, University of California at Santa Barbara, Mammoth Lakes, CA.

- Conducted high alpine fieldwork, laboratory analysis and computer database programming and maintenance for the Sierra Lakes Inventory and Mountain Yellow Legged Frog Projects.

Environmental Analyst III and II (1996-1999)

Massachusetts Department of Environmental Protection (DEP), Bureau of Waste Site Cleanup (BWSC), Boston, MA.

- Managed and supervised all daily operations of a BWSC enforcement unit (staff of 6) with duties including cost recovery, violation issuance, regulatory and technical assistance, regional coordination. Extensive public interaction.
- Primary author/editor of all fee/cost recovery related policy material (including the Financial Inability Program), guidance documents, operating procedures, and correspondence with the regulated community.
- Attended senior level meetings, developed policy and regulations, designed and implemented computer tracking systems, assisted with the implementation of the BWSC Brownfields Program, trained new staff, and served as primary point of contact for all internal and external fee and cost recovery related matters.

Environmental Analyst (1994-1996)

ENSOL, Inc. (Environmental Engineering and Consulting Firm), Billerica, MA.

- Performed environmental site assessments, risk assessments, and subsurface investigations; responsible for over 100 individual projects. Specific tasks included technical report writing, preparation, and review, historical and municipal research, site inspections, title searches, marketing and proposal writing, and project coordination. Fieldwork responsibilities included soil, groundwater, asbestos, radon, and lead paint sampling, water table surveying, PID field screening, and supervision of environmental contractors.
- Maintained extensive oral and written communication with clients, federal, state, and local officials, financial institutions, analytical laboratories, and the legal community.

Assistant Environmental Engineer (1993-1994)

Massachusetts Department of Environmental Protection, Division of Water Supply, Boston, MA.

- Coordinated data management for the Water Quality Assurance Program, revised standard operating procedures, and communicated with regional offices, laboratories, and water suppliers throughout Massachusetts.

Select Publications and Talks:

- UMass Boston, Invited Lecturer (Boston, MA July 2012): Stream Ecology and Restoration in Massachusetts”
- Nashua River Watershed Association, Annual Board Meeting, Invited Speaker (Groton, MA, May 2012): “Dam Removal in Massachusetts – Overview, Issues, and Process”
- Society for Ecological Restoration, Plenary Speaker (Brooklyn, NY, April 2012): “The Eel River Headwaters Project - Exploring the Frontiers of Restoration Theory and Practice in Massachusetts”
- MA Division of Ecological Restoration, Lead Author (April 2011): *White Paper: Developing a framework for holistic watershed restoration in Massachusetts*
- MACC Annual Conference, Speaker (Worcester, MA, March 2011): “The Eel River Headwaters Restoration Project (Plymouth) - Project Overview and Lessons Learned”
- Northeastern Mosquito Control Association, Keynote Speaker (Plymouth, MA, October 2010): “All about streams - ecology, stressors, and the restoration movement in Massachusetts”
- Association of Massachusetts Wetland Scientists, Speaker and Tour Leader (Plymouth, MA, November 2010): “Overview of the Eel River Headwaters Restoration Project”
- Morse, Bowden, Hackman, Pruden, Steiner, and Berger, 2007. *Using sound pressure to estimate reaeration in streams*. Journal of the North American Benthological Society Mar 2007 : Vol. 26, Issue 1, pg(s) 28-37

Personal:

Avid cyclist, photographer, nature-lover, Somerville aficionado, kayaker, and fisherman.

Professional References (others available upon request):

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