# **Environmental Job Resource Manual: Boston**

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## **Chapter 1: Private Sector Jobs in the Boston Metro-Area**

**Abt Associates Inc.** www.abtassociates.com/ Cambridge, Lexington

Abt Associates applies rigorous research and consulting techniques to a wide range of issues in social and economic policy, international development, business research and consulting, and clinical trials and registries.

#### Services:

- A. Economic and Regulatory Analysis
- 1. Environmental Benefit-Cost Analysis
- 2. Environmental Justice Analysis
- 3. Financial and Affordability Analysis
- 4. Non-Market Valuation Methods Natural Resource Damages
- 5. Regulatory Flexibility Analysis
- 6. Regulatory Impact Analysis
- B. Health-Risk Assessment Modeling
- 1. Comparative Risk Assessment
- 2. Cumulative Exposure Analysis
- 3. Environmental Effects on Children's Health
- 4. Media- and Pollution-Specific Analysis
- C. Industry Sector Analysis
- 1. Design for Environment
- 2. Environmental Management Systems
- 3. Environmental Performances Measures
- 4. Industry and Sector Initiatives
- 5. Industry Profiles
- 6. Pollution-Prevention Programs

- D. Information and Data
- 1. Environmental Internet and Software Applications
- 2. Environmental Right-to-Know Information
- 3. Environmental Survey Research
- E. Natural Resources Analysis and
- Management
- 1. Environmental Impact Assessment
- 2. Soil Conservation and Project
- Implementation
- 3. Water Resources Management and Watershed Planning
- F. Policies and Programs
- 1. Economic Incentive Programs
- 2. Environmental Feasibility Studies
- 3. Environmental Labeling
- 4. Environmental Outreach
- 5. Environmental Program Evaluation
- 6. Global Climate Change
- 7. Voluntary Environmental Programs

Staff:

Analyst Outcomes Research Fellow Project Manager
Consultant Outcomes Research Project Research Assistant

Director of Global Manager

Economics Principal Scientist

#### **Environmental Job Postings:**

Entry-Level Research Assistant for Social and Economic Policy Research

- Bachelor's Degree Biological/natural sciences and 0-1 year of work experience
- Strong writing ability and demonstrated quantitative skills, ability to work well with others, ability to work with minimal supervision.
- Experience with Excel and Word preferred

#### Job Responsibilities:

- Assist contract managers in various aspects of project development and task management
- Provide assistance in preparing proposals, reports and presentations to clients
- Apply analytical and substantive expertise to the problems of homeland defense. Knowledge of the topics of molecular and cell biology and biochemistry are preferred over the other disciplines in biology.

### Principal Associate/Principal Scientist for Environment, Trade, and Agriculture

- Master's degree, Ph.D. preferred, in medicine, public health, and/or environmental health-related field
- 20+ years work experience in the field of public health, environment in developing country settings designing, managing and implementing projects related to public health and environmental health, especially on water, sanitation, population and environment linkages, vector control and other infectious disease issues
- Experience in managing technical quality of project outputs, and in monitoring and evaluating US government projects on public health and the environment.
- 10 plus years managing health and/or environmental programs in the field
- Published reports in the peer-reviewed literature on research and technical assistance related to international development, health and the environment.

#### Job Responsibilities:

- Provide technical and management leadership and perform qualitative and quantitative research on environmental health projects, particularly projects on integrated population, health and environmental interventions; community-based environmental sanitation and hygiene; vector control; and infectious disease control.
- Provide technical leadership on methods and approaches related to environmental health project implementation, such as development of quality management systems, monitoring and evaluation, surveys, information systems and surveillance, training, and field program design. Methods and reputation should attract business.
- Provide guidance to less senior staff through the application of advanced techniques, concepts and methods in international health and environment.
- Serve as a principal leader in business development on environment and health topics for USAID, by making significant technical design and other key contributions to winning proposal efforts.
- Manage and lead marketing and proposal activities with an established annual sales goal balanced with technical work targets, depending on work plan for the year
- Provide technical quality assurance, and monitoring and evaluation of international health and environment projects, as directed.
- Publish research and speak at client and professional meetings.

# **Apex Environmental, Inc.** www.apexenv.com/Boston

Apex Environmental, Inc. offers comprehensive environmental consulting, engineering, industrial hygiene, and remediation services. Our Remedial Services Group has developed environmental investigation and remediation capabilities that have spawned several technological innovations in site cleanup and closure. Our site investigation expertise has led us into specialties such as characterization of contaminated dredge materials. Environmental permitting, compliance and the software to manage the data offer clients with complex or multiple sites efficiencies inherent in automated data collection and management. Our engineers provide site planning and regulatory expertise to residential and commercial developers.

#### Services:

- 1. Air Quality Management
- 2. Data Management
- 3. Environmental Health & Safety Audits
- 4. Environmental Due Diligence
- 5. Engineering Land Planning
- 6. Engineering Process Design & Remedial Engineering
- 7. Risk Assessment

- 8. Industrial Hygiene & Hazardous Materials Management
- 9. Hazardous Waste & Recycling
- 10. Litigation
- 11. Remediation & Regulatory Closure
- 12. Water Resources
- 13. Stormwater Management

#### Environmental job postings:

Entry- and Mid-level Environmental Scientists\*

- 0-3 years (entry-level) and 3-5 years of related experience (mid-level)
- BS in Environmental Science or a related field preferred, but may be substituted for experience
- Proficiency with MS office
- Strong written and oral communication skills
- Have or be able to obtain timely job specific certifications including HAZWOPER and AHERA inspector
- Ability to lift and carry at least 40 pounds and work in field conditions
- Experience in performing environmental site assessments and/or asbestos surveys preferred
- Responsibilities: Perform asbestos/lead building surveys, indoor air quality and mold inspections, write and prepare reports, and provide bid and proposal support.

#### Program Manager

- 10 plus years experience of related technical consulting & business development experience
- BA/BS in Environmental or other related science or Engineering
- Strong written and oral communication skills
- Strong background in large program management, client development, & project management
- Professional certifications are a plus

<sup>\*</sup> Job trending information available.

• Responsibilities: develop and manage new services in various environmental and related engineering competencies

Private Sector - Apex Environmental continued

## Entry-level Environmental Scientist/Engineer\*

- 0-3 years of experience
- BA/BS in Environmental Science, Geology, Engineering, or a related field
- Strong written and oral communication skills
- Responsibilities: perform phase I/II environmental site assessments; groundwater and soil sampling; compliance inspections; asbestos, lead, and mold surveys and project monitoring; indoor air quality inspections, writing and preparing reports; and providing bid and proposal support.

#### Entry-level Environmental Scientist/Geologist\*

- 0-4 years of experience
- BA/BS in related science, preferably in Geology
- Organizational skills and attention to detail
- Responsibilities: soil and groundwater sampling, well installation, analyzing slug test data, data entry, preparing logs, and report preparation

#### Entry- and Mid-level Asbestos Professional

- 0-3 years (entry-level) and 3-5 years of related experience (mid-level)
- BS in Environmental Science or a related field preferred may be substituted for experience
- Proficiency with MS office
- Strong written and oral communication skills
- Have or be able to able to obtain timely job specific certifications including NIOSH 582 and AHERA inspector, project monitor, and supervisor certifications
- Ability to lift and carry at least 40 pounds and work in field conditions
- Responsibilities: perform asbestos/lead/mold surveys and project monitoring, indoor air quality inspections, air sample analyses, write and prepare reports, and provide bid and proposal support

#### Environmental Construction Project Manager

- 10 plus years of experience directing construction activities for environmental projects including underground storage tanks, soil and groundwater remediation, stormwater and stream restoration, and/or demolition
- BA/BS in Construction Management or equivalent experience
- Strong oral and written communication skills
- Responsibilities: oversee removal, upgrade, and installation of UST's and manage other environmental remediation projects

#### Entry-level Hydrogeologist

• 0-3 years of experience

<sup>\*</sup> Job trending information available.

- BA/BS (prefer MS) in Geology, with a Hydrogeology emphasis, or a related field
- Strong written and oral communication skills
- Exposure to contaminate, fate, and transport modeling software required
- Responsibilities: perform aquifer testing, data reduction, and soil and groundwater sampling.

Private Sector - Apex Environmental continued

#### Entry- to Mid-level Remediation Specialist

- 3 plus years of related experience
- BA/BS/MS in Civil or Mechanical Engineering, or a related field
- Strong mechanical, analytical, written, and oral communication skills
- GIS experience and EIT certification are preferred.
- Responsibilities: design, operate, and maintenance of remediation systems, report writing, and project management.

#### Environmental Engineer\*

- 5 plus years of related experience
- BA/BS in related science or engineering
- Strong written and oral communication skills and computer literacy
- Environmental consulting experience with real estate development, stormwater management, NEPA, and Brownfields preferred
- Responsibilities: project development, management, and execution of new services in various environmental and related engineering competencies

# Applied Geographics, Inc. www.appgeo.com

Boston

Applied Geographics, Inc. (AGI) provides a full range of high-quality Geographic Information System services, including a broad range of spatial information solutions for a diverse clientele, including all levels of government & the private sector, and for a variety of markets - environment, defense, facility management, transportation, utilities, urban planning, real estate, & government.

#### Services:

- 1. Cartography
- 2. Data Development
- 3. Desktop Applications
- 4. Facilities Management/System Integration
- 5. Implementation Assistance
- 6. Needs Assessment and Implementation Planning
- 7. Pilot Projects
- 8. Quality Assurance/Quality Control
- 9. RFP Development/Vendor Selection
- 10. Training
- 11. Web Applications

#### Staff:

Principals: President, Vice Presidents, Executive Vice President of Municipal Services Software Architects and Developers: Web Developer, Database Architect, Senior Software Developer

Business Development: Director of Marketing

<sup>\*</sup> Job trending information available.

Program Managers: Project Director, Director of Spatial Analysis

GIS Analysts: GIS Analysts/Project Managers, GIS Analysts, Production Manager, Senior

GIS Analysts/Project Managers

Information Technology: Director of Information Resources

Private Sector – ATC Associates

# ATC Associates, Inc. www.atc-enviro.com

Woburn

ATC Associates Inc. helps clients identify, analyze and resolve environmental, geotechnical and construction materials testing issues. With more than 1600 engineers, scientists, technicians and health and safety professionals in 65 offices nationwide, ATC has the resources to help address a full range of regulatory compliance, health and safety, environmental impact and structural concerns. ATC's environmental professionals are experts at conducting various levels of environmental studies, from baseline field assessments to full environmental impact statements. The range of services we provide includes identification of wetlands and other resource areas, preparation of required regulatory agency permits, and design of mitigation plans to offset environmental impacts. Services also encompass environmental planning & resource management.

Job Categories:

Chemist

Engineer

Geologist

Legal

Project Manager

Scientist

#### Environmental job postings:

Remediation Engineer

- BS in Environmental Science, Chemical or Petroleum Engineering or related field
- 7 to 10 years experience with related projects
- Experience with State Reimbursement
- Experience with Remediation System Design
- Certifications: Professional Engineer
- Responsibilities: Day-to-day management of petroleum related environmental remediation projects, including direct management of pilot testing activities, remediation system design, oversight of field activities associated with environmental remediation projects, installation and operation, data compilation, regulatory interface, coordination of subcontractors, scheduling field activities, and regulatory report preparation, invoicing and reimbursement.

#### Staff Geologist\*

- BS in Geology
- 0-3 years relevant experience in subsurface investigation, installation of gw monitoring wells,

<sup>\*</sup> Job trending information available.

- sampling, computation of data, strong writing skills, & proficiency in Microsoft Word & Excel
- Responsibilities: assist with proposal generation, subsurface investigations (including field work related to drilling and sample collection), data analysis, report writing, etc.

Private Sector – ATC Associates continued

#### Project Geologist\*

- B.A./B.S. in Geology, Environmental Science, or Environmental Engineering. M.A/M.S. Geology preferred.
- Minimum 5 years experience in environmental consulting, including environmental site characterization, subsurface investigation, and remediation for non-petroleum and petroleum sites.
- Strong Microsoft Office skills and experience with Visual ModFlow would be a plus.
- LPG, CHMM, or PE preferred
- Responsibilities: serve as a project manager in the hydrocarbon services group, and will be
  responsible for project-level activities as an environmental consultant and for assisting with
  the development of environmental services. The position will be involved with UST, LUST,
  RCRA, VRP and solid waste project management, with a majority of time spent with LUST
  projects. Candidate should be familiar with conventional and innovative remediation
  technologies and must be willing to assume responsibility for local client development

#### Senior Project Manager

- Excellent organizational skills. Good verbal and written communication skills.
- Working knowledge of Word and Excel
- B.S. Degree in Environmental Science/Engineering
- 8 to 10 years environmental consulting experience with 2+ years in a management role
- Project level budgeting/planning and tracking experience
- PG or PE designation plus
- Phase II and Remediation Consulting experience required
- Phase I Environmental Assessment experience required
- IDPH asbestos inspector and/or lead inspector licenses, and mold work experience plus
- Responsibilities: manage and conduct Phase II Subsurface and Remediation Consulting, Phase I ESA's, Transaction Screens, and NEPA compliance work performed by Environmental Professionals. Responsibilities also include business development and marketing, national account management, profit/loss and utilization management, preparation of proposals, management of project budgets, invoicing, etc; client interface, personnel training, mentoring, and development.

#### Environmental Project Manager

- B.S. in environmental science, geology, engineering, or equivalent
- Minimum of 5 years experience performing site assessments
- Preference will given to candidates with VCP, remediation, & project management experience
- Responsibilities: manage subsurface investigation and remediation. Prepare proposals, manage budgets and deadlines, regulatory interaction, and report preparation and review.

-

<sup>\*</sup> Job trending information available.

#### Staff Scientist

- BA/BS in Environmental Sciences, Geology, Engineering or related field
- MS Word, Excel proficiency; 40 hour OSHA preferred
- Responsibilities: field activities associated with environmental and geotechnical investigations, groundwater monitoring and sampling, report preparation; coordination of subcontractors; scheduling field activities; and data compilation.

Private Sector – Atmospheric and Environmental Research

# **Atmospheric and Environmental Research, Inc.** www.aer.com Lexington

Atmospheric and Environmental Research (AER), Inc. is a research and development company for cutting-edge technology. AER's expertise ranges from weather and climate prediction to remote sensing, air quality, and risk assessment for a diversity of clients.

#### Services:

- 1. Air Quality Assessment
- 2. Remote Sensing Solutions
- 3. Risk and Climate Analysis
- 4. Regulatory Compliance Strategies
- 5. Solution Engineering

#### Environmental job postings:

Ensemble Weather Position

- Postdoctoral or research scientist position in ensemble data assimilation
- Familiar with geophysical fluid dynamics principles
- Experience with numerical weather prediction, data assimilation methods, & atmospheric datasets
- Good verbal and written communication skills
- Responsibilities: Work on a number of projects to study the interactions of dynamics, thermodynamics, and model error in the context of ensemble data assimilation and forecasting, as well as develop advanced ensemble data assimilation techniques and methods for enhancing ensemble forecasts and to apply these in theoretical and practical contexts;
   Participate in scientific meetings and collaborate with scientists at academic and other institutions; Develop an independent research agenda

#### Microwave Remote Sensing Algorithm Development Scientist

- Working knowledge of atmospheric radiative transfer
- Familiarity with satellite remote sensing retrieval techniques
- Firm background in mathematical/statistical methods for applied physics
- Good oral and written communication skills
- Knowledge of FORTRAN and Microsoft Office applications
- MS or PhD in one of physical or Earth sciences advantageous
- Familiarity with microwave radiometric technology advantageous
- Experience with developing and meeting technical requirements advantageous

- Detailed knowledge of the physics and computation methods of atmospheric and/or surface radiative processes advantageous
- Knowledge of IDL, Python, Matlab, and CVS advantageous
- Responsibilities: development and performance evaluation of algorithms for retrieving atmospheric and/or land/ice surface parameters from microwave remote sensing data. The primary focus will be on algorithms for the Conical-scanning Microwave Imager/Sounder (CMIS) which is in development for the National Polar-orbiting Operational Environmental Satellite System (NPOESS).

Private Sector – Atmospheric and Environmental Research continued

#### Remote Sensing Software Engineer / Programmer

- Skills in applied mathematics, implementation of numerical methods, large scale systems
  development, image processing techniques and applications, scientific software
  development, software test, configuration management and software project control tools,
  object oriented design and programming techniques, mathematical programming, software
  engineering standards and application library development
- Experience with multi-sensor satellite data fusion (remapping, collocation, footprint matching, etc.) desirable
- Software skill requirements: IDL experience, Object oriented languages C++, Java and Python, and experience with code management systems CVS and Rational Rose.
- MS/PhD in one of the Physical or Earth sciences
- Minimum five years of experience in atmospheric remote sensing
- Responsibilities: support a team in development, validation and practical application of software and algorithms to support the retrieval of specialized atmospheric and geophysical parameters from remotely sensed data.

# **Battelle** www.battelle.org Waltham

Battelle is a global science and technology enterprise that develops and commercializes technology and manages laboratories for customers. We also team with more than 800 federal, state, and local government agencies, providing cost-effective science and technology in the areas of national security, homeland defense, energy and environment, health and life sciences, and transportation and space. We insert technology into systems and processes for manufacturers; pharmaceutical and agrochemical industries; trade associations; and government agencies supporting energy, the environment, health, national security, and transportation.

#### Staff:

Acquisition Analyst
Aerosol Research Associate
Agent Chemist
Bioinformatics Statistician
Biological Laboratory Specialist
Biometrics Engineer
Chemical Engineer

Chemistry/Biochemistry Research Associate Environmental Engineer Research Intern Environmental Scientist\*

<sup>\*</sup> Job trending information available.

GIS Analyst Hazardous Materials Tech Lab Data Analyst Laboratory Animal Caretaker Laboratory Helper Laboratory Technician Microbiology Technician Research Scientist Toxicologist

#### Environmental job postings:

#### Quality Assurance Coordinator

- Bachelor's degree in chemical science
- 3 plus years of experience in Quality Assurance
- 2 plus years of laboratory experience
- Familiar with water and sediment sampling procedures, the requirements of EPA's regulated programs (e.g., Clean Water Act, CERCLA), and the associated methods
- Strong written and oral communication skills

#### Responsibilities:

- Work with laboratory manager to implement Battelle's Quality System
- Schedule, plan, and conduct audits and inspections of projects and facilities and prepare written reports to management
- Manage all aspect of laboratory certification
- Prepare for and respond to external inspections
- Coordinate performance testing program
- Oversee management of the chemistry training documentation
- Review analytical SOPs and prepare SOPs that define the QAU activities and responsibilities
- Conduct training sessions for analytical staff in QA/QC requirements

#### Laboratory Technician

- B.S. or B.A. in physical or biological sciences
- Minimum of two years of specialized training in chemistry or other physical science, or two years of laboratory work experience
- Experience in preparation of environmental samples for chemical analysis

#### **Preferred Qualifications**

- Familiarity with sample preparation procedures used at the Battelle chemistry laboratory
- Familiarity with Battelle LIMS for laboratory data entry and recordkeeping
- Familiarity with Microsoft Word and Excel
- Good interpersonal and communication skills

#### Responsibilities:

- Perform standard and sometimes repetitive laboratory operations such as extraction and processing of samples, including solvent extraction, filtering, weighing, and other activities according to instructions and under the supervision of a task leader.
- Interpret scientists' explanations, and set up and conduct experiments.
- Operate and/or monitor standard laboratory and test equipment such as accelerated solvent extractors and high performance liquid chromatographs
- Perform simple mathematical calculations and prepare data for supervisors or scientists.
- Prepare data for computer input and perform manual keyboarding to enter data into LIMS.
- Observe experiments and accurately record data in laboratory notebooks or into LIMS records.

# Bechtel Group, Inc. www.bechtel.com

**Boston** 

Bechtel is a global engineering, construction and project management company.

#### What We Do

- Roads and rail systems
- Airports and seaports
- Fossil and nuclear power plants
- Refineries and petrochemical facilities
- Mines and smelters

- Defense and aerospace facilities
- Environmental cleanup projects
- Telecommunications networks
- Pipelines
- Oil and gas field development

#### Markets served:

- Civil Infrastructure
- Development, Financing, & Ownership
- Mining & Metals
- Oil, Gas & Chemicals

- Power
- Telecommunications
- U.S. Government Services

Functional Departments of Employment: *Engineering* 

Environmental, Safety, and Health Urban Infrastructure and Planning

#### Environmental job openings:

Program Industrial Hygienist

#### Responsibilities:

- Plan, develop, monitor, & evaluate health physics & industrial hygiene services for projects & operating facilities
- Assists projects and operating facilities in health programs, monitoring health systems, collecting data (air samples), and implementing emergency response capabilities.
- Analyzes environmental and occupational health hazards and develops methods for health environmental and hazard controls at projects and operating facilities
- Assist in the development of IH policies, procedures, and recommended practices.
- Assist in the preparation of reports, plans, assessments, and other documentation to ensure that ERC activities are conducted in a manner that compiles with applicable requirements.
- Monitor group training activities to ensure qualifications are maintained.
- Participates in readiness reviews, self-assessments, and surveillances of sites/activities to ensure continued compliance with applicable regulations and contract requirements.
- Provides technical IH support to projects and functional groups.

#### Private Sector - Bechtel Group continued

#### Senior ESH Specialist

- Skills: Proficiency levels range from lowest to highest: Basic, Intermediate, Advanced, & Expert
- Intermediate Office Automation Skills Microsoft Excel, Outlook, & Work:
- Advanced Series 100:ES&H Policies & Programs CP101-ES&H Responsibilities, CP103-Proj.Develop & Plan Process, & CP106-Zero Accident Team
- Advanced Series 200: Safety Regulations & Standards CP200-General Safe Work Practices & CP202-Hazard Communication Program

#### Responsibilities:

- Develop, implement, and supervise the Project ES&H Execution Plan
- May act as project emergency preparedness coordinator and/or field industrial hygienist, health physicist, and/or environmental compliance professional
- Ensures events meeting thresholds identified in DOE Order 232.1A are reported to DOE headquarters through the Occurrence Reporting and Processing System (ORPS) database.
- Conduct accident investigations to determine root, direct, and contributing cause(s) of events.
- Document results of the investigations in a detailed report to be reviewed and approved by DOE personnel.

#### Structural Senior Engineer

- B.S. in structural engineering
- Minimum of 5-years experience as a structural engineer for grade 24 and 8 years for grade 25.
- Prior experience in the design of nuclear waste handling/processing facilities / nuclear power plants and familiarity with DOE Orders and NRC Regulatory Guides desirable
- Familiarity in finite element modeling of structure and use of structural computer programs, such as GTSTRUDL.
- Proficient in Word and Excel

#### Responsibilities:

- Plans and conducts independent work requiring judgment in the evaluation, selection, application and adaptation of engineering techniques, procedures and criteria.
- Provides technical direction and assigns work to engineers, designers, and drafters who assist on specific assignments
- Assist in developing finite element models of the Process Buildings for the Waste Treatment and Immobilization Plant (WTP) Project.
- Perform structural analyses.
- Provide structural input for development of seismic analyses models for the Process Buildings.
- Prepare preliminary structural design of the Process Buildings, and Plant Structures.
- Prepare structural specifications, design criteria, and drawing standards for CS&A group.
- Provide input to Safety Analysis Report.
- Provide structural input to modularization plan.
- Provide detailed structural input to fixed price cost estimate.

### **R.W. Beck** www.rwbeck.com/ Framingham

R. W. Beck has the resources and experience to help you achieve your goals in management consulting and engineering. Since 1942, R. W. Beck has been providing services to the public and private sectors in the areas of energy, water resources, solid waste and telecommunications.

#### Environmental job postings:

#### Senior Civil/Structural Engineer

- BS degree in civil engineering
- PE license
- 5 -10 years of relevant experience in HV & EHV transmission design

#### Responsibilities:

- Transmission Line Routing/Siting
- Transmission Line Permitting
- Transmission line design & upgrades for 34.5 kV through 500 kV
- Apply NESC Codes, ASCE Standards, and RUS Standards
- PLS-CADD

- High level of computer competency, PLS-CADD required
- Excellent technical writing ability
- Project management ++
- Structure loading
- Conductor ratings
- Structural analysis
- Foundation design
- Prepare material procurement documents
- Prepare construction documents
- Project management

#### Senior Solid Waste Engineer

- Professional Engineer's license required Civil Engineer preferred.
- 7-8 years of industry experience.
- Experience in planning, permitting, and design of solid waste management facilities.
- Working knowledge of solid waste regulatory issues as they relate to landfills, transfer stations, WTE plants, etc.
- Experience in marketing solid waste consulting engineering services to new and existing clients.
- Strong writing, analytical and quantitative skills.
- Excellent project management skills
- Responsibilities: Provide consulting & engineering services to municipal clients on planning, permitting, & design of landfills, transfer stations &/or waste to energy plants; Bring in new business, oversee project activities, & hire new talent

#### Senior Engineer\*

- Bachelors in Civil Engineering (P.E. license required).
- Minimum of 7-10 years of experience in managing storm water, transportation, and solid waste management planning and engineering projects.
- Strong writing, analytical and quantitative skills

#### Responsibilities:

• Provide consulting and engineering services to local and regional governments for storm water,

<sup>\*</sup> Job trending information available.

transportation, and solid waste management planning and engineering issues.

• Involvement in overseeing project activities, obtaining new business, & hiring new talent

*Private Sector – R.W. Beck continued* 

#### Water Consultant/Project Manager

- B.S. degree in Civil Engineering & PE required
- Minimum of 8-12 years experience in management consulting in the water and wastewater industry for planning/design water supply, transmission, storage, and wastewater and reuse design, treatment and conveyance. An earlier career with a water district or utility directing water and wastewater operations may apply towards experience.
- Responsibilities: Assist with the expansion of the water consulting and engineering practice

# Louis Berger Group, Inc. www.louisberger.com

Needham

The Louis Berger Group's objective is to continue to be one of the leading infrastructure engineering, environmental science and economic development operations in the world.

#### Sectors:

- Aviation
- Buildings
- Construction Management
- Cultural Resources
- Energy Services
- Environmental Engineering
- Environmental Services

- Hazardous Materials & Environmental Management
- Highways and Bridges
- Program Management
- Project Finance Advisory
- Railroad Services
- Traffic Engineering

- Transit
- Transportation Planning
- Utility Services
- Water Resources & Irrigation
- Waterfront and Marine

#### Environmental job postings:

Mid to Senior level Site Civil Engineers/Planners

- Bachelor's degree in related field required, PE desirable.
- 2 to 4 years of experience in hydrology and hydraulics, roadway drainage design/stormwater management, utility design, grading design, preparation of Soil Erosion and Sediment Control Plans, NJDEP Land Use Permitting, and preparation of contract documents.
- Experience in hydrologic and hydraulic modeling (TR-55, HEC-1, HEC-2, HEC-RAS, Hydraflow) a plus
- Strong communication and writing skills.

#### Construction Engineers and Inspectors (Civil)

- *Resident Engineer:* Bachelor's degree in civil engineering, minimum 5 years experience in public works highway and bridge projects, and PE.
- Assistant Resident Engineers/Construction Engineers: Bachelor's degree in civil engineering, minimum 5 years experience in public works highway and bridge projects, and PE preferred.
- *Construction Inspectors:* Min 5 years experience in public works highway and bridge projects, NAQTC, WAQTC, or NICET certifications preferred.

#### Geotechnical Engineers

- One position requires 10+ yrs experience, and the other 3 to 8 yrs experience.
- PE license, landfill experience, and Brownfields redevelopment experience preferred

Private Sector - Louis Berger Group continued

#### Hydrologist/Engineer

- 4 to 10 years experience.
- PE license preferred

### Remediation Engineer or Geologist

- 5 to 10 yrs experience.
- PE license preferred.

#### Geologist/Environmental Scientist\*

- 2 to 5 years (mid-level) and 5 to 10 years (senior) experience in site and remedial investigations, data evaluation, and subsequent reporting
- Bachelor's Degree in Geology, Environmental Science or Engineering- MS a plus
- 40-hr OSHA HAZWOPER certification
- Subsurface Evaluator license and/or PA IUM Certification a plus

#### Responsibilities:

- Leadership role in site investigations and remediation projects for public and private clientele.
- Everything from cost estimating a project through managing field efforts through final report preparation.

#### Water Resources Engineer

- BS in Civil Engineering, Agricultural Engineering, or related disciplines and at least 5 years work experience or with a Masters/Ph.D. degree and at least 2 years experience
- PE certification and hydrologic/hydraulic modeling experience desirable Responsibilities:
  - Conduct field surveys and collect hydrologic data for engineering design projects.
  - Perform/manage hydrologic and hydraulic engineering aspects of civil/site/wetland design projects, such as feasibility studies, water budget, groundwater and surface water studies, hydraulic and hydrologic modeling, and prepare technical reports.

# Civil/Environmental Engineer\*

- BS in Engineering
- 0-4 years work experience
- AutoCAD and/or Microstation experience
- Excellent technical writing skills
- EIT certification desirable.

#### Responsibilities:

• Conduct field surveys and collect data for environmental engineering design projects.

• Assist senior staff in all aspects of environmental engineering design projects, such as site

<sup>\*</sup> Job trending information available.

design, feasibility studies, hydraulic and hydrologic studies and modeling, technical reports, and quantity calculations.

• Prepare design documents (drawings, specifications, and cost estimates).

#### Mid to Senior level Civil/Structural Engineer

- 6 to 10 years broad based experience in site layout, buildings design and code compliance
- PE preferred.

Private Sector - Louis Berger Group continued

#### Environmental Engineer/Scientist\*

- BS in Science related field (Environmental Science, Geology, Civil or Environmental Engineering)
- Up to 2 years related experience
- Excellent interpersonal, communication, and teamwork skills
- Word and Excel proficient
- 40 hour HAZWOPER certified (asbestos and lead certifications are a plus)

#### Responsibilities:

• Perform environmental site assessments, facility compliance, permitting, subsurface evaluations, industrial hygiene surveys, asbestos and lead services, indoor air quality assessments, environmental health & safety training, and other environmental services.

#### Mid- to Senior-Level Civil Engineer\*

- B.S. in Civil/Environmental Engineering; an advanced degree in engineering desirable
- Minimum of five to ten years experience
- Project experience with grading, topography manipulation, hydrology and hydraulics, and drainage design/storm water management
- Experience in conducting utility assessments and in preparing utility plans
- Experience preparing Soil Erosion and Sediment Control Plans
- Experience in preparation of contract documents
- Experience with client management
- Excellent computer skills, technical skills and verbal communication skills
- Experience in hydrologic and hydraulic modeling (TR-55, HEC-1, HEC-2, HEC-RAS, HEC-HMS, HEC-FDA, Hydraflow) desirable

#### Responsibilities:

Site planning studies, Infrastructure studies, Site selection analyses, Site condition
assessments, Watershed evaluation and planning, Flood control and flood plain
management, Environmental compliance studies, Environmental impact assessments under
NEPA, and Design related to the areas above.

#### Planner/Economist\*

- Master's degree and 2-3 years of experience in urban planning, regional science, transportation economics, or related field
- Familiarity with spreadsheets, databases, statistical packages, and quantitative methods required. Knowledge of demographic-economic models, regional economic and fiscal

Job trending information available.

- impacts, site selection, and market research tools used in the support of transportation planning, environmental assessment, and community planning studies strongly preferred.
- Responsibilities: research on a wide variety of project and policy-related studies for a roster of government agency and private-sector clients

#### Civil Inspector

- Bachelor's degree in related field required
- 5 years relevant experience
- Landfill experience required with 40hr HAZWOPER training

Private Sector - Louis Berger Group continued

Senior Environmental Engineer/Scientist/Geologist\*

- BS in Engineering, Geology
- MS, PE, CHMM and/or PG a plus
- 5 to 10 years experience in environmental due diligence, remedial investigations, data evaluation, and subsequent reporting
- 40-hour OSHA Health and Safety Training and strong technical writing skills required.

#### BETA Group, Inc. www.beta-inc.com

Norwood

Welcome to the BETA Group, a strong, progressive engineering, technology and science firm serving the federal, state, municipal and commercial sectors since 1982. BETA offers focused services in the areas of Environmental Engineering, Transportation Engineering, Civil-Site Engineering, Structural Engineering, Environmental Science, Information Systems.

#### Environmental job postings:

Civil/Transportation Engineer\*

- BS in Civil Engineering and Fundamentals of Engineering Registration
- 3 to 5 years of experience in the field of transportation and civil/site engineering with an emphasis on state DOT and/or municipal projects
- Excellent organizational and written communication skills
- Working knowledge of AutoCAD and Autodesk Land Desktop required.
- Knowledge of Microstation desirable

#### Transportation Engineer

- BS in Civil Engineering
- 2-5 years experience in field of transportation with emphasis on roadway design including drainage analyses & water quality/detention basin design
- Proficiency in Land Development
- Fundamentals of Engineering Registration preferred
- Experience in quantity takeoffs, traffic assessments including signal design/analyses, signal warrants desired
- Excellent organizational & written communication skills

<sup>\*</sup> Job trending information available.

#### Civil/Sanitary Engineer

- BS in Civil Engineering
- Minimum of 6 years of experience in the design of wastewater collection systems and/or water distribution systems
- Professional Engineering Registration
- Fundamentals of Engineering Registration and AutoCAD experience preferred
- Excellent organizational and written communication skills

Private Sector – Bioengineering Group

# Bioengineering Group, Inc. www.bioengineering.com

Salem

The Bioengineering Group, Inc. provides a full range of consulting services in the field of bioengineering for erosion control, water quality, habitat restoration, and stormwater management. Our designs combine the use of vegetation with the principles of geomorphology, ecology, and hydrology and hydraulics to offer long-term stability and low-cost maintenance as an alternative to "hard" engineering structures. Native plant materials, working alone or in conjunction with reinforcing materials, provide enhanced habitat for fish and terrestrial life, as well as the benefits of biodiversity, buffering capacity, and aesthetics.

Staff:

President

**Director of Operations** 

Ecology\*:

Senior Ecologist Water Resource Planner Natural Resources Planner

Riparian Ecologist Aquatic Ecologist Intern Junior Ecologist Marine Scientist

Earth Science\*:

Fluvial Geomorphologist Senior Watershed Restoration Hydrologist

Hydrogeologist Field Technician

Engineering:

Hydraulic Engineer Water Resources Engineer Ecologist Engineer

Senior Hydraulic Engineer Civil Engineer

Design\*:

Senior Landscape Architect Junior Landscape Architect

Landscape Designer Landscape Architect/Horticulturalist

#### Environmental job postings:

Senior Soils Engineer

• Ph.D. in geotechnical, agricultural, environmental, or civil engineering, or equivalent field

• 15+ yrs experience applied engineering, academic research, project management, consulting

<sup>&</sup>lt;sup>\*</sup> Job trending information available.

- Specialized training & experience in obtaining slope stability through the use of native plants and the ability to integrate vegetation and soils for the restoration of degraded landscapes
- Detailed computational skills related to various aspects of plant/soil/water interaction
- Experience modeling watershed hydrology & designing measures for managing water quality
- Familiar with issues related to mine reclamation, including methods for using plants to dewater mine tailings and solutions for acid mine drainage problems
- Ability to coordinate project activities with the diverse group of multi-disciplinary natural scientists as well as engineers and landscape architects
- Show a proficiency at report writing and technical presentations, and preferably, have an extensive list of published peer-reviewed articles in respected scientific journals.
- Presentation skills & leading public meetings for projects.

Private Sector – Bioengineering Group continued

#### Mid-Level Ecological Designer

- Academic degrees and work experience that may fill our needs include civil/environmental engineering, landscape architecture, and natural resource management
- 5+ years work experience. 1+ year working w/AutoCAD R14 or later version or GIS program
- Experience with Computer Aided Design (CAD) & Geographic Information Systems (GIS). Experience with the operation and maintenance of these systems in order to provide both drafting and technical support related to preparation of watershed management information and construction-related documents.
- Graphic communication skills and the ability to think visually
- Experience with survey management and terrain modeling a plus

#### Responsibilities:

- Work under the supervision and guidance of senior level engineers and natural scientists
- Drafting and information retrieval using AutoCAD and GIS programs, presenting at meetings, performing and/or assisting with field investigations including inventory of soil, vegetation, topography, and hydrography, preparing and/or assisting with detailed plans and specifications, supporting the preparation of cost estimates and maintenance guidelines, project report writing, and general project administration and record keeping. The job will consist mainly of office work, with under 25% of the time involved in fieldwork for the purposes of site evaluation, construction supervision, project monitoring, and public outreach. Some travel will be required to address project needs outside of the local region.

#### Summer Internships

• Possess or are in pursuit of a Master's degree in the field of natural science

#### Black & Veatch www.bv.com

**Boston** 

Black & Veatch Corporation is a leading global engineering, consulting and construction company specializing in infrastructure development in the fields of energy, water and information. Founded in 1915, Black & Veatch serves its clients with conceptual and preliminary engineering services, engineering design, procurement, construction, financial management, asset management,

information technology, environmental, security design and consulting, and management consulting services.

Job categories:

Architecture Engineering - Electrical Engineering Technician
Consulting Engineer - Instrument & Engineering - Other
Engineering - Chemical Control Environmental Science

Engineering - Civil Engineering - Mechanical

Private Sector - Black & Veatch continued

#### Environmental job postings:

Civil Engineer\*

- MS Degree preferred. Courses in Hydrology, hydraulics and water quality preferred
- PE
- Minimum of 5 years in a Water Resources leadership capacity required
- Word processing, spreadsheets, application of specialized computer models skills required Responsibilities:
  - Perform a variety of water resources engineering analyses, write reports, make marketing presentations, and prepare proposals. This may involve the collection, organization, and evaluation of data; computer modeling of stormwater and water quality; preparation of letters, memoranda, and reports; preparation of engineering drawings and specifications; and development of project approaches, budgets, and schedules.

#### **Project Scientist**

- BS Degree in Geography
- Experience using GIS software & Geodata bases
- GIS Software (ArcInfo/ArcView), Log Boring software, MS Office (Word, Excel, Access), Outlook, Microstation experience a plus

#### Responsibilities:

Working with other scientists and engineers on projects to provide GIS support. Use
 ArcView to produce graphics for project reports. Also, use ArcView to do datum
 conversions and translate files to and from Microstation. Use ArcInfo to attach GIS data to
 database.

#### Environmental Scientist\*

- Bachelor's or Master's degree Environmental Science, Biology, Ecology, or Chemistry.
- 2-5 years of relevant experience.
- Proficient in MS Office (Word, Excel, Access), and Outlook. General Computer Literacy spreadsheets, word processing, GIS, CAD.

<sup>\*</sup> Job trending information available.

#### Responsibilities:

• Primarily support investigation activities for hazardous waste projects. Prepare investigation plans, reports and support field investigation activities. Assist with human health risk assessments, ecological risk assessments, data validation, and GIS activities.

#### Geologist\*

• Bachelor's degree required.

#### Responsibilities

• Working with other scientists and engineers on projects resolving hazardous and toxic waste problems. Initial responsibilities will be specific to geologic and hydrogeologic characterization, planning documents, conducting field investigations, directing well installations, collection of soil and groundwater samples, performing and interpreting aquifer tests, preparing reports, and participating in other site characterization and hazardous waste management activities.

Private Sector - Black & Veatch continued

#### Entry-Level Project Scientist

- BS in environmental science or related field
- MS office ArcGIS would be helpful

#### Responsibilities

• Conduct HAZWOPR field investigations including collection of environmental samples of soil, groundwater, surface water, sediment, and biota; 40-hour OSHA HAZWOPR training; Field work; position will progress to include environmental data analysis, GIS, report writing, & risk assessment.

#### Project Scientist

- B.S. / B.A. Geography or equivalent
- 3-8+ years experience with at least 3-5 years experience using ArcInfo and/or ArcView 3.x and 8.x for all phases of GIS project support including data creation, data editing/ modification, and analysis.
- EIT or PE license desired
- General knowledge of civil engineering features including but not limited to stormwater utilities, floodplains, and roadways, etc is also desired though not required.
- Good written and oral communication skills

#### Responsibilities:

- Participate in work under the FEMA Multi Hazard Flood Map Modernization contract.
- Preparation of standardized FEMA Digital Flood Insurance Rate Maps and GIS databases using ESRI ARCGIS 8.x software

# Geologist\*

- BS/BA in Geology or Civil-Environmental Engineering-MS preferred. Special Courses or Training Helpful
- 1 to 2 years experience
- Recent Hazardous waste field experience including sample collection/description for

<sup>\*</sup> Job trending information available.

hazardous waste project

- Superior communication skills
- 40 hours Hazardous Material training required & current.
- Familiar with Word processing and spreadsheet software (prefer MS Word and Excel)
- Physically capable of performing Hazardous Waste field work

#### Responsibilities:

• Participate in a broad range of office & field environmental studies and remedial actions. Field observation, sample collection & description, supervise drill rig crews; construction oversight; test, operate & maintain remediation system, data analysis, report preparation

#### **Project Scientist**

- BS Degree in Geography; Experience using GIS software & Geodata bases Responsibilities:
  - Work with other scientists and engineers on projects to provide GIS support.
  - Use ArcView to produce graphics for project reports & do datum conversions and translate files to and from Microstation. Use ArcInfo to attach GIS data to database

Private Sector - Blasland, Bouck & Lee

# **Blasland, Bouck & Lee, Inc.** www.bbl-inc.com Beverly

Blasland, Bouck & Lee, Inc. (BBL) is a leading provider of environmental, health, and safety services in the United States and internationally on behalf of the world's most important companies and select, non-regulatory governmental clients. We provide effective environmental, engineering, life sciences, and related management services to protect, clean, and restore the environment.

#### We offer career opportunities in:

Construction/Field ServicesEnvironmental EngineeringLife ScientistDesignerEnvironmental SciencesScientistDrafterField ServiceSurveyorEcologistGeology / HydrogeologyToxicologyEconomicsIndustrial Hygiene / SafetySupport Services

#### Environmental job postings:

Civil Designer / Engineer\*

- BS in civil engineering or related technical field
- 2 5 years experience in civil/design engineering
- Highly effective written & oral communications skills
- Experience with civil engineering-based design software strongly preferred
- MS and & preferred
- Responsibilities: Civil technical design projects focusing on storm water management, earthwork, landfill & site remediation design.

#### EHS Technical Specialist

• B.S. in Health & Safety, Industrial Hygiene, Public Health, Engineering or Health and Safety

Job trending information available.

related discipline. M.S. in related discipline preferred.

• Minimum of 5 years of related EHS compliance experience. Minimum of three years consulting experience required.

#### Responsibilities:

- Closely coordinates Senior EHS Manager or their designee to assure that technical support services are delivered to the EHS Team's clients in a professional, timely and cost effective manner
- Provide administrative support to the assigned Senior EHS Leader
- Independent management of tasks and projects as assigned, under the direction of the Senior EHS Leader
- Maintain core knowledge base of EHS regulatory requirements and conduct higher level research and interpretation of EHS regulations and emerging regulatory issues
- Assist EHS Senior Leader in management of key client relationships
- Track and report on EHS project opportunities and activities
- Assist EHS Senior Leader in preparing proposal & cost estimates for Tier Clients & qualifications, marketing materials, cut-sheets, newsletters, etc.
- Investigate & identify additional potential EHS programs

Private Sector - Blasland, Bouck & Lee continued

#### Environmental Engineer/Geologist/Scientist\*

- BS in Civil, Environmental, Geology or related field
- 1-3 years related experience
- Responsibilities: Perform field-testing and sampling activities

### Environmental Engineer\*

- BS in engineering, geology, or related environmental field
- 6-8 yrs experience with at least 4 years in environmental consulting
- MS and PE or PG preferred
- Experience with MA Contingency Plan and/or CT RSRs a plus
- Responsibilities: Project management, coordinating field activities associated with site investigations, feasibility studies, remedial designs, and report preparation.

### Environmental Geologist-Scientist\*

- BS in Geology, Environmental Studies, or related field
- 1-3 years related experience with an emphasis on hands-on, field-related work
- Preference for candidates with 40-Hour OSHA HAZWOPER certification; and qualified individuals with petroleum-related remediation experience
- Responsibilities: Perform field-testing & sampling activities, drilling supervision, recordkeeping & reporting, & oversight/coordination of field technicians & subcontractors.

#### Environmental Project Engineer

- BS in chemical engineering, civil/environmental engineering or a related discipline
- 3 to 6 years of environmental regulatory compliance, reporting, and management systems experience in manufacturing and/or consulting required
- Good knowledge of environmental regulations promulgated under the Clean Air Act (CAA),

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<sup>\*</sup> Job trending information available.

Clean Water Act (CWA), Emergency Planning and Community Right-To-Know Act (EPCRA), Resource Conservation and Recovery Act (RCRA), and Superfund Amendments and reauthorization Act (SARA)

- Working experience completing air emission calculations & inventories, air permit applications, air emission reports, water discharge calculations & monitoring reports, SARA Form R chemical release reports, & other environmental compliance calculations & reports
- Knowledge of ISO 14001 environmental management system requirements, including comfort with guiding organizations in system design, implementation, and maintenance
- Excellent written communication skills and high level of comfort in writing procedures and reports, with good working knowledge of Microsoft Word

### Responsibilities:

- Responsible for the environmental compliance, reporting, assessment, due diligence, and
  management systems components of the EHS business area. Work closely with Senior EHS
  Leader to help advance growth of the EHS Attack Team by developing advance technical
  and management skill in this segment of EHS service area
- Closely coordinate w/Senior EHS Manager to provide technical support & assure that work products are delivered to EHS Team's clients in professional & timely manner
- Assist EHS Senior Leader in preparing proposal & cost estimates for Tier Clients & qualifications, marketing materials, cut-sheets, newsletters, etc.

Private Sector - Blasland, Bouck & Lee continued

#### Field Technician

- High school diploma
- 0-3 yrs of related experience
- 40-Hour OSHA certification is a plus
- Responsibilities: Sample groundwater, monitor wells & work with ground water remediation systems

#### Geologist\*

- BS in Geology or Hydrogeology
- 1 to 4 years related experience
- MS and Professional certification preferred
- Responsible for logging soils, collecting soil/ground water samples, groundwater mapping/contouring, cost estimating, working with contractors and clients, writing reports, data management, aquifer testing and analysis, and geochemical interpretations.

#### Scientist

- Masters degree in biology, ecology, zoology, wildlife biology, fisheries, or a closely related natural resource field. Preference given to candidates with specialty in herpetology, ornithology, or fisheries.
- 2-3 years of experience
- Excellent field survey, research, and writing skills required.
- Candidates must be able to pursue rigorous fieldwork
- Experience in invertebrate identification very helpful

Job trending information available.

• Responsibilities include field-work (e.g., wetlands delineations, endangered species surveys, etc.), preparation of reports, permit applications, interaction with clients and agency staff.

#### Water Resource Specialist

- B.S or higher in Environmental Science, Engineering or aquatic biology discipline
- 16 to 20 + years experience in industrial water quality permitting, compliance, biological applications, particularly in the power industry
- Established relationships with the industry and regulatory agencies are important along with significant experience with Section 316 (b), i.e. knowledge of the EPA Rule, aquatic biology, mitigation approaches, as well as in depth experience with I & E design and execution
- Expertise in NPDES permitting as well as evaluation and permitting
- Excellent communication skills

#### Responsibilities:

• Focus on Section 316 (b) projects for phase II plants in the power industry and eventually phase III plants in other industries. Recruit additional staff and develop and managing specific client relationships as well as large quality water projects

*Private Sector – BlazeTech Corp.* 

# **BlazeTech Corp.** www.blazetech.com Cambridge

Founded in 1987, BlazeTech, an engineering consulting firm, provides research and development, modeling and simulation, and expert witness services. Our forte is in bridging the gap between theory and practice to solve real problems and develop software and advanced technologies in a timely and cost-effective manner. Technology development includes conceptual designs, proof-of-concept tests, proto- type development, field-testing, and analysis.

#### Environmental job postings:

Senior Engineers (full time)

• Responsibilities: design/develop/maintain engineering computational models and software applications, develop interfaces, maintain web infrastructure/content and RDBMS.

#### Environmental Assessment/RMP Expert (part time/consulting)

- Experience in regulatory analysis and in the chemical industry required. Individual must have completed successfully several projects in this area.
- Responsibilities: leverage our internal resources and capture directly a portion of the RMP/environmental assessment market.

#### Booz Allen Hamilton www.bah.com

Boston, Burlington

Booz Allen Hamilton is a global strategy and technology consulting firm.

#### Environmental job postings:

#### Biosciences Technical Assistant

- BS in Biology, Microbiology, Molecular Biology, Epidemiology, Chemistry, or related field
- Experience with chemical and biological defense required
- Knowledge of biostatistics a plus
- Knowledge of MS Office applications, including Access, Excel, Word, PowerPoint, and Project
- Excellent interpersonal, analytical and organizational, and oral and written communication skills

#### Responsibilities:

- Perform challenging work in the defense arena on projects related to next generation detection equipment for biological agents.
- Assist with important technical and administrative support for key government clients in the Department of Defense.
- Provide technical writing, document coordination, team action coordination, and data management.
- Develop and revise technical reports, daily report tracking, the development of test plans, and conducting market research on chemical and biological defense technology.

#### Private Sector – Booz Allen Hamilton continued

#### Environmental Consultant

- BS degree in Environmental Science, Environmental Engineering, or related field
- Experience with the management of the DoD test & training ranges and the installations located overseas preferred
- Experience with environmental management at overseas locations
- Experience with civil engineering, facilities management, or military training for DoD organizations
- Experience with the management functions for military training, including environmental management, facilities management at military department headquarters, major commands, or overseas locations
- Experience with information systems used by DoD organizations
- Experience with management training, environmental, or facilities activities and functions Key Role:
  - Provide management consulting services to DoD organizations related to environmental management and readiness at military installations located overseas.
  - Conduct research, analysis, and synthesize information to help prepare briefings and written reports for DoD senior officials.
  - Provide analytical, organizational, and writing skills.

#### Environmental Policy Analyst

- BA or BS in Environmental Science, Environmental Policy, or related field
- 3 years related experience

- Experience with DoD or other federal agency environmental programs preferred
- Ability to conduct research & analysis of environmental issues for federal gov't agencies
- Ability to evaluate environmental policy, guidance, and programmatic data
- Ability to assist with report preparation, client representation, and data analysis
- Excellent oral and written communication skills
- Responsibilities: Evaluate environmental policy, guidance, & programmatic data; Provide support in report preparation, client presentation, & data analysis; Work with project team on environmental issues related to hazardous waste cleanup and environmental compliance for various federal government clients.

#### Environmental Program Analyst

- BA or BS Environmental Science, Environmental Policy, or related field; MA or MS preferred
- 1-3 years related experience
- Experience with report preparation, client presentation, and data analysis preferred
- Ability to conduct research and an analysis of environmental issues
- Excellent oral and written communication skills

#### Responsibilities:

 Assist current clients with all aspects of their environmental programs associated with environmental compliance, hazardous waste cleanup, pollution prevention, and conservation. Evaluate environmental policy, guidance, and programmatic data. Lead and participate in tasks, including policy and guidance development, data management, strategic planning, and communication outreach.

Private Sector - Booz Allen Hamilton continued

#### NEPA Environmental Specialist

- BS degree in Engineering or a related field required
- 7 to 9 years of experience with NEPA required
- Experience performing NEPA reviews & making determinations of appropriate level of NEPA review
- Experience with other civilian and government agencies to support activities with the Federal Aviation Administration, other civilian agencies, and potentially DoD components
- Excellent analytical, writing, client interaction, management, and project management skills
- Responsibilities: Support growing client needs for NEPA reviews, including CX, EA, and EIS policy development, and program management assistance. Provide support to EPA's Architectural, Engineering, and Real Estate Branch, EPA's Office of Federal Activities, and their NEPA program, including making determinations of the appropriate level of NEPA review, and research and develop NEPA environmental assessments and categorical exclusions. Lead NEPA projects, perform senior technical quality assurance reviews of NEPA documents, and provide technical expertise on NEPA-related tasks and NEPA program management. Read and interpret design drawings and technical statements of work for construction projects. Interact with technical, scientific, and engineering professionals at the EPA's headquarter engineering, real estate, environmental professionals, local facility representatives, and the EPA's Office of Federal Activities representative.

#### Cambridge

Areas Of Expertise:

1. Energy

#### 2. Environmental & Product Liability

The Brattle Group offers clients a unique combination of economic, finance, engineering, and regulatory expertise in the environmental and product liability area. The primary focus of our practice is litigation and settlement support. We have applied our multidisciplinary expertise to a wide variety of litigation matters that have involved the allocation or recovery of costs, claims of property value diminution, natural resource damages, insurance, business damages, and non-compliance penalties. We have also provided consulting to help firms manage liabilities, assess regulatory impacts, and develop business plans to take advantage of the changing regulatory environment. We have worked on issues driven by all major environmental regulations including the Clean Water Act, Clean Air Act, RCRA, CERCLA, and occupational issues under OSHA.

Subpractice Areas:

Ability to Pay Economic Benefit of Non-Compliance Air Quality Environmental Liabilities Estimation

Allocation Insurance Recovery

Civil Penalties Product Liability/Mass Tort
Cost Recovery Property Diminution/Stigma
Damage Estimation Regulatory Impact Analysis

Disclosure Toxic Tort

*Private Sector – Brattle Group continued* 

Consulting Staff:

Principals Senior Consultants Associates

Senior Advisors Senior Associates

Staff positions:

Principal Research Analyst Associate Support Staff

#### **Principals**

Nearly all Principals hold advanced degrees in economics, finance, management, law, or engineering and have built reputations as experts in their fields. Their specialties include Energy, General Litigation, Finance, and Environmental.

In each of these areas, our Principals handle the following roles and responsibilities:

- Energy: analyze and develop plans and strategy options for electric, gas, and other previously regulated industries, focusing on the many complex and often controversial aspects of regulatory transitions. Provide expert economic analysis and testimony in regulatory proceedings involving industry restructuring, product design, and cost allocation and recovery.
- Environmental Litigation & Policy: conduct liability and damage analysis in environmental litigation, analyze the appropriate estimation, allocation, and recovery of environmental costs, and estimate benefits of noncompliance.

#### Associates

Associates handle the research necessary for successfully completing our engagements. This typically involves applying industrial organization principles, econometrics, finance theory, or cost benefit analysis to litigation, regulation, public policy, and market strategy issues.

#### Research Analysts

- Strong quantitative background and have completed significant coursework in economics, mathematics and statistics. RAs with engineering backgrounds related to environmental work (e.g., environmental, civil engineering, or chemical engineering).
- Build and solve economic, financial, and operational models, perform statistical analyses, and research business and legal trends.

# Bryant Associates, Inc. www.bryant-engrs.com

**Boston** 

Bryant Associates is a Professional Consulting Engineering & Surveying firm. We've helped our clients through projects in Transportation (road, rail, air, rapid transit, maritime), Site Development (commercial, institutional, industrial, public facilities, parks, playgrounds), Infrastructure (bridges, retaining walls, wharves, piers), & Utilities (storm drain, water, sewer). We offer services in Civil Engineering (environmental permitting; hydraulics hydrology; highways, roads, streets; traffic), Structural Engineering (bridges, buildings, waterfront), Surveying (aerial mapping, construction layout/monitoring, 3D mapping, Geographic Information System [GIS], Global Positioning System [GPS], hydrographic/bathymetric, property line/right-of-way, topographic, tunnel, utility), Landscape Design (parks playgrounds, streetscape, site development, and wetlands), & Construction Management (office administration, resident engineering, resident inspection).

Private Sector - Bryant Associates continued

# Environmental job posting:

Senior Structural Engineer

- Bachelors Degree & PE
- 15+ years experience with bridge design/inspection and MHD/RIDOT Standards
- Knowledge of STAAD/Pro, AutoCAD and MS Office.

#### **BSC Group** www.bscgroup.com

**Boston** 

The BSC Group provides integrated planning & engineering solutions for large- & small-scale projects throughout New England & along the East Coast. We have aligned our three companies – the BSC Group, TerraSphere and Geonetics – to provide the best in planning, engineering, regulatory permitting & ecological science, landscape architecture & land surveying.

Careers:

Civil Engineering
Transportation
Engineering
Structural Engineering
Regulatory Permitting & Ecological Science

Planning Landscape Architecture Land Surveying Survey Engineering

#### Cadmus Group, Inc. www.cadmusgroup.com

Watertown

Cadmus provides high-quality, multidisciplinary consulting, research, & technical support services to government, non-profit, & corporate clients. We focus primarily on air and water issues, energy efficiency, global climate change, and ecological risk assessment. Our more than 200 full-time staff members include scientists, statisticians, engineers, economists, attorneys, information technology specialists, writers, graphic artists, outreach specialists, trainers, & public policy analysts.

We generally seek applicants with backgrounds in the following disciplines:

Engineering Ecological Modeling

Public Policy Human Health & Ecological Risk Assessment

Public Finance Ecosystem Analysis
Statistics Media and Marketing
Economics Public Relations

#### Environmental job postings:

Environmental Consultant

- Graduate level degree in policy, science, economics, or a related field
- 3+ years experience in policy analysis, social marketing, communications, & outreach to support contracts with EPA in areas of indoor air quality and children's health protection
- Previous work experience should demonstrate excellent problem-solving skills
- Strong written and oral communication skills
- Responsibilities: Ensure completion of deliverables to clients; manage workflow of projects, personnel & financial resource allocations; foster client relationships; oversee subcontractors

Private Sector - Cadmus Group continued

#### Research Analyst/Associates

- Recent college graduates with 0-1 years experience & professionals with 1-5 years experience to support national drinking water policy and program development and implementation projects
- Outstanding academic results, superior quantitative skills, strong organizational abilities, a professional demeanor, and excellent written and oral communication skills. Public sector consulting experience is a definite plus.
- Backgrounds in: Environmental sciences and policy, Statistics, Economics, Public finance, Public policy

# **Cambridge Environmental Inc.** www.cambridgeenvironmental.com Cambridge

Cambridge Environmental Inc. is a research and consulting firm that assesses and helps to minimize risks to health and the environment. We provide objective, expert, and timely analyses of problems related to chemicals in the environment, workplace, and home.

Services:

#### Risk assessments, including

- » health and environmental risk assessments
- » fate and transport modeling of pollutant releases
- » assessment of risks from electromagnetic fields
- » technical support for regulatory compliance

**Expert evaluations** 

Research & development

Litigation support

Staff:

Senior Scientist & President Associate Scientist
Senior Engineers Staff Scientist
Senior Scientists Consulting Associates

Senior Scientist & Director of Operations

## Environmental job postings:

Staff Scientist / Engineer

- Bachelors degree in science or engineering
- Strong quantitative and critical reasoning abilities
- Extensive exposure to one or more of the following fields: physics, chemistry, biochemistry, ecology, toxicology, and/or computer science.

## Senior Scientist / Engineer

- Advanced degree (Ph.D. preferred) in engineering or the natural sciences
- Strong communication skills to present scientific issues to scientists and non-scientists

Private Sector – Cambridge Systematics

# **Cambridge Systematics, Inc.** www.camsys.com Cambridge

We are transportation specialists, dedicated to ensuring that transportation investments deliver the best possible results. By providing innovative policy and planning solutions, objective analysis, and technology applications, we help our clients meet future transportation needs while improving the performance of existing infrastructure and operations. Cambridge Systematics serves local, state, national, and international agencies in the public and private transportation industries.

#### Services:

- 1. Policy, Strategic Planning, & Management
- 2. Freight Systems & Intermodal Planning
- 3. Forecasting & Simulation
- 4. Asset Management
- 5. Corridor & Systems Planning

- 6. Economic Analysis
- 7. Operations & Intelligent Transportation Systems
- 8. GIS & Data Management

#### Environmental job postings:

Senior Transportation Planning Manager

• Master's degree in Transportation Planning or a related field

- 7+ years professional experience
- Proven business development, project management, technical, and client service skills.
- Responsibilities: work with Cambridge Systematics' professionals throughout the country to address transportation challenges faced by federal, state, and local governments by creating and implementing business development strategies, managing complex client projects, and conducting leading edge transportation research and analysis.

#### Transportation Analyst

- Bachelor's degree Engineering, Planning, Economics, related field; Master's degree preferred
- 0-5 years experience
- Evidence of strong oral & written communications skills
- Experience with spreadsheet & word processing packages, familiarity w/relational databases
- Experience in field of public transportation a plus
- Experience w/statistical analysis packages (e.g., SAS or SPSS), benefit/cost models, or GIS +
- Responsibilities: work with Project Managers on wide variety of transportation consulting assignments, including analysis of likely impacts and benefits of proposed transportation investments; design and implementation of data collection efforts; support in the analysis of land use impacts, financial feasibility, and air quality impacts; and related tasks.

## Transportation/ITS Analyst

- 2-5 years experience with traffic data collection/analysis & familiarity with simulation models
- Strong oral and written communication skills
- Proven strong analytical and quantitative skills
- Responsibilities: provide engineering & analytical support to transportation clients focusing in areas of intelligent transportation systems (ITS) & transportation operations; Develop & implement data collection & analysis efforts; implement & use simulation models; analysis of likely impacts & benefits of proposed transportation investments; evaluation of ITS/operational deployments; and preparation of technical reports and presentations.

Private Sector - Cambridge Systematics continued

#### Transportation Planner/Project Manager

- Bachelors Civil Engineering, Transportation Planning, Policy, related field; Masters preferred
- 3-6 years experience in multimodal transportation planning/engineering; project management experience (client interaction, managing budgets, managing project staff)
- Strong written and oral communication skills and analytical and problem solving skills
- Broad range technical experience preferred (freight, transit, land use, economics, performance measures, etc.).
- GIS and database management skills desirable.
- Responsibilities: data collection (e.g., surveys, interviews, research, highway traffic volumes), data analysis (e.g., multimodal level of service, safety analysis, alternatives analysis, commodity flow patterns, socioeconomic profiles), and development of recommendations

#### Transportation/Economic Analyst

- Master's or Bachelor's in Transportation, Civil Engineering, Economics, or related field
- Strong analytic, writing, and communication skills
- Experience with statistical analysis packages, regional economic and freight/commodity flow

- databases, econometric and input/output models, travel demand forecasting models, GIS, or traffic simulation software.
- Responsibilities: support studies related to regional economics and economic development, transportation policy, land use analysis, financial analysis, and related areas. Assist in the preparation of proposals and reports, and conduct research on transportation projects.

#### Camp Dresser & McKee Inc. www.cdm.com

Cambridge, Lexington

CDM is a global, full-service consulting, engineering, construction, and operations firm helping public and private clients improve the environment and infrastructure.

Services: water management; environmental management; transportation; construction, designbuild and operations; information management and technology; institutional and management consulting; facilities design and geotechnical.

## Environmental job postings:

Senior Environmental Engineer\*

- B.S. in civil engineering or related field with an M.S. preferred
- Registration as a P.E. in Massachusetts with 10 to 15 years of related experience
- Knowledge of pertinent solid waste regulations required
- Excellent communication skills, people skills and proven ability to mentor and supervise junior level staff
- Responsibilities: Specialize in solid waste related projects. Position will have significant client
  contact, manage the day-to-day project activities and staff for multiple solid waste projects,
  and help develop new business. Projects would include landfill closure studies, designs and
  construction support, landfill gas mitigation programs, landfill reuse projects, and general
  waste management consulting services.

Private Sector - Camp Dresser & McKee continued

#### Solid Waste Project Manager

- B.S. in civil engineering (M.S. preferred)
- 10+ years related experience
- Extensive experience with all aspects of solid waste regulations and projects
- P.E. in Massachusetts
- Advanced writing skills; excellent verbal communication and presentation skills
- Ability to mentor and supervise junior level staff
- Responsibilities: The position requires significant client contact, the ability to manage the
  day-to-day project activities and staff for multiple solid waste projects, and assist in new
  business development. Projects include landfill closure studies, designs and construction
  support, landfill gas mitigation programs, landfill reuse projects and general waste
  management consulting services.

#### Solid Waste Engineer

• B.S. in civil engineering or related field (M.S. preferred)

• Minimum of 5 years experience with all conventional aspects of solid waste engineering.

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<sup>\*</sup> Job trending information available.

- E.I.T. required, P.E. preferred.
- Some solid waste field experience preferred.
- Extensive knowledge of pertinent solid waste regulation and best management practices for stormwater control.
- Working knowledge of AutoCAD, HydroCAD, HELP Model, & common software packages
- Excellent written communication skills a plus
- Responsibilities: design and coordinate project activities relating to solid waste projects and provide support for new business efforts. Projects would include studies and design of landfill closures, construction support, landfill gas mitigation programs, landfill reuse projects and general solid waste management consulting services.

#### Carter & Burgess Inc. www.c-b.com

Cambridge

What began in 1939 as a two-man partnership providing landscape architecture and civil engineering services, has matured into a dynamic, full-services consulting firm. Carter & Burgess is organized by market sectors. Our multidiscipline teams of architects, engineers, planners and program/construction management personnel serve a broad diversity of market sectors.

Market Sectors:

Facilities Transportation Programs Land Development

Survey Acoustics & Audiovisual Urban Design & Planning

Retail & Distribution Environmental Public Works

Our core competencies include:

Architecture

Engineering

Planning

Management

**Technology** 

Private Sector - Carter & Burgess continued

### Environmental job postings:

Senior Environmental Planner\*

- Minimum of 10 to 15 years in the related field
- High degree of knowledge in managing major highway environmental projects (EAs and EISs), knowledge of NEPA as well as state/federal environmental laws.
- Presently be a PE or Professional Transportation Planner (AICP).
- BSCE is required
- Responsibilities: manage multiple major highway corridor projects, manage the schedule and budget control aspects relating to the specific projects. Manage and mentor project staff as well as communicate effectively with our client base to ensure project success.

Senior Environmental Scientist\*

<sup>\*</sup> Job trending information available.

- BS in a natural resources field (MS preferred). Majors which will be considered include Biology, Botany, Range Science Forestry, Wildlife Ecology and Environmental Science
- 5-15 years experience
- Experience with federal and state resource agencies required including managing of projects or task orders for these resource agencies.
- Successful background in marketing federal and state agencies is also desired
- NEPA expertise and wetland delineation training.
- GIS mapping software/GPS-based survey equipment usage a plus.
- Responsibilities: manage projects, perform some business development duties, operate
  independently on selected projects and leading work teams in field investigations, sample
  collections and report preparation. Serve as the lead manager for the Vice President of
  Environmental Services. Physical activities may include lifting, climbing, brush-clearing,
  crawling, digging with hand equipment, retrieving vegetation and soil samples and other
  physical activities required to perform assigned duties.

## Senior Hydrologist\*

- Bachelor's Degree in Civil or Agricultural Engineering, Master's Degree is preferred. Bachelor's Degree in Hydrology may also be considered
- 4-8 years experience
- Registered Professional Engineer or ability to become registered within 1 year
- Specialized training in hydrologic and hydraulic analysis programs, HEC-1, HEC-HMS, HEC-2, HEC-RAS preferred. Specialized experience in GIS techniques (ArcVIEW, ArcMAP, ArcGIS) and experience with FEMA map revision process are highly preferred.
- Responsibilities: lead technical tasks or projects using GIS-based techniques to update flood boundaries for DFIRM production for the FEMA Map Modernization program. Perform flood studies using GIS-based and CADD-based computerized modeling techniques, develop FEMA CLOMR and LOMR documents, prepare various water resources permitting documents, prepare NPDES SWPPP documentation, design stream restoration projects using fluvial geomorphological principles and water resources structures such as dams, spillways and storm drainage systems.

Private Sector – CH2M

### CH2M Hill www.ch2m.com

**Boston** 

We provide engineering, construction, operations, communications, security, environmental, and related services to public and private clients in numerous industries on six continents.

**Primary Business Sectors:** 

- 1. Communications & Information Solutions
- 2. Environmental Services
- 3. Facility and Infrastructure Services
- 4. Industrial and Manufacturing Facilities
- 5. Nuclear

- 6. Operations and Maintenance
- 7. Power and Energy
- 8. Transportation
- 9. Water, Wastewater & Water Resources

## Environmental job postings:

## Senior NEPA Expert

- BA/BS; prefer Bachelor of Science degree in a related discipline
- 15+ years experience consulting environment managing & preparing NEPA documents (EA, EIS)
- Experience in the federal facilities arena required
- Excellent working knowledge of NEPA (and state equivalents) requirements for various agencies (BLM, EPA, etc.), with land use and environmental policy analysis expertise, federal facility experience and state and local permitting experience is required of qualified candidates.
- Proven project management and business development track records
- Strong oral and written communication skills
- Areas of expertise must include understanding of major regulatory drivers (CWA, CAA, ESA), cumulative impacts, alternatives development and assessment
- Responsibilities: growing our existing client relationships as well as participate in business
  development efforts in order to help grow our environmental business in the Northeast
  Region. Lead alternative analysis and permit assistance including the development of
  NEPA/SEPA environmental documents for a variety of projects. Prepare and oversee the
  development of technical sections of environmental documents. Provide technical and
  quality assurance review for junior team members.

#### Ecological Risk Assessor

- Bachelor's Degree in Biology or a related discipline. (MS degree preferred).
- 8-15 years of experience in a similar position is required; at least 5 of these years should be in a consulting environment
- Strong oral and written communication skills
- Proven track record working independently as well as over long distances
- Ability to evaluate, select and apply standard scientific techniques and procedures; to strategize approach; and to interact with clients and regulators for approval on approach.
- Responsibilities: supervisory responsibility over more junior level staff delivering ecological
  risk assessment tasks. Strategize and define the specific objectives of the project and work
  with the client and regulators to implement the strategy. Provide technical guidance to
  junior level staff. Client and agency contacts are regular part of delivery of ecological
  related projects.

Private Sector - CH2M continued

#### Natural Resources Economist

- BA/BS in Economics
- 6-12 years experience in similar position; 4+ these years should be in consulting environment
- Strong oral and written communication skills

- Proven track record working independently & managing economics-type tasks & projects
- Fully competent in all conventional aspects of natural resources economics
- Experience in technical project delivery & task or project management & interacting w/clients & regulators on technical strategy & delivery; experience w/natural resource damage assessments, calculation of human use & ecological service values, & cost/benefit analyses; experience w/estimating economic value of natural resources with recreation demand models, benefits transfer, & direct questioning (e.g., contingent valuation); familiarity with natural resource asset replacement models (e.g., habitat equivalency analysis)
- Responsibilities: strategize & define specific objectives of project & work with client & regulators to implement strategy

## Senior Biological and Water Resources Specialist / 316(b) Expert

- B.S or higher in Environmental Science, Engineering or aquatic biology discipline
- 16 to 20 + years experience in industrial water quality permitting, compliance, biological applications, particularly in power industry
- Established relationships with industry and regulatory agencies
- Significant experience with Section 316 (b), i.e. knowledge of EPA Rule, aquatic biology, mitigation approaches & design and execution.
- Expertise in NPDES permitting & evaluation
- Excellent communication skills
- Responsibilities: focus on Section 316 (b) projects for phase II plants in power industry & eventually phase III plants in other industries. Develop & manage specific client relationships & large quality water projects.

#### Project Manager

- BS in Geology, Hydrogeology or Geotechnical Engineering (Masters is highly desirable)
- 10-15 years experience working for an Environmental Consulting Firm
- Massachusetts Licensed Site Professional (LSP)
- Experience with project management of multiple and complex projects (simultaneously)
- Solid written and verbal communication skills & strong leadership attributes
- Experience managing sites in accordance with Massachusetts Contingency Plan
- Work history of conducting remedial investigations, feasibility studies, engineering evaluations or cost assessments following RCRA and CERCLA guidance preferred
- Remedial design experience a plus
- Experience interacting with state & federal regulators
- Responsibilities: oversee & manage multiple, complex projects (simultaneously) associated primarily with site management under CERCLA, RCRA, & state-lead programs; analyze data, prepare remedial investigations, feasibility studies, engineering evaluations, cost assessments, RFI, or corrective measures study reports, interact with internal team players, & external clients & regulators; plan, staff, schedule, budget, ensure quality of work products, ensure consistency across projects, ensure safety of staff, coordinate with contractors & internal support staff, communicate with client & regulators

Private Sector – Clean Harbors

**Clean Harbors, Inc.** www.cleanharbors.com/ Braintree, South Boston, Woburn Offering a wide range of Technical Services, such as transportation & disposal as well as lab chemical packing, along with Site Services, including emergency response & industrial cleaning services, Clean Harbors is committed to preserving natural environment & adhering to strict government regulations.

## Environmental job postings:

Reactive Materials Specialist

- BS in Environmental Science or related
- 5 years industry experience
- Responsibilities: reports directly to the Reactive Materials General Manager and develops solutions to complex gas and energetic material opportunities. Assist General Manager in development of new technologies and capabilities and service lines within the organization. Member of development team for research, development, and implementation of new technologies. Continuing review of existing operational procedures and work with H&S Manager to create new Standard Operating Procedures (SOPs) when warranted. Works with coordinator and health and safety manager to prepare complex Health and Safety work plans. Provide technical expertise with regard to planning and execution of high hazards projects involving energetic materials and compressed gases and lab pack projects.

#### Senior Project Manager for Environmental Construction and Technical Services group

 Responsibilities: manages and oversees large, technically complex projects involving waste site clean up and construction, building and equipment decontamination and demolition.
 Prepare proposals, including cost estimates and work scopes and schedules. Develops business opportunities from existing customer base.

#### Health and Safety Manager

- BS/BA in Safety, Industrial Hygiene or related field
- 5+ years Health and Safety experience. Environmental experience preferred.
- Responsibilities: Provide comprehensive safety and health direction and support to
  Technical Service's operations in their assigned area. Provide guidance to management and
  direction to various personnel on implementing CHESI Health & Safety Programs and
  promoting continuous safety improvement. Safety audits and inspections, record-keeping,
  industrial hygiene monitoring and assessments, equipment inspections, safety performance
  tracking and reporting, safety and health training, incident and accident investigation and
  tracking, and program development, among other responsibilities.

## Apollo Chemist

- B.S./B.A. in Chemistry, Biology or Environmental Science or related experience (preferred).
- 40 Hour OSHA Training, Forklift Training and certification Reactive Materials certification. DOT Training Clean Pack Chemist Training Course.
- Responsibilities: perform tasks associated with preparing, testing, packing and inspecting all chemical wastes in accordance with CHESI policies and procedures while at the client site

#### Private Sector - Clean Harbors continued

#### Field Technician

• High School Diploma or equivalent. Environmental studies (2 or 4 year degree) preferred.

• Responsibilities: Performs a variety of tasks associated with hazardous waste cleanup, site remediation, equipment and facility decontamination and handling of hazardous materials.

## Landfill / Compliance Specialist

- High school diploma & two years experience preferred
- Responsibilities: environmental protection, monitoring and regulatory compliance at the facility operations level. Assist in assuring that the day-to-day regulatory compliance requirements are met by maintaining appropriate records, logs and reports to ensure the incinerator meets all regulatory standards. Specific requirements include compliance with the Inspection Program, compliance with the training program and ensuring day-to-day regulatory compliance requirements are met by maintaining appropriate records, logs and reports to ensure the incinerator meets all regulatory standards.

#### Apollo Environmental Manager

- B.S. in Chemistry, Biology, or Environmental Science (strongly preferred)
- Masters Degree in Environmental Engineering (preferred)
- CHMM certification preferred Wastewater treatment operator's certification preferred
- Responsibilities: reports directly to Technical Services General Manager and responsible for daily activities of the assigned facility's environmental program as well as for implementing programs to maintain, lead and improve the environmental conditions of the facility

## Project Engineer / Scientist

- MCP experience, B.S. in Civil, Environmental Engineering, Geology and related Sciences.
- 2-5 years site assessment and/or remediation related experience
- Responsibilities: project development & implementation in field & office. Support senior technical & managerial staff w/proposal preparation, project cost estimating & subcontractor selection/procurement.

## Field Inspector

- Bachelor's in Engineering, Environmental Science, or other related degree for LSP licensure.
- Responsibilities: oversee and document emergency response events or other remedial measures performed by the Service Centers and/or Remedial Technologies, collects soil and groundwater samples and site data, and prepares response reports.

#### Clean Pack Chemist

- BS degree in Chemistry or related discipline strongly preferred
- Knowledge manifesting, LDR, & DOT regulations, disposal options, EPA waste codes
- Responsibilities: perform daily lab packs within customer facilities, household hazardous waste collections, lab moves

#### Chemist Training and Development Manager

- Bachelor's Degree and 2+ years lab pack experience
- Responsibilities: increase retention of Chemists & service delivery to customer; interact with various internal departments about operating procedures & health & safety guidelines

Private Sector - Cyn Environmental Services

# Cyn Environmental Services www.cynenv.com

Cyn Environmental Services (Cyn) is one of the Northeast's leading environmental management firms. Cyn's staff includes Licensed Site Professionals (LSP), project supervisors and technicians.

Services:

24-hour Emergency Response Environmental Construction Waste Disposal Services Industrial/Field Services

PCB Storage/Water Treatment Insurance

Site Remediation Laboratory Services
Waste Oil Recycling Health and Safety

Lab Packing

## Environmental job postings:

Environmental Project Manager

- BS degree (MS preferred)
- 6-8 years experience with Massachusetts Contingency Plan (MCP) experience
- Excellent writing and communication skills
- OSHA 40 required; Certified Professional Geologist preferred
- Responsibilities: supervise & manage daily operations of environmental projects, supervision & field inspection of assessment/remediation projects, budget and work-scope preparation, correspondence with clients & regulatory agencies, MCP and RIDEM report preparation

## Field Engineer / Scientist / Geologist\*

- BS degree
- 1 to 2 years field experience in Environmental Consulting/Remediation
- Good observation, communication, organization skills; field sampling techniques; note taking
- OSHA 40 required
- Responsibilities: field inspection at remediation projects, soil & groundwater sampling

#### **Dewberry** www.dewberry.com

Boston

Dewberry is a leader in the planning, design, & program management professions. Our multidisciplinary staff includes engineers, architects, planners, surveyors, environmental scientists, and many specialized experts.

Our capabilities include expertise in the disciplines of structural, site/civil, environmental, architectural, and mechanical and electrical engineering. Major disciplines offered:

Architecture Geotechnical Rail & Mass Transit

Building Structures Land Development Telecommunications Services
Construction Support Services Landscape Architecture Transportation Engineering

Design-Build Mechanical & Electrical Water/Wastewater

Private Sector - Dewberry continued

\* Job trending information available.

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## Environmental job postings:

## Civil Engineer\*: Land Development

- Bachelor's Degree in Civil Engineering
- 3+ years professional land development work experience
- Working knowledge of local land development and engineering fundamentals
- Proficiency using AutoCAD required; knowledge of Microstation preferred
- Excellent communication/people skills

## Civil Engineer\*: Transportation

- Bachelor's degree in engineering
- 10+ years of experience in the field or in a related area
- Professional registration (P.E.) required
- Extensive background with DOT, highway design, drainage, contract documents, and proficiency in AutoCAD and/or Microstation.
- Responsibilities: design of, and supervision of individuals designing, projects for major highway and interstate improvements, and interchange design. Design, development, implementation, and analysis for roadway design and highway design.

## Civil Engineer\*: Water Resources

- BS/MS in civil engineering, emphasis in water resources
- Minimum of 5 years of experience
- Knowledge of hydrologic and hydraulic analysis of riverine systems. Knowledge of floodplain mapping a plus
- Strong oral and written communication skills
- Proposal writing, leadership, project management and GIS experience desired.
- Responsibilities: support flood studies across the nation

#### Engineer: Water Resources

- BS degree in Civil or Environmental Engineering (or related discipline)
- 2 to 4 years of directly related experience
- PE registration
- Strong computer and GIS skills, excellent communication skills
- H & H modeling experience with HEC programs
- Responsibilities: assist with variety of water resources planning and design projects. Hydrologic and hydraulic modeling of open and closed systems, flood hazard mitigation analysis, water quality/BMP and stream restoration planning and design, GIS analysis, and preparation of planning reports, construction documents, and regulatory permit applications.

#### Entry-Level Analyst: GIS

• Responsibilities: Create a variety of digital mapping products using various software platforms, to include ArcGIS and MicroStation. Project requirements include data capture, ability to create and manipulate databases, and tools necessary to produce hard copy maps.

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<sup>\*</sup> Job trending information available.

## Entry-Level Engineer: Land Development

- BS in Civil Engineering
- Oral & written communication skills; proficiency using CADD (Microstation or AutoCAD)
- Completion of Fundamentals of Engineering exam & work experience w/DOT preferred
- Responsibilities: work on all phases of civil/site development including grading design, roadway design, storm water management systems design, & erosion & sediment control design; conduct code research, write specifications, & obtain permitting

#### Entry-Level Engineer: Municipal

- BS in Civil Engineering, (MSCE preferred)
- Oral & written communication skills; proficiency using CADD (Microstation or AutoCAD)
- Completion of Fundamentals of Engineering exam & work experience w/DOT preferred
- Responsibilities: design municipal infrastructure including water & sewer utility lines, facilities, & related water/wastewater project types; conduct code research, write specifications, & obtain permitting

#### Entry-Level Engineer: Transportation

- BS in Civil Engineering; 0-2 years related experience
- Oral & written communication skills; proficiency using CADD (Microstation or AutoCAD)
- Completion of Fundamentals of Engineering exam & work experience w/DOT preferred
- Responsibilities: work as part of a project team in all facets of highway engineering including design of horizontal and vertical alignments, drainage systems, traffic signal systems, utility relocations, development of maintenance and protection of traffic schemes, and preparation of right of way and contact plans for a variety of project types and clients.

#### Entry-Level Engineer: Water Resources

- BS in Civil Engineering
- Oral & written communication skills; proficiency using CADD (Microstation or AutoCAD)
- Completion of Fundamentals of Engineering exam & work experience w/DOT preferred

## GIS Hydrographer

- Graduation from a four-year college or equivalent (BS geography preferred)
- 1-3 years experience in physical sciences or related field
- Knowledge, interest, and project experience in GIS applications
- CFM certification a strong plus
- Knowledge of the National Flood Insurance Program
- Project management experience
- Strong client relations.
- Strong oral and written communication skills
- Proficiency in basic computer applications, especially MS Office (Word, Excel, and Access)
- Responsibilities: mapping statistical modeled flood zones for the National Flood Insurance
  Program; assisting engineers in the production of Flood Insurance Rate Maps; check for
  graphical, technical accuracy of Flood Insurance Study texts and maps; coordinating with
  the client, local communities, and flood insurance study contractors to compile all data and
  information necessary to process the most accurate and up-to-date product; and developing

the scope, schedule, and budget for projects and serve as project leader.

Private Sector - Dewberry continued

## Landscape Architect\*

- Bachelor's degree in Landscape Architecture, Urban Planning or related discipline
- 3+ years experience in the field or related area
- Excellent verbal & written communication skills; Proficiency in AutoCAD
- Responsibilities: work on various land development assignments with emphasis on residential and commercial projects

## Project Engineer - Hydrologic & Hydraulics

- BS degree in Civil or Environmental Engineering (or related discipline)
- 4 to 6 years of directly related experience
- PE registration
- Solid H & H modeling capabilities using HEC Series, HEC-RAS, and SWMM
- GIS ArcView proficiency
- Excellent communication skills, including presentation and technical writing skills
- Responsibilities: use hydrologic and hydraulic modeling in support of floodplain mapping studies and watershed master planning and assist water resources team in project execution, including but not limited to, model development, interpretation of results, preparation of reports, cost estimates, and preliminary and final construction plans.

## Project Engineer: Civil / Water & Wastewater

- BS Civil degree, MS Civil or Environmental degree desirable
- EIT registration required; PE registration desirable
- Minimum 4 years experience in water/wastewater or related field
- Excellent verbal and written communication skills.
- Computer, AutoCAD, and spreadsheet proficiency a must; Civil Desktop and KY Pipe and/or WaterCAD experience desirable.
- Responsibilities: work on a variety of complicated water/wastewater infrastructure study and design projects under the direction of a PE

#### Project Engineer: Land Development

- 4-6 years experience in site planning and land development, including: design of grading, storm water management, soil erosion prevention and roadways
- Ability to communicate both orally and in writing to clients and outside agencies is a must

## **DMJM+HARRIS** www.dmjmharris.com/

Boston

Specializing in Transit/Rail, Highway and Bridge, Marine, Aviation and Energy Infrastructures, DMJM+HARRIS's multidiscipline staff of 2,200 engineers, construction specialists, and other professionals are strategically deployed in offices around the world.

<sup>\*</sup> Job trending information available.

Projects:

Planning Highway/ Bridge Energy
Transit Marine Airports

Private Sector - DMJM+HARRIS continued

## Environmental job postings:

#### Coastal Engineers

- Advanced Engineering Degree
- Minimum of 5 10 years experience in siting evaluations, sediment transport, breakwater design, coastal restoration, dredging, etc.
- Professional Engineer Registration (PE) is required
- Operational knowledge of the CEDAS software applications is a must
- Knowledge of Genesis and MIKE 21 Modeling systems is a plus
- Effectively communicate (written & oral) and understand scope of work requirements

#### Marine Structural Engineers

- Minimum BSCE Degree
- Minimum of 10 years experience in engineering design of marine structures
- Experienced in the analysis and design of container wharves, piers, bulkheads, bulk handling and oil & gas facilities, both new construction and rehabilitation
- Operational knowledge of STAADPro, Microsoft Excel, AutoCAD is must; Familiarity with other structural, coastal and geotechnical software packages a plus
- Professional Engineer Registration (PE) in state required. Registration in other states a plus.
- Effectively communicate (written & oral) and understand scope of work requirements and be capable of generating construction contract documents

#### Water Resource Drainage Civil Engineer

- BSCE Degree
- 3 -6 years experience in hydrologic and hydraulic analysis and design for transportation and flood control related projects
- Operational knowledge of Microstation, SelectCad, water resource software applications HEC-1 and HEC RAS desired
- Professional Engineer (PE) license required
- Ability to effectively design and prepare construction documents desired
- Effectively communicate (written & oral) and understand scope of work requirements

## Dufresne-Henry, Inc. www.dufresne-henry.com

**Boston** 

We provide a full range of consulting, engineering, planning, environmental science, and landscape architecture services for public and private clients.

#### Environmental job postings:

#### Project Engineer

- BSCE
- 4-6 years of experience in water and wastewater design

- Have P.E. or anticipate attaining within a year
- Experience process piping layout and design
- Good communication skills, both written and verbal and computer skills essential
- AutoCAD experience helpful

## Private Sector - Dufresne-Henry continued

#### Municipal Engineer

- BSCE & PE or anticipate within a year
- 3-5 years experience in civil site, water and wastewater engineering
- Demonstrated knowledge site drainage design, roadway geometry & erosion control practices
- Strong written, verbal, computer, and organizational skills

## Senior Municipal Engineer

- BSCE & PE
- 10-15 years experience in civil site, water and wastewater engineering
- Demonstrated knowledge site drainage design, roadway geometry & erosion control practices
- Strong written, verbal, computer, and organizational skills

## Civil Engineer\*

- 1-3 years of experience in civil engineering. Experience in municipal water & wastewater or civil site preferred
- AutoCAD with Land Development helpful
- Good communication and computer skills

## Landscape Architect\*

- 5-10 years of experience with BLA, BSLA or MLA and license in state
- AutoCAD experience helpful
- Good communication skills
- Desire to work on public and private sector projects including: urban revitalization, resort, waterfront, recreational and residential developments

#### Senior Water Engineer

- BSCE with a concentration in water & wastewater & PE
- 8-10 years of experience including process piping layout and design
- Good communication, both verbal and written and computer skills essential
- AutoCAD experience helpful

#### Water/Wastewater Project Engineer

- BSCE
- 6-8 years experience with design & construction phase engineering services related to municipal wastewater & water facilities

#### Eastern Research Group www.erg.com

<sup>\*</sup> Job trending information available.

## Lexington

ERG is a multidisciplinary consulting firm offering a broad range of professional services.

7 Core Service Lines:

Communications Services Energy Services Facility Planning & Engineering

Information Technology Environmental Services
Economic Research & Analysis Occupational Health & Safety

Private Sector – Eastern Research Group continued

Jobs by field:

Corporate/Administrative Environmental Services Information Technology

Communication Services Energy Services Occupational Health & Safety

Economic Research & Analysis Facilities Planning & Engineering

## Environmental job postings:

Entry-Level Engineers, Chemists, Biologists, Scientists

• BS or MS degree; 0 to 3 years of experience; Good communication & computer skills

• Knowledge of CWA, RCRA, CERCLA, NEPA, and TRI a plus

#### Entry Level Chemist

• BS chemistry w/course work & lab experience in analytical chemistry or equivalent

- Knowledge of common word processing software & Excel
- Strong organizational and communication skills
- Working knowledge of HPLC and IC
- Responsibilities: sample preparation & extraction; data entry and analysis

#### Environmental Analyst

- Degree in environmental science, engineering, or related environmental discipline
- 0-5 years of experience (w/EPA's Office of Water programs & water quality modeling a plus)
- Adept at working with MS Access and Excel programs
- Excellent written & oral communication skills
- Responsibilities: research & evaluate effect of point source discharges on the environment

## Environmental Scientist\*

• Background in chemistry, biology, or engineering

- MS Access experience a plus; Excellent analytical, written, & verbal communication skills
- Responsibilities: involve evaluate & assess environmental contamination & exposures at hazardous waste sites

### Risk Assessor/Toxicologist

- M.S. or Ph.D. in toxicology or public health
- Experience in risk assessment; Project management experience a plus
- Excellent written and oral communication skills
- Responsibilities: evaluate human health effects from exposure to environmental contaminants. Work will involve quantitative and qualitative analysis, including evaluation of sensitive

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<sup>\*</sup> Job trending information available.

populations, exposures to multiple chemicals, and the significance of toxicological findings.

## Senior Engineer or Scientist

- Degree in engineering or related environmental discipline
- 8+ years of experience & project management experience; experience with EPA's Office of Water programs, chemical manufacturing, &/or POTW systems a plus
- Excellent written and oral communication skills
- Responsibilities: research & evaluate wastewater discharges from US industries. Lead a team of technical staff to perform process, pollution prevention, and waste treatment evaluations

## Private Sector - Eastern Research Group continued

## Senior Engineer or Scientist - Remediation

- Advanced degree in engineering, hydrogeology, or related environmental discipline
- 10+ years of experience
- Project management experience
- PE or PG registration
- Excellent written and oral communication skills
- Experience with EPA's SITE program a major plus
- Responsibilities: research & evaluate innovative technologies for the treatment & remediation of soils and sediments, hazardous wastes, groundwater, sludge, debris, brownfields, and ecosystems. Lead full- and pilot-scale field studies & bench-scale studies in the lab.

#### Senior Engineer or Scientist - Water, Wastewater, Watersheds

- Advanced degree in engineering or related environmental discipline
- 10+ years of experience
- Project management experience
- PE or other professional registration
- Excellent written and oral communication skills
- Experience with EPA's Office of Research and Development programs a plus
- Responsibilities: research and evaluate innovative technologies for treatment, measurement, and monitoring of drinking water, surface water, storm water, sediments, mining wastes, watersheds, and ecosystems. Lead full-, pilot-, and bench-scale studies in the field or lab.

#### EBI Consultants www.ebiconsultants.com

## Cambridge

## 1. Environmental Health & Safety Services

EH&S management system design and implementation Environmental consulting/permitting Safety, health and environmental regulatory compliance Industrial hygiene Air quality monitoring Process Engineering Services

#### 2. Site Investigation and Remediation

Our Site Investigation and Remediation Group provides environmental site investigation, contaminant remediation, and regulatory-compliant site closure services to private industry, law firms, developers and property owners, organizations, and institutions.

## Environmental job postings:

#### Environmental Scientist\*

- Professional science degree in environmental science, geology, engineering, or related field
- 3+ years professional experience in due diligence consulting
- Excellent report writing skills, computer and internet skills &
- Excellent communications and management skills
- Ability to perform Property Condition Reports (PCS/PCA), Phase I and NEPA a plus
- Responsibilities: conduct environmental site assessment Phase I reports, and/or wireless National Environmental Policy Act (NEPA) reports

Private Sector - EBI Consultants continued

## Senior Design Engineer

- BS/MS in Chemical engineering or related field; PE Preferred
- Position 1: 5+ years related experience; Position 2: 10+ years of related experience
- Experience in process plant design, preferably with strong background in wastewater treatment system design. Knowledgeable in fluid flow and hydraulics; pump design; chemical reactor design; and instrumentation
- Responsibilities: design wastewater treatment and pretreatment system, water purification systems, tank farms, and chemical processing systems, etc.

#### Project Engineer/Environmental Scientist

- Professional degree (engineering, architecture, environmental science, or related field)
- 3 to 5 years professional experience in due diligence consulting
- Prior experience with Phase I Environmental site assessments and Property Condition assessments (Physical Needs Assessment) conducted for property acquisition and/or lender due diligence. Construction monitoring experience is a bonus
- Knowledge of commercial buildings (such multifamily, office, retail, industrial)
- Excellent report writing, computer, internet, communications, & time management skills
- Field assessment and information research skills

#### ECS www.ecsmarin.com

#### Wakefield

Environmental Compliance Services (ECS) serves following market sectors: Commercial, Gov't, Industrial, Institutional, Insurance, Petroleum, Real Estate/Due Diligence, Residential, and Utilities.

#### Services:

- Air Quality/Industrial Hygiene Indoor Air Quality, Mold, Asbestos & Lead
- Remediation System Design, Installation, & Operation & Maintenance

Job trending information available.

- Brownfields & Site Redevelopment
- Construction Engineering Support
- Cost Recovery
- Drilling
- Emergency Response Management
- Facilities Management
- Geographic Information Services
- Health and Safety Training

- Information Technology Services
- Landfill Design, Monitoring & Permitting
- Real Estate Transactions/Due Diligence
- Regulatory Compliance and Permitting
- Site Characterization
- Storage Tank Management
- Water and Wastewater Management
- Water Supply Development

## Environmental job postings:

#### GIS Analyst / Manager

- Bachelor's degree or better in GIS, computer related degree program, Geography, cartography or comparable experience in the field with advanced training or certifications highly considered
- Excellent communication skills
- Demonstrated knowledge of GIS and AutoCad programs including ArcGIS9.0, ArcSDE, ArcObjects, SQL Server, and GeoDatabases.
- Experience in developing GIS applications & knowledge of .net development platform plus

#### Private Sector – ECS continued

#### Environmental Field Technician

- BS in Environmental Science a plus; 1-2 yrs experience in related field
- Experience with AutoCAD work involving completion of site plans and figures a benefit
- Responsibilities: demonstrated experience in field sampling tasks including water and soil sampling, and performance of soil gas surveys, drilling and UST removal oversight, data tabulation, Phase I ESA's and report preparation

#### Project Manager

- 5-7 years in an environmental field with experience in generating Environmental and Historical Site Assessments, site surveys for property development, re development and other real estate transactions
- Responsibilities: soil and groundwater assessments, site characterizations, remediation and O&M of remedial equipment, groundwater monitoring, compilation of data to generate tables and charts, developing scopes of work and cost estimates, client relations, supervising field personnel and staff hydrogeologists, project regulatory compliance, budget management, and all phases of technical report writing

#### CAD Operator/Environmental Field Technician Position

- BS in related field a benefit; 0-2 years experience
- OSHA 40-hr Hazwoper Certification a plus
- Strong verbal & written skills required as some letter &/or report preparation expected
- Responsibilities: provide AutoCAD work and completion of site plans and figures. Responsible for Environmental Field Technician duties: site surveying, soil and water sample collection, well monitoring, pump tests, data collection, file review and documentation from state and/or local sources, lab data reduction and preparation of summary tables for regulatory report submittal.

## Edwards and Kelcey www.ekcorp.com

**Boston** 

Edwards and Kelcey is an engineering, design, planning & construction management firm with commitment to developing & executing the very best products, programs & projects for our clients.

Markets:

1. Transportation

Aviation Highways Rail / Transit

Bridges Ports and Harbors

2. Communication

Wireless Networks Integrated Security Systems Fiber Optic / Wireless

In-Building Wireless Inspections & Maintenance

3. Utilities

Planning and Studies Power Monitoring and Control Turn-Key Construction

Utility Design / Engineering Consumption Management

Private Sector – Edwards and Kelcey continued

4. Institutional / Commercial

Architectural Services Building Envelope MEP / Fire Protection

Site Development Services Building Evaluation Structural Design Construction Services

5. Federal

Central Contractor Registration Planning

Civil Engineering Design Critical Infrastructure

6. Planning / Environmental

Transportation Planning Facility Master Planning
Land Use Planning Environmental Services

EG&G www.egginc.com

Cambridge

We are one of nation's leading US federal gov't contractors for operations & maintenance services. EG&G provides clients with technical services, management support, & consultation pertaining to environmental management & compliance issues on individual contracts & task orders.

**Environmental Services** 

Site characterization & waste management services Environment, safety, & health assessments & plans Waste minimization & pollution prevention support Scientific analysis including modeling & simulation Environmental impact analyses & documentation Regulatory compliance support Permit planning & acquisition Training & communication activities Environmental planning & analysis Hazardous materials inventories/reports

## Environmental technology assessment & deployment

## Environmental job posting:

Environmental Auditor

- Bachelor's Degree in related field and 4 years directly related work experience OR Master's Degree in related field and 2 years directly related work experience OR Ph.D. OR 12 years equivalent specialized training and directly related work experience
- Demonstrate in-depth knowledge of state and federal environmental regulations, with emphasis on hazardous waste treatment, storage, transportation, and disposal regulations
- Responsibilities: support the Environmental/Compliance Branch by performing a combination of related tasks to ensure all operational activities for 24-hour chemical demilitarization operation are in compliance with federal, state & local environmental acts, regulations, laws, & rulings. Develop & maintain database for all munitions waste tracking forms & manifest, preparing & submitting these forms to the state monthly; perform audits to evaluate compliance with all federal, state, & local environmental laws & regulations; perform all environmental shift inspector duties as required. Tracking & trending of compliance data & developing surveillance & audit plans & schedules. Develop information to support communication of compliance goals & metrics to the site population.

Private Sector - EMA

## **EMA, Inc.** www.ema-inc.com

Natick

#### 1. Water and Wastewater Utilities

We work with you to improve your core services. An assessment begins the process by showing where improvements are needed. Water utilities look at source protection, water production, transmission, treatment, and distribution. Wastewater utilities look at sewer use monitoring, wastewater collection, treatment, solids disposition, and environment monitoring.

- 2. Electric and Gas Utilities
- 3. Public Works and Municipalities
- 4. Manufacturing

#### **ENTRIX, Inc.** www.entrix.com/

Boston

ENTRIX, Inc. is a professional environmental consulting company specializing in water resources management, environmental risk management, natural resources management, natural resource economics, and facility permitting & compliance.

Services:

Air Quality Chemical Fate & Transport Modeling Community Relations (Ecuador) Constructed Treatment Wetlands

**Instream Flow Modeling** Litigation Support Natural Resource Damage Assessment Natural Resource Economics Cultural Resources/ Archaeology/ Historic Preservation Oil & Hazardous Materials Response

Environmental & Civil Engineering

Environmental & Geochemical Forensic Assessment

Environmental Due Diligence Environmental Economics

**Environmental Information Management** 

Environmental Management Systems & Compliance

FERC Third-Party EISs Fisheries Evaluations

Geographic Information Systems (GIS) Groundwater & Surface Water Remediation

**Habitat Restoration** 

Human Health & Ecological Risk Assessment

Hydroelectric Project Licensing

Permitting & Compliance

Public Involvement, Edu., & Facilitation Risk Assessment and Management Sediment Quality Evaluations

Site Assessments

Socio-Economic Impacts Analysis Stormwater Management & Planning

Strategic Planning

Threatened/Endang. Species Assessment

Water Quality Assessment Water Resource Management

Watershed Planning

Wetlands Assessment & Design

## Envirogen, Inc. www.envirogen.com

Canton

Envirogen is a biotechnology-based environmental systems & services company. Soil & groundwater remediation capabilities & air & wastewater treatment systems are at core of expertise.

Private Sector – Envirogen continued

Envirogen applies its biocatalysts & systems expertise to meet plant effluent criteria for air & water on a project-specific basis. Envirogen's programs include:

Bioreactor Systems for Air Emissions & Wastewater Effluents Remediation Services Environmental Consulting, Management, and Engineering Services Research & Development

Job specialties:

Biologist/Ecologist\* Ecotoxicologist/Ecorisk Geologist/Hydrologist\*

Business Development Environmental or Natural Resources GIS/GPS/Geography

Civil Engineer\* Environmental Planner Hydrogeologist

Ecologist\* Environmental Scientist\* Water Resources

Economist Fisheries Biologist: Fisheries Biology/Aquatic Ecology

#### Environmental job postings:

Natural Resource and Environmental Economist

- Masters Degree (Ph.D. Preferred) or substantial training in an aquatic or terrestrial environmental science (e.g. biology, ecology etc.)
- 4+ years experience in economics or closely related field (e.g. natural resource economics, agricultural economics)
- Advanced training in & experience with economic valuation of natural resources and/or environmental quality change specifically related to aquatic and/or terrestrial resources (water quality, fisheries, recreation) using revealed and/or stated preference methods
- Demonstrated excellence in quantitative economic methods including statistics/econometrics

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<sup>\*</sup>Envirogen is now part of Shaw Environmental & Infrastructure, a subsidiary of The Shaw Group

<sup>\*</sup> Job trending information available.

- Knowledge of U.S. environmental regulations
- Excellent oral and written communication skills desired
- Solid computer skills desired
- Strong business/client orientation desired
- Responsibilities: Provide technical support in economics and statistics to various projects; Report and proposal writing; Task management; Client contact and development

## Senior Project Scientist

- B.S. in geology or hydrogeology
- 12+ years of consulting experience including client services, construction management, M&A due diligence, and project management
- Experience managing multiple large projects and portfolios of sites simultaneously
- Experience with evaluation and feasibility of remedial technologies
- Strong business/client orientation
- Excellent oral and written communication skills
- Strong proficiency in Microsoft Word & Excel
- Massachusetts Licensed Site Professional desired
- Responsibilities: business development, technical leadership, technical & strategic task management, proposal writing, client & agency contact, technical support to various projects

Private Sector - Environmental and Occupational Risk Management

# **Environmental and Occupational Risk Management, Inc.** www.eorm.com Woburn

Environmental & Occupational Risk Management, Inc. (EORM) partners with companies worldwide to develop and implement cost-effective Environmental, Health and Safety (EHS) management programs. We focus on integrating EHS management into business operation processes to make it a beneficial part of a company's business strategy and corporate culture.

#### Services:

- 1. Management Consulting EORM's strategic management team helps companies make informed business choices about managing their EHS Risks
- 2. Environmental EORM offers strategic & technical environmental (air, water, waste, toxic substances) program support & partners w/clients to align compliance strategies w/business goals.

### Job categories:

Production TechnicianAssociate EHS ConsultantPrincipal ConsultantEHS TechnicianEHS ConsultantManaging PrincipalEHS SpecialistSenior EHS ConsultantEHS Manager

#### Environmental job postings:

Regional Manager EHS Consulting

• Bachelor of Science; CIH, CSP, and/or PE preferred

- 10+ years of business EHS experience; 3+ years in EHS Consulting
- Proven business development skills, selling non-remediation type EHS Services
- Strong network in the region
- Strong understanding of consulting business operations; competency in running a business.
- Successful track record of managing a team of professionals
- Responsibilities: operational responsibility for the region; sell to new & existing clients; manages, develops & mentors staff; brings on new consultants & integrates them into the firm; manages certain client accounts & projects; supports certain clients with billable project work

#### Senior Environmental Consultant

- BS/MS in Engineering or Science, plus MBA preferred
- 10+ years of business EHS experience
- Technically competent and well rounded with very strong expertise in: Environmental services (regulatory compliance and strategic management). Experience in the following areas also helpful: Industrial Hygiene, Safety Engineering/Management and Training
- Experience with design and implementation of Environmental Management Systems
- Semiconductor and/or Biotech experience
- Strong business acumen with budget management experience
- Excellent listening and overall communication skills (written and verbal)
- Business development experience in consulting a plus
- Responsibilities: do and lead a wide variety of EHS/Environmental projects, in addition to providing client stewardship (account management) and business development.

Private Sector – Environmental Resources Management

# **Environmental Resources Management** www.erm.com Boston

# Services:

ERM works with the private sector assessing how their business is likely to be impacted by environmental & social issues, new regulations, consumer concerns, & supply chain issues and help companies develop appropriate policies and management systems to manage these business risks. ERM assists with mergers & acquisitions to help buyers & sellers fully understand potential financial value of environmental liabilities and works with corporations to understand & manage risks. We provide assistance developing clean up solutions & working with the client as project managers to remediate the sites.

#### Job titles:

Air quality engineer EHS/Compliance/Due Diligence Specialist Geologist\*

Air quality project manager Engineer/Environmental Scientist Hydrogeologist

Civil engineer\* Environmental compliance consultant Environmental planner

Consultant Environmental impact assessment

#### Environmental job posting:

EHS / Compliance / Due Diligence Specialist

Bachelors degree

<u>.</u>

<sup>\*</sup> Job trending information available.

- 2-6 years experience performing compliance reviews & due diligence at industrial facilities
- Experience performing multi-media EHS audits & familiar with EPA & OSHA regulations
- Excellent writing and communication skills required
- Responsibilities: perform compliance assessments, prepare permits, perform due diligence in New England and manage national and international due diligence and compliance assessment projects

## Environmental Systems Research Institute, Inc. www.esri.com/

**Danvers** 

ESRI is about improving our world & use of our resources through better information management. Industries:

Engineering: Civil Engineering & Surveying

Government

Economic Development Law Enforcement Land Records & Cadastral Solutions

Sustainable Development Public Safety Urban and Regional Planning

Health and Human Services: Hospitals and Health Systems & Public Health and Human Services

Natural Resources

Agriculture ESRI Conservation Program Petroleum Archaeology Forestry Pipeline

Cave and Karst Marine and Coast

Environmental Management Mining and Earth Science

Transportation: Transportation Systems and Networks & Distribution and Fleet Management

Utilities: Electric and Gas & Water/Wastewater

Private Sector – Environmental Systems Research Institute continued

#### Environmental job postings:

Consultant / Project Manager

- B.A., M.A., or Ph.D. degree (depending upon position level) in relevant field
- 1 to 8 or more years of significant proven industry experience;
- Practical experience in related industry or application area
- Ability to develop project designs, work plans, budgets, & schedules
- Knowledge of & ability to apply GIS technologies; experience with desktop, client/server, & Internet applications & architectures; experience w/current ESRI software & object oriented methods & techniques & knowledge of software development methodologies desired
- Excellent interpersonal, writing, presentation, and leadership skills
- Responsibilities: lead projects in following areas: electric/gas utilities, environment & natural resources, water/wastewater utilities, & transportation/logistics services; help clients translate & implement real-world needs into practical, state-of-the-art, GIS technology-driven solutions; lead project teams during requirements, analysis, design, build, & rollout; manage project performance as well as client relationship & expectations; manage subcontractors; work with the ESRI marketing & sales teams to develop new business

#### EnviroTrac Ltd. www.envirotrac.com

Norwood

EnviroTrac is a consulting & contracting firm that provides turnkey environmental services.

EnviroTrac specializes in developing and implementing comprehensive solutions to soil and ground-water contamination associated with petroleum, industrial and commercial facilities.

#### Services:

Hydrogeologic Investigations

Acquisition and Divestment Assessments

Remediation Design, Install and Maintenance

Remedial Investigations and Feasibility Studies

Risk Assessments

GIS & Data Management

Manufactured Gas Plant (MGP) Sites

**UST** Assessments and Closures

Underground Injection Control (UIC) Closures

Environmental Site Assessments (Phase 1, 2, & 3)

Soil, Air, Surface-Water and Ground-Water Sampling

Soil & Ground-Water Modeling, Fate & Transport, Natural Attenuation, etc

Air Evaluation, Monitoring & Permitting Health & Safety Monitoring & Training Waste Classification, Management & Disposal Environmental Compliance, Audits, Permitting Hydrogeologic & Aquifer Testing and Analysis

**Construction Services** 

24-Hour Emergency Response Services

**Construction Management** Remedial Pilot Testing Research & Development

Landfill Capping

**SPCC Plans** 

## Environmental job posting:

Staff Scientist

- B.S. degree in Geology, Environmental Science, or related degree;
- 40 hour OSHA hazwoper certification required
- Responsibilities: tabulate, review & evaluate field data, testing results or other technical information for use by upper level personnel; prepare environmental reports & plans for review & use by upper level personnel; perform routine environmental sampling of soil & ground water; perform O&M of remedial systems

Private Sector – Epsilon Associates

## Epsilon Associates Inc. www.epsilonassociates.com Maynard

Epsilon Associates is an engineering & environmental consulting firm. Our engineers, scientists, & planners are committed to securing timely & workable environmental approvals for a wide array of real estate development, energy, industrial, & infrastructure projects. Epsilon's principals & project managers provide effective client advocacy founded on credibility with regulatory community. Epsilon has grown to a team of 50 professionals proficient in regulatory strategy, site & route selection, environmental analysis, licensing, permitting, & expert testimony. Epsilon specialists provide compliance assistance, due diligence, air pollution control systems engineering, air quality modeling, noise data collection & modeling, coastal & tidelands permitting, wetlands & natural resource assessments, & historic preservation consulting.

## Environmental job postings:

Acoustical Engineer

- BS in Engineering, Acoustics or Environmental Sciences. MS in Engineering or Acoustics preferred together with professional registration or certification
- 6-10 years of experience in a consulting environment
- Superior written and oral communication skills
- Experience in business development and proposal efforts desired
- Experience in the energy industry, the aggregate or hard rock industry, and with the FHWA

TNM model a plus

- Facility with MS Word, MS Excel, & SURFER and familiarity with AutoCAD and GIS
- Responsibilities: responsible for community sound level measurement programs, data analysis, noise propagation modeling, noise barrier modeling, analysis of mitigation measures & report preparation; presentations to clients, regulatory agencies & public.

## Air Quality Engineer or Scientist

- BS in Engineering, Chemistry or Environmental Sciences. M.S or Ph.D. in Chemistry preferred for Science candidates. Engineering candidates should be working towards professional registration
- Superior written and oral communication skills
- MS Word, MS Excel, and a familiarity with AutoCAD
- Responsibilities: responsible for CEMS monitoring, recordkeeping & reporting support related to the Acid Rain Program, the NOx Budget Program & New Source Performance Standards. Develop understanding of Federal & State regulations & policies in these areas, learn to compile Electronic Data Reports (EDR), prepare Monitoring & QA/QC plans in multiple states. Make presentations to clients & regulatory agencies.

## **ESS Group, Inc.** www.essgroup.com

Wellesley

ESS Group, Inc. is a full-service environmental consulting and engineering firm servicing clients throughout the northeast. ESS Group, services encompass all environmental media. We have technical experts in air and water quality, geosciences and hydrogeology, risk assessment, wetlands, wildlife, fisheries, and coastal geology. Our civil engineers have provided design, drafting, and construction oversight services for industrial, commercial, and residential facilities. Private Sector – ESS Group continued

## Environmental job postings:

Mid / Senior Wetland Scientist

- 5-15 years experience in wetland & terrestrial ecology evaluations, soil science, wildlife biology, herpetology, and/or endangered species disciplines
- Specific project experience in energy & land development projects in Northeast required
- Demonstrated business development experience preferred

## Entry Level Environmental Field Engineer / Geologist\*

- BS in engineering, geology, or related field; 0-2 years experience; EIT desirable
- OSHA training or ability to obtain OSHA training required
- Responsibilities: field sampling; drilling & contractor oversight; site investigations; remediation system design; construction and operation; and site assessments.

## **Exponent Environmental Group** www.exponent.com Natick

Job trending information available.

Our multidisciplinary team of scientists, physicians, engineers, & regulatory consultants will perform in-depth scientific research & analysis or very rapid-response evaluations to provide our clients with the critical information that day-to-day & strategic decisions can require.

Disciplines:

Aviation Fires & Explosions Risk Management & Reliability

Biomechanics Food & Chemicals Security Engineering
Civil/Structural Engineering Health/Epidemiology Technology Development
Construction Consulting Human Factors Toxicology/Human Health
Data/Risk Analysis Marine Services Vehicle Engineering
EcoSciences Materials/Metallurgy Visual Communication

Electrical Engineering Mechanical Engineering Water Resources & Atmosphere Sci

Environmental Sciences Natural Resource Damage Assessment

#### Staff:

Within each discipline, there are managers, engineers, and scientists

#### Environmental job postings:

Principal Scientist / Air Modeler

- Ph.D. or MS in a related science
- 15+ years of experience in the field and an equivalent publication history
- Proven track record in attracting & maintaining client base
- Specializes in air quality modeling for environmental and human health risk studies
- Responsibilities: lead business development efforts, hire additional staff, & support others at high level.

Private Sector – Exponent Environmental Group continued

#### Principal Scientist, Ecosciences

- P.h.D. in ecology, ecotoxicology, toxicology, or related discipline
- 10+ years experience in consulting for private companies & demonstrated publication record
- Demonstrated record of successful business development for projects involving ecological risk assessment and natural resource damage assessment
- Responsibilities: project direction & business development in EcoSciences practice

## Air Quality Scientist, Environmental Science

- Ph.D. in a relevant discipline or a M.S. with 3 years of relevant experience
- Familiar with air transport modeling.
- Excellent oral and written communication and organizational skills
- Expertise in modeling of transport and fate of chemicals in the environment, particularly in the dispersion and deposition of aerially-borne contaminants
- Experience with EPA's regulatory air dispersion models
- Responsibilities: calculate environmental concentrations of chemicals from current & historical data to facilitate assessments (including probabilistic assessments) of risks to human & ecological receptors, communicate the results concisely & effectively in both written & verbal forums, & publish scientific findings & interpretations

#### Fay, Spofford & Thorndike, Inc. www.fstinc.com

Boston, Burlington

At Fay, Spofford & Thorndike (FST), we are engineers, planners, and scientists. FST has nearly 85 years of experience, planning & providing scientific solutions for civil engineering project.

Specialty markets:

Highways and Roadways Waterworks Environmental Permitting

Bridges and Viaducts Buildings Airports

Waterfront Facilities Mass Transit Special Transportation
Wastewater Systems Transportation Planning Parking Facilities

#### Environmental job postings:

Engineer / Senior Engineer (Water)

- BSCE; P.E. (required for Sr. Engineer)
- 3-10 years experience
- Experience with master planning, water quality and treatment feasibility studies, design of wells, pump stations, water and distribution facilities
- Responsibilities: planning, design & services during construction of water supply & distribution facilities

## Assistant Engineer / Engineer (Wastewater)

- BS in Civil and Environmental Engineering
- 0 to 5 years experience
- EIT preferred
- Word processing, cost estimating, spreadsheet, AutoCAD & GIS/ArcView experience plus
- Responsibilities: wastewater treatment and collection system evaluation, design and construction phase office services.

Private Sector - Gannett Fleming

## Gannett Fleming, Inc. www.gannettfleming.com

Braintree, Malden, Newton

Gannett Fleming Inc. is an international planning, design, and construction management firm.

## Environmental job postings:

Environmental GIS Analyst

- BS (Master's preferred) in Environmental Science, Planning, Geography, or related field
- Experience using GIS analyses & mapping software to support impact assessments & planning studies; Proficiency using ESRI ArcGIS software
- Knowledge of NEPA compliance & document preparation standards
- Strong written & verbal communication skills
- GIS application development and/or GPS experience a plus

#### Environmental Scientist\*

- Bachelor's degree in Environmental Science, Geology or Engineering; PC proficient
- 1-4 years experience in Environmental Investigation/remediation, field sampling & oversight
- Responsibilities: field sample; site remediation; site data analysis; proposal/report preparation

#### Engineer

- BS or BE with emphasis on Environmental Engineering or Science; 40-hour OSHA training
- 2 to 5 years experience in environmental assessment/remediation
- Able to perform resident engineer duties; coordinate/manage subcontractors conducting remediation work; oversee field operations/remedial activities; maintain field health and safety protocols; develop/maintain project documents/reports.

## Geologist\* / Hydrogeologist / Engineer

- BS Environmental Science, Geology, Engineering or related field, emphasis in hydrogeology
- 10 to 15 years experience in environmental science/hydrogeology, site investigation, well installation, report preparation, project management, participation in field studies, knowledge of state and federal regulations, and client relations
- Professional Engineer (P.E.) or Professional Geologist (P.G.); M.S. degree; and/or 40-hour OSHA health and safety training are preferred
- Responsibilities: monitor well sampling, site investigation, report preparation, data collection, environmental assessments, field reconnaissance, field observation of construction activities, assist in proposal preparation & business development, manage projects & budgets

## Entry-Level Project Engineer in Water / Wastewater Field

- BS or MS in Civil, Water Resources or Environmental Engineering with course work in water/wastewater system planning, hydraulics, hydrology, water quality and treatment, operations and related subjects; EIT desirable
- Experience in water supply, treatment & distribution &/or wastewater collection & treatment preferred; Strong communication and writing skills highly desirable

Private Sector - Gannett Fleming continued

#### Solid Waste Engineer

- Bachelor's degree in Civil Engineering with emphasis in Solid Waste or Environmental Engineering and proficiency with common work processing and spreadsheet computer software are required. EIT & experience with solid waste facility planning, design, permitting & construction are preferred
- Responsibilities: perform engineering analyses; prepare engineering designs, reports, permit applications, site grading plans; perform field surveys for data collection & observation of construction; attend & present information at client, public, & regulatory meetings

## Staff Geologist\*

- Bachelor's degree (Master's preferred) in geology or hydrogeology
- Minimum of 3 to 5 years experience in environmental consulting including environmental regulatory experience specific to state

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<sup>\*</sup> Job trending information available.

<sup>\*</sup> Job trending information available.

- Strong organizational & communication skills
- Responsibilities: provide geological/hydrogeological support specific to performing Phase I/II
  assessments, environmental investigations, O&M projects, & construction management
  projects; assist in preparing reports & other associated technical documents

## GEI Consultants, Inc. www.geiconsultants.com

Winchester

Our talented staff of nearly 250 multi-disciplined engineers and scientists deliver integrated geotechnical, environmental, and water-related planning, design, and construction solutions.

#### Services:

## 1. Transportation

Our programmatic environmental & geotechnical support to transportation agencies and companies helps them ensure that transportation projects and facilities are planned, constructed, and operated cost-effectively, safely, & in compliance with all state & federal environmental regulations.

2. Water

Planning & Permitting Conveyance / Storage / Treatment
Dam Engineering Fisheries and Water Quality

## General Physics Corp. www.gpworldwide.com

Woburn

GP is a performance improvement company & leader in training, engineering, & technical services.

Engineering:

Chemical Demilitarization Environmental Engineering

Construction Management Plant Engineering

Technical and IT:

Application Development & Support Product Development Support Logistics Support

GIS & GPS Services Maintenance and Reliability Services
Information Technology Systems Support Project / Program Management Support

Private Sector - General Physics Corp. continued

#### Environmental job postings:

Junior Environmental Engineer/Scientist\*

- BS degree in Engineering or science
- 1-5 yrs experience in environmental, engineering or related science discipline

#### Mid-Level Environmental Engineer/Scientist\*

- BS degree in Engineering or science, MS preferred
- 5-10 years experience in environmental, engineering or related science discipline

#### Senior Environmental Engineer/Scientist\*

• BS/MS degree in Engineering or science

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<sup>\*</sup> Job trending information available.

• 10+ yrs experience in environmental, engineering or related science discipline

#### Environmental Scientist\*

- B.S. in Engineering or science as appropriate; Computer & written/oral communication skills
- Responsibilities: determine data collection methods to be used in projects & surveys; plan &
  develop projects & surveys; collect & synthesize data; identify & analyze sources of
  pollution to determine their effects; analyze data to assess pollution problems & develop
  approaches for removal or control

#### **GEO-CENTERS** www.geo-centers.com

Natick, Newton

GEO-CENTERS is a provider of preparedness services & products with major strengths in chemical & biological research, detection, protection & defense. Our highly experienced professionals excel in scientific research, technology development, engineering, field-testing, & project management.

Research:

Biomarkers Environmental Systems Nanotechnology

Biotechnology Epidemiology Sensors

Chemistry Human Factors Performance/Engineering Systems Integration

Engineering Materials Science Toxicology

Job categories: Chemistry, Engineering, Info, Info Tech,& Physiology

## Environmental job posting:

#### GIS Specialist

- Bachelor's degree in Geography, Planning, Natural Resources, Engineering or GIS related field or equivalent work experience; 1-3+ years experience; Good communication skills
- Knowledge of 1+ GIS packages & GIS programming languages; familiar with web authoring & web development tools; experience in operating systems such as UNIX or NT; Ability to demonstrate working knowledge of relational database theory and application;
- May be specialist in a technical area such as remote sensing/image processing, GPS or in applications such as cadastral or environmental

Private Sector – GEOD Corp.

#### **GEOD Corp.** www.geodcorp.com/home.htm

Boston

#### Services:

#### 1. Photogrammetry

Earthwork and stockpile measurements

Digital terrain modeling & Digital elevation modeling

Route selection surveys, transmission lines & highways

Aerial photography

Base mapping for GIS

Topographic mapping

#### 2. Surveying

GPS, Bridge & structure, Verticality, Assurance, Property acquisition, Hazardous waste site, Horizontal & vertical control, Wetland location, Hydrographic, Right-of-way, & Tunnel surveys

# $\textbf{GEOD Consulting} \ www.geodcorp.com/GEOD/index.htm$

**Boston** 

GEOD Consulting provides civil engineering, traffic/transportation engineering & surveying services throughout the northeast. Our senior staff consists of licensed engineers, land surveyors & certified photogrammetrists.

#### Services:

- 1. Storm Water Management: performs storm water management ranging from basic drainage analysis to large-scale hydrologic storm water studies. Our engineers utilize advanced computer software modeling packages to improve water quality & address water quantity problems.
- 2. Transportation
- 3. Engineering: provides civil engineering services to public & private sectors.
- 4. Site Development: Our staff has planned, designed and supervised numerous commercial, residential, industrial, and public development projects, including single family, town house developments and adult communities as well as recreational, medical and corporate facilities.
- 5. Survey/Photogrammetry

## Environmental job postings:

Traffic Engineer

- 0 to 5 years experience
- Working knowledge of traffic impact studies including site distance determination, crash rate calculations, queue analysis and intersection capacity analysis
- Familiarity with software: Highway Capacity Software, AutoCAD version 2000i & SYNCRO
- FE/PE preferred and ability to obtain required

## Project Traffic Engineer

- 5 to 15 years experience in charge of traffic impact study reports and the design of signalized intersections utilizing MassHighway design guidelines
- Used transportation software: Highway Capacity Software, SYNCHRO version 5.0 & SIDRA
- Strong communication skills and the ability to direct staff
- PE preferred and ability to obtain required

### Private Sector - GEOD Consulting

## Civil Engineer\*

• 0-5 years experience

- Working knowledge: roadway geometric design, storm water management & utility relocation
- Strong working knowledge of AutoCAD version 2000i or 14
- Desire to learn many aspects of civil engineering: site development (layout, storm water modeling/management, grading & environmental permitting); highway design (geometric alignments, drainage & development of plans, specifications & estimates)
- FE/PE preferred and ability to obtain required

#### Gradient Corp. www.gradcorp.com

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<sup>\*</sup> Job trending information available.

#### Cambridge

Gradient Corporation is a consulting firm with specialties in risk & environmental sciences. Clients rely on Gradient to bring sound science to bear on costly environmental and product safety issues where rigorous analysis and competent negotiation forge innovative, cost-saving solutions. Our mission is to protect human health while making good environmental sense and minimizing costs.

Services:

1. Risk Science

Product Safety Site-specific risk Toxicology Toxic torts

2. Environmental Science

Compliance/enforcement Data interpretation

Data quality management Fate & transport modeling

Categories for technical staff include: Analyst, Senior Analyst, Associate, Senior Associate

Environmental job posting:

Licensed Site Professional (LSP)

- Strong project management and report-writing skills
- Responsibilities: Oversee other consultants' investigation & remediation field work including critiques of work plans, site characterization, & remedial actions at PCB & trace metal sites; Independent interpretation of site data and reports

# **Green Century Capital Management** www.greencentury.com/Boston

With Green Century's mutual funds, you can use your investment dollars to help the environment. We seek competitive returns while we put your money to work for cleaner air, cleaner water and a safer planet. We believe that, in the long run, companies that protect the environment can be more profitable than companies that pollute.

Private Sector – Greenman-Pedersen

# Greenman-Pedersen, Inc. www.gpinet.com/

Stoneham

Greenman-Pedersen, Inc. (GPI) is a multi-discipline engineering firm that provides professional design, planning, & construction management services to the public & private sectors.

Services:

Building Design & Engineering Infrastructure Telecommunications
Environment Power Transportation

**Staff Positions:** 

Architecture Construction Inspection Landscape Architecture

Civil Engineering Resident Engineering Site Development

Structural Engineering Environmental Telecommunications Design

Traffic / Transportation Engineering

## Environmental job postings:

Land Development Design Professionals - Project Designers

- 2+ years related experience and relevant education credential
- Proficiency in technical aspects of CADD, site design, utility design, technical writing for permit applications and environmental statements, storm water modeling, traffic engineering, environmental engineering, landscape design, land
- Responsibilities: hands-on experience in the details of planning, permitting and designing residential and commercial land development projects.

#### Land Development Design Professional - Senior Managers

- 10+ years experience in surveying, planning, landscape design and/or engineering related to land development with at least three years at the management level
- Professional license as Land Surveyor, Professional Engineer, Landscape Architect or a credential as a Professional Planner highly desired
- Skilled in: client contact and management, municipal approval presentations, technical aspects of civil/site/environmental engineering, land planning, land surveying and/or landscape architecture, supervision of technical staff
- Responsibilities: direct team of design professionals in process of planning & designing residential & commercial land development projects; establish & maintain project schedule, budget & design quality

#### GZA GeoEnvironmental, Inc. www.gza.net

Norwood

GZA GeoEnvironmental is an environmental consulting, geocivil engineering, & environmental remediation firm. We provide services focused on engineering & earth sciences, water resources/management, waste minimization/handling & strategic health/safety management & regulatory compliance in industrial, commercial, financial, public service, & gov't sectors. Our engineering capacity has broadened to general civil engineering services with emphasis on geo-structural engineering, solid waste engineering, stormwater management, site design, & dam engineering. *Private Sector – GZA GeoEnvironmental continued* 

#### Services:

Environmental Consulting Regulatory Compliance & Environmental Management

Environmental Remediation Solid Waste Management

Contractor Services Property Condition Assessments

Geotechnical Engineering Water Resources
Geographic Information Systems In-House Support

#### Environmental job postings:

Senior Environmental Health & Safety Consultant

• BS/MS in Chemistry, Environmental/Chemical Engineering or related science or engineering

- 12+ years EHS consulting experience, expertise in marketing, client development, & proposal preparation
- Excellent technical, verbal and written skills
- Extensive knowledge of federal and state EHS regulatory programs and the principals of effective EHS management & proven track record in the field of EHS consulting
- Responsibilities: assist clients in evaluating & managing EHS-related risk & liability by
  developing & implementing management systems, policies & procedures, comprehensive
  multimedia regulatory compliance & management system auditing programs, facility &
  asset acquisition & divesture programs, & by providing comprehensive EHS training &
  educational programs

#### Senior Risk Assessor

- MS/PhD in Toxicology or Environmental Health
- 8+ years experience managing risk assessment projects under CERCLA, RCRA & state regulation; Experience w/RCRA facility closures, TSCA, & indoor air quality issues desired
- Strong communication and analysis skills

#### Risk Assessor

- BS or MS in environmental health, toxicology or related field
- 5+ years experience coordinating risk assessment tasks under CERCLA, RCRA and/or state regulations; Strong communication and analysis skills

## Civil / Water Resources Engineer\*

- BS or MS civil or environmental engineering, w/strong background in surface & groundwater hydrology, open channel hydraulics, watershed management & related physical sciences
- 3 to 5 years work experience in site/civil engineering
- Strong communication, problem solving and organization skills
- Ability to write technical proposals, reports and publications
- Responsibilities: work on wide variety of projects including rainfall/runoff analyses, drainage
  and flood control designs, computer modeling, water quality investigations including lake
  diagnostic studies, hydraulic structure design, water supply investigations, onsite wastewater
  design, dam safety engineering, and related environmental permitting support; conduct
  various fieldwork activities: drill observations, soil and water sampling, pump tests, &
  stream flow measurements

Private Sector - GZA GeoEnvironmental continued

#### Energy Facility Siting and Permitting Professional

- MS degree or higher preferred
- 10 to 15 years experience in permitting new energy facilities or retrofits to existing facilities, project and/or program management
- Extensive experience in siting and permitting new energy facilities such as steam electric, gas pipeline, wind, and other renewable energy facilities
- Knowledgeable of siting and permitting regulations
- Technical report writing, supervision of field data collection programs, proposal writing and presentation skills desired

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<sup>\*</sup> Job trending information available.

# Haley & Aldrich, Inc. www.haleyaldrich.com

**Boston** 

Haley & Aldrich is a consulting firm that specializes in underground engineering, environmental science, and environmental management consulting. We are organized to serve clients in three key market areas: Real Estate and Development, Environmental Services for Industry, Infrastructure.

Staff disciplines:

Geotechnical engineers Environmental engineers Environmental geologists

Tunnel engineers Chemical engineers Geologists
Structural engineers Industrial hygienists IT specialists

Work Environment:

23% of Employees have Bachelor's degree 4% of Employees have Doctorate

73% of Employees have Master's Degree

Job types:

3% Geologists 3% Environmental, Health, & Safety Management

28% Geotechnical Engineers 14% Field/Laboratory Technicians

31% Environmental Engineers/Scientists 5% Information Technology

## Environmental job postings:

Environmental Scientist\*

- Bachelor's degree in Environmental Science; 1+ year conducting environmental investigations
- Experience with wetland mapping/characterization &/or ecological risk assessment a plus
- Excellent writing and communication skills
- Responsibilities: responsible for research and writing associated with environmental reports and permit applications; field support for environmental investigations

## Environmental Geologist\*

- Bachelor's (Master's preferred) degree in Geology; 2 to 4 years experience
- Responsibilities: site characterization, due diligence (Phase I –Phase IV, including ASTM & client specific protocols), support of remedial design & implementation activities, data base development & report preparation

Private Sector - Haley & Aldrich continued

#### Staff Hydrogeologist

- Bachelor's (Master's preferred) degree in Hydrogeology or Geology
- 3 to 7 years experience
- Experience in glacial geology, groundwater flow, contaminant transport, well hydraulics
- Strong verbal and written communication skills
- Experience with database software, Geographic Information Systems (GIS), & computer modeling preferred

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<sup>\*</sup> Job trending information available.

- OSHA 40-hour HAZWOPER training preferred
- Responsibilities: support or perform field & office work including monitoring test borings, test pits, & well installations; perform & analyze in-situ hydraulic conductivity & pumping tests; data management & analysis; seepage, flow net, & well hydraulics analysis; groundwater flow & transport modeling; data assimilation, interpretation, & preparation of reports; prepare & execute of technical presentations, cost estimates, & proposals

#### Entry to Junior Level Risk Assessor

- Bachelor's or Master's degree in Chemistry, Toxicology, Chemical or Environmental Engineering, Environmental Science, Industrial Hygiene, Biology, Ecology or related science
- Up to 3 years of experience conducting human health and/or ecological risk assessment
- Strong quantitative and computer skills (MS Excel, Word, Access)
- Communicate effectively in writing and verbally
- Experience with indoor air quality, radon, and vapor intrusion assessments and ecological risk assessment desired
- EQuIS, ArcView, EVS/MVS desired
- Experience working under various regulatory frameworks (CERCLA, RCRA, UST, state programs) desired
- Responsibilities: perform human health risk assessments at contaminated sites for industrial and commercial clients; under supervision, perform risk assessment, data management, environmental fate & transport modeling, development of risk-based clean-up levels for soil, groundwater, surface water, sediment, soil vapor, and indoor air; perform calculations using database and spreadsheet tools, statistical analyses, database management, interpreting environmental chemistry data, toxicological assessments, report writing, environmental sampling, and presentation development

## Staff Environmental Engineer\*

- Bachelor's (Master's preferred) degree Environmental, Chemical, or Mechanical Engineering
- 3 to 8 years experience
- Previous environmental site remediation work
- Working knowledge of CAD software
- Familiarity with MS Office programs preferred
- Good written and oral communication skills preferred
- Responsibilities: conduct RCRA Corrective Action and/or Superfund site remediation, permitting, remedial design, grading, and site civil work

Private Sector – Hancock Associates

## Hancock Associates, Inc. www.hancockassociates.com Danvers

Hancock Associates provides services in Land Surveying, Civil Engineering, Environmental Consulting and Landscape Architectural Design. Hancock's four divisions are:

Job trending information available.

## 1. Hancock Survey

The Land Surveying staff at *Hancock Associates* provides a wide range of services from cadastral, topographic and ALTA title insurance surveys to hydrographic and GPS. We are OSHA certified in Hazardous Waste Operations and Emergency Response (Surveys).

#### 2. Hancock Engineering

The Civil Engineering staff at *Hancock Associates* provides a comprehensive range of land development services from conceptual design, permit site plans and subdivision plans, to construction management and as-built certifications. As a part of a multidisciplinary firm, we assemble a team of experienced professionals and support staff. Such teams are able to coordinate in-house, plan project strategy, assemble required data and prepare successful designs for our clients. Each team will include a Professional Engineer, Professional Land Surveyor and Environmental Scientist as needed.

#### 3. Hancock Environmental

The Environmental Consulting staff at *Hancock Associates* provides a broad range of environmental and planning services to a variety of clients, including developers, architects, attorneys, landowners, and state and municipal agencies.

#### 4. Hancock Landscape Architecture

Environmental job postings:

Staff and Field Surveyors

• 2+ years experience

## Civil Engineer\*

- BSCE required
- 3-7 years experience in preparation of civil/site documents
- Strong technical skills and proficiency with CAD tools including Soft Desk civil applications
- Strong knowledge of site, utility, storm water design, permitting process
- Excellent verbal and written communication skills
- P.E. preferred

## Registered Landscape Architect\*

- 5 + years Project Management experience in residential / commercial / institutional projects
- Good business development and communication skills
- Experience before municipal regulatory boards
- AutoCAD/LDD experience
- PhotoShop & Illustrator experience preferred

Private Sector – Harvard Design & Mapping Company

# **Harvard Design & Mapping Company, Inc.** www.hdm.com Cambridge

HDM specializes in Geographic Information Systems (GIS). From single user and workgroup

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<sup>\*</sup> Job trending information available.

systems to enterprise-wide solutions and web / Internet applications, HDM provides expert GIS services in data management and custom applications solutions.

#### Industries:

### 1. Environment and Engineering

HDM has extensive experience applying GIS tools to address environmental and engineering concerns. HDM capabilities to efficiently and accurately support investigation and remediation of environmental issues range from data acquisition to modeling to data visualization and include:

Environmental risk assessment Ground Water Modeling

GIS & GPS based environmental applications
Wireless environmental data collection

Natural Resource Management
Environmental Impact Assessment

Hazard waste site geocoding

GIS mapping services for engineering design

Watershed Boundary Refinement

Data Development

Data Analysis

Site Remediation

Storm Drainage Data Creation

## 2. Risk Management

HDM has been extensively involved with natural hazards mitigation, response and recovery. For over 10 years, HDM has worked directly with Federal Emergency Management Agency (FEMA), the federal agency charged with responding to any and all natural hazards.

#### 3. Energy and Utilities

HDM has many years experience working with all types of utilities including electric, gas, water, sewer and telecommunications.

## 4. Transportation

HDM offers a full range of GIS/IT and transportation planning services to integrate key data and achieve powerful analysis.

#### Environmental job posting:

GIS Programmer / Developer

- Bachelor's Degree in Geography, GIS, Computer Science or related degree
- 2+ years professional experience in GIS application development
- Technical proficiency in VB6 and/or VB.net
- Excellent skills with ESRI Spatial Data Engine (SDE -Versions 8.x or 9.x), ArcObjects API Development, Versions 8.x or ArcEngine 9.x, ArcMap or ArcView Applications, Versions 7.x, 8.x or 9.x
- Experience with HTML and/or Oracle a plus
- Responsibilities: support development of web-based data quality management portal

Private Sector - Hatch Mott MacDonald

## Hatch Mott MacDonald Ltd. www.mottmac.com

Boston

We're an independent management, engineering and development consultancy with staff working to deliver solutions touching many areas of everyday life - from transport, energy, building, water and the environment to industry, communications, social development, health and education.

Markets:

1. Environment

Policy Development Risk Management Environment and Society

Capacity Building Sustainable Development Pollution Control

2.Oil and Gas

Environmental Services: Risk, safety and environment

3. Power

Environmental Service: Emissions trading

4. Urban Regeneration

Urban Environment Built Environment Planning

Urban Transportation Urban Infrastructure Management Services

5. Water

Mott MacDonald helps governments, municipalities & private sector water utilities manage water resources & provide increasing numbers of people with access to reliable & safe water supplies.

Job types:

BuildingsConsultancyManagementSafetyCivilEducationOil and gasStructureCommunicationsEnvironmentPowerTransportation

Construction Highways Railways Water

Environmental job posting:

Senior Project Manager / Project Managers

- Degree/HND in an electrical discipline
- 5+ years experience in Project Management
- Experience working in consultancy roles
- Proven expertise in project planning & monitoring, working with HSE regulations, & interfacing with clients in long term relationships as a consultant
- Experience working with variety of alternative procurement practices
- Analytical skills, proficient in monitoring budgets, manage invoicing, & sound approach to risk management
- Responsibilities: manage construction projects for utility & industrial electrical power transmission &/or distribution networks under Power Systems Division of Energy Unit

Private Sector – HDR

HDR, Inc. www.hdrinc.com

**Boston** 

HDR is an architectural, engineering and consulting firm.

Markets:

Community Architecture Justice Solid Waste Water Resources

Drinking water Power Transportation
Healthcare Science & Technology Wastewater

Job types:

Architecture Engineer Landscape Architecture Surveying

Building/Facilities Environmental Science Management Consulting

Construction/Design Build Equipment/Lab Planning Planning

## Environmental job postings:

Senior Biologist\*

- BS Biology or related field required; MS preferred
- 5+ (10+ preferred) years experience w/location flora & fauna; habitat restoration; marketing & managing biological/environmental projects; team/group leadership or staff management
- Fish and Wildlife sensitive species certifications & Wetland certifications preferred
- Native revegetation background a plus
- Responsibilities: market & develop biological resources services; conduct biological field surveys & wetland delineations; plan and manage written environmental reports (Biological Technical Reports; biological sections of EIR/EIS; function as biological group leader by mentoring and directing less experienced staff; monitor work load of the group, project quality control, serve as a technical leader & project manager

## Environmental Analyst / Scientist\*

- BS in Environmental Planning, Ecology or related field
- 5+ (8+ preferred) years experience
- 1+ year working knowledge of the National Environmental Policy Act (NEPA)
- Working knowledge of NEPA document preparation process; Software: MS Office
- Experience in state/federal permit coordination a plus
- Responsibilities: prepare environmental documents used in EISs; transportation and general land use planning services for state and federal agencies, municipalities and private clients; collect project related data which may include research, interviews with government agencies & clients, map reviews, field investigations for wetlands, land use, etc.; assimilate & manages data; prepare constraints mapping; define level of environmental analysis required; conduct environmental impact assessments; perform complex assignments, make independent decisions on problems & methods; assist in preparation for & participation in public information meetings & hearings; assist public & private clients with permit coordination, acquisition & compliance for wetland impacts, bridge construction, threatened/endangered species etc.

Private Sector - HDR continued

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<sup>\*</sup> Job trending information available.

## Biologist - Part time\*

- Bachelors degree in a related discipline; 5-9 years experience
- Responsibilities: under broad general instruction, conduct analyses to develop design options or recommendations & assist in preparation of service deliverable documents; perform assignments requiring application of moderately complex objectives & limited variables; work independently on medium sized projects or assist senior scientists on larger projects

## Environmental Scientist\*

- BS Environmental Science or related field; 0-4 yrs environmental assessment experience
- Knowledge of wetland delineation/NCDWQ, USCOE, field investigation techniques, & stream identification
- Responsibilities: follow prescribed procedures & detailed instructions; conduct analyses to
  develop design options or recommendations & assist in preparation of service deliverable
  documents; perform routine scientist assignments requiring application of standard
  techniques & procedures; work independently on small projects or assist more senior
  scientists on larger projects

#### Environmental Design Build Inspector

 Responsibilities: assist in development of Design build projects on multiple bridge rehabilitation project; monitor progress for DB proposals; provide environmental review during RFQ/RFP selection process; assist in administration of DB projects

## Engineering Geologist

- BA Degree in Geology
- 2-4 years experience with field investigations (Test Borings, Geophysical, etc) especially on DOT projects and in soil and rock. Experience in differing geologic areas.
- Experience with engineering evaluations including settlement, stability, materials suitability (including compaction) and foundations (spread fittings, piles, shafts, etc.)
- Construction experience
- Responsibilities: assist in development of test boring & laboratory testing programs for site
  investigations (incl subcontract preparation & administration); provide field surveillance of
  test boring & other field investigations (incl certification by DOT's) & coordinate laboratory
  testing programs; complete typed test boring logs, coordinate & check drafting work, &
  assist in engineering evaluations (e.g. stability, settlement, foundation design, etc)

#### GIS / CAD Technician

- Minimum 5 (20+ preferred) years related experience
- Proficiency with ESRI ArcGIS or ArcMAP to current version 9.0
- AutoCAD &/or Microstation experience
- Responsibilities: produce CAD drawings, maps, illustrations & graphic presentations from
  concepts, ideas or rough sketches with little guidance from Engineer; compile GIS databases
  & information for maps, graphic presentations, flood mapping products, & geospatial
  analyses; assist with technical support for coordination & maintenance of design & GIS
  standards; work on projects for other disciplines (i.e., structural, site development,
  transportation), using AutoCAD, Microstation, & ArcGIS

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<sup>\*</sup> Job trending information available.

#### Environmental Design Coordinator

- BS
- 5+ years environmental coordination experience
- Transportation construction experience preferred
- Responsibilities: provide primary review of environmental permitting documentation on multiple bridge rehabilitation project; coordinate with design oversight staff & subcontractors to assure environmental compliance & permitting clearances being met

### **HNTB Companies** www.hntb.com

Boston, Burlington

HNTB is a multidisciplinary firm known for our work in transportation, bridges, aviation, architecture, urban design & planning, environmental engineering, water and construction services.

## Environmental job postings:

Municipal Project Manager

- Bachelor's degree in Engineering
- 6 years experience
- PE
- Responsibilities: manage client's budget, schedule & program; HNTB budget & schedule; project communications & documentation; coordinate work efforts; review work performed

#### Wetlands Ecologist/Regulatory Specialist

- Bachelor's (Master's preferred) degree in environmental field of study (Biology, Botany, Environmental Science, Rangeland Ecology, or related field)
- 5-7 years experience preferred but new graduate with wetlands &/or plant ecology coursework considered. Entry-levels must have coursework in field botany, soils, or wetland science
- Good writing skills and plant identification abilities are essential. Experience with GPS/GIS applications preferred. This position involves diversified work within general procedures, requiring frequent judgment and initiative. A good grasp of technology and ability to adapt and work quickly in a fast paced environment is highly preferred
- Responsibilities: work with team of planners & scientists under Manager of Environmental Planning to perform wetlands delineations, Section 404 permitting, resource mapping, woodlands & other biological surveys, mitigation plans, & NEPA-related tasks; conduct general field biology assessments: wetland delineations, wildlife identification, endangered species/habitat biological assessments & surveys, plant identification/tree surveys, land use studies, socio-economic studies, historical/archaeological studies & parkland impact assessments; prepare &/or supervise preparation of environmental documents & technical reports; coordinate with design team to ensure compliance with environmental commitments & permit requirements as well as preparing permit applications, & related documents & experience working with federal/state agencies on complex projects; work with others to gather & analyze wide range of environmental data; formulate and conduct technical planning &present results in concise, well-written documents

#### Environmental Planner

- Bachelor's degree in Natural Science (i.e. Biology, Rangeland Ecology, Geology, Hydrology, Forestry, Geography, Wildlife Biology, Ecology) or related environmental policy or science
- 3-5 years of NEPA experience
- Working knowledge of ArcView 8.x, or other GIS based software
- Transportation related experience a plus
- Responsibilities: conduct fieldwork to complete NEPA documentation for specific projects; conduct general field biology assessments: wetland delineations, noise & air quality modeling, wildlife identification, endangered species/habitat biological assessments & surveys, plant identification/tree surveys, land use studies, socio-economic studies, historical/archaeological studies & parkland impact assessments; read, interpret, & compose Categorical Exclusions, Environmental Assessments & Environmental Impact Statements & other technical reports; gather & prepare material & data for proposals; prepare & assess environmental impact studies; contribute to alternative recommendations; attend meetings within & outside firm pertaining to existing & potential projects (Public awareness groups & regulatory agencies, etc.); organize and conduct technical planning studies in timely and efficient manner and formulate results in concise, well-written document

# **Hoyle, Tanner & Associates, Inc.** www.hta-nh.com Boston

Hoyle, Tanner & Associates, Inc. (HTA) is a New England consulting engineering company. HTA provides comprehensive planning and engineering services to municipal, state and federal clients. HTA's Environmental Services Group (ESG) has assisted all types of clients in water supply, treatment and distribution; wastewater collection, treatment and disposal; and solid waste projects.

# Environmental job posting:

Mid-Level Civil Engineer\*

• BSCE; 1 to 4 years experience in water, wastewater and/or stormwater systems

# ICF Consulting www.icfconsulting.com

Lexington

ICF Consulting is a management, technology, and policy consulting firm. Drawing upon extensive industry knowledge, distinguished professionals, and innovative analytics, the firm develops solutions to complex energy, environment, community development, and transportation issues. The firm's services are organized around six markets: defense; energy; environment; homeland security; housing, communities, and economic development; transportation

## Environmental job postings:

Air Monitoring Specialist

- Bachelor's degree in chemistry or related field
- 1 to 5 years experience in air sampling & analysis of PM2.5, O3, CO, NOX, & SOX for monitoring and auditing projects

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<sup>\*</sup> Job trending information available.

• Responsibilities: responsible for ambient air sampling & analysis *Private Sector – ICF Consulting continued* 

## Mid-Level Associate in Environmental Science and Engineering Practice

- Master's degree in Public Health, Environmental Science/Engineering, Biology, Chemistry, Toxicology, or related field
- Excellent quantitative and communications skills
- Consulting or government experience preferred
- Training/experience in environmental sciences & engineering, with particular focus on: Exposure and Risk Assessment; Environmental Fate and Transport Modeling; Toxicology and Human Health Effects Analysis; Air Quality Analysis

#### Entry-level Ph.D. Economist

- Master's or Ph.D.-level economist
- 0 to 3 years of experience
- Experience in environmental, transportation, &/or agricultural policy analysis consulting
- Strong analytical and writing skills
- Responsibilities: conduct analyses of regulatory programs; assist in development & implementation of methods for addressing issues of regulatory impacts (including both costs & benefits); direct junior staff in conducting analysis & preparing reports

#### Environmental Health Scientists and Toxicologists

- Master's degree or Ph.D. in toxicology, physiology, biochemistry, environmental health science, or related field
- Professional experience in aforementioned technical areas a plus
- Excellent writing and analytical skills
- Responsibilities: evaluate human health toxicity data on a variety of chemicals; evaluate peerreviewed literature or "raw data" from tests on toxic & clinical endpoints & epidemiological studies; prepare summaries describing & examining study protocols, results, & conclusions (summaries will be used to support federal government decisions regarding food additives, pesticides, drinking water contaminants, solid & hazardous wastes, air pollutants)

#### Environmental Scientist\*

- Master's degree in Environmental Science or Computer Science
- 2+ years experience in air quality modeling
- Knowledge of meteorology, emission inventory analysis, Community Multiscale Air Quality modeling system, Urban Airshed Model, & Regional Modeling System for Aerosols & Deposition
- Responsibilities: develop meteorological & air quality modeling techniques to provide solutions to environmental problems; develop software tools for evaluation & analysis of emission inventory, meteorological & air quality database; apply Community Multiscale Air Quality (CMAQ) modeling system, Urban Airshed Model (UAM) & Regional Modeling System for Aerosols & deposition (REMSAD) to address ozone, visibility & particulate matter issues

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<sup>\*</sup> Job trending information available.

# **Jacobs Engineering Group Inc.** www.jacobs.com Boston

Services include scientific & specialty consulting as well as all aspects of engineering & construction, and operations & maintenance. Our primary markets include:

Automotive and Industrial Federal Programs Pulp and Paper

Basic ResourcesFood and Consumer ProductsRefiningBuildingsInfrastructureTechnology

Chemicals and Polymers Oil and Gas

Defense and Aerospace Pharmaceuticals and Biotechnology

#### Environmental job postings:

Project Environmental Scientist

- MS in Environmental Science or BS (MS preferred) in Geology, Hydrology, Geological Engineering, or related field with Hydrogeology coursework
- 2+ years of experience in site investigation in support of CERCLA RI/FS process
- OSHA HAZWOPER 40 Hour Certification preferred; verbal & written communication skills
- Experience analyzing contaminant nature & extent, statistical evaluation, & geochemistry
- Responsibilities: assess chemical & hydrologic data with respect to contaminant nature & extent; develop & refine hydrogeologic site conceptual models; prepare, coordinate, & review technical plans & reports; coordinate & oversee hydrogeological field investigations.

#### Project Hydrogeologist

- M.S. in Environmental Science or BS (MS preferred) in Geology, Hydrology, Geological Engineering, or related field with Hydrogeology coursework
- 5 years experience in hydrogeological evaluation in support of CERCLA RI/FS process
- OSHA HAZWOPER 40 Hour Certification preferred
- Experience analyzing contaminant fate & transport, statistical evaluation, numerical modeling, & geochemistry; Excellent verbal and written communication skills
- Responsibilities: assess chemical & hydrologic data with respect to contaminant fate & transport; develop & refine hydrogeologic site conceptual model; plan, execute, & analyze aquifer tests; prepare, coordinate, and review technical plans and reports; coordinate and oversee hydrogeological field investigations; technical support of numerical modeling in support of fate and transport analysis and evaluation of remedial alternatives

#### Senior Toxicologist/Risk Assessor

- MS (PhD preferred) in toxicology, biology, chemistry or other appropriate discipline
- 15+ years experience: risk assessment strategy development; conducting ecological & human health risk assessments; data quality objective (DQO) development; interface w/regulatory agencies including negotiations; development of remedial action objectives (RAOs) & clean-up levels; DOD experience required; DOE/radiological experience a plus
- Responsible for developing/oversight of: ecological & human health risk assessment approaches/strategies at program, project & site levels; risk assessment scope & parameters;

conceptual site models; DQOs for data collection relative to risk assessments; ecological & human health risk assessments & reports; presenting results & conclusions to clients & regulators; representing clients in regulatory agency negotiations for risk assessment scope, parameters, RAOs & final clean-up level

Private Sector – LEC Environmental Consultants

# **LEC Environmental Consultants, Inc.** www.lecenvironmental.com Wakefield

LEC Environmental Consultants is a multidisciplinary ecology-based environmental consulting firm dedicated to providing an interface between natural sciences & land-use management. We offer a broad range of services applicable to the environmental permitting processes throughout Massachusetts & New England. We are experienced in representing the public, private, & non-profit sector in conducting ecological inventories & wetland assessments, preparing & reviewing environmental permit applications, & developing educational & research-oriented programs. LEC is experienced in providing a full range of environmental services from wetland boundary determinations, wildlife habitat evaluations, & endangered species surveys to in-depth ecological analysis & vegetation management plans, strategic planning, & environmental permitting.

## Environmental job postings:

Marine Biologist

- MS or BS in Marine Biology or Ecology; 2+ years field experience with eel grass surveys, shellfish surveys, coastal & freshwater wetland delineation
- Responsibilities: conduct eel grass surveys, shellfish surveys, & coastal delineation, permit applications for coastal structures & shoreline evaluations, reports, public presentations, & court testimony; inland wetland delineation, wildlife habitat evaluations, endangered species surveys, wetland restoration, and impact mitigation and monitoring.

#### Wetland Scientist

- B.S. in Biology, Ecology, Wildlife Biology, Plant/Soil Sciences, or other related environmental sciences; 2+ years direct field experience in wetland delineation
- Responsibilities: inland wetland delineation, wildlife habitat evaluations, endangered species surveys, wetland restoration, impact mitigation & monitoring, permit applications, reports, & public presentations

## **LECG** www.lecg.com/ Cambridge

LECG's mission is to provide independent testimony, authoritative studies and advisory services to inform business, regulatory, and judicial decision makers and help resolve commercial disputes.

Research Staff at LECG includes three positions: Research Analyst, Associate, & Senior Associate

#### Research Analyst

- Undergraduate or Master's degrees in natural resource economics
- Work experience natural resource economics a plus
- Excellent analytical and communication skills

- Experience with spreadsheets, statistical packages, databases, and other software
- Responsibilities: database programming; theoretical research synthesis; determine what qualitative information is important for projects; gather & summarize this information for use by clients or in reports; work with data, regressions and statistics; collect and synthesize financial and other information; create and manage spreadsheets and databases

Private Sector – Lombardo Associates

## **Lombardo Associates, Inc.** www.lombardoassociates.com Newton

Lombardo Associates, Inc. is an environmental consulting and engineering firm specializing in the development and implementation of creative solutions to water, wastewater and hazardous waste remediation challenges for municipal, commercial and industrial clients.

Lombardo Associates specializes in providing consulting & engineering services in following areas:

- Wastewater Master Planning evaluating alternative strategies & developing community & industry-supported solutions that minimize user charges
- Wastewater Engineering Providing detailed engineering services for design and construction oversight of project implementation
- Water Management Developing water supply programs and Master Plans that incorporate water conservation and reuse programs
- Water Conservation Plans Evaluating existing water use practices and identifying costeffective water conservation approaches
- Hazardous Waste Remediation Manage remediation process to ensure goals achieved at lowest cost
- Full Turnkey Services for Designing, Building, Owning/Financing, and Operating wastewater and water management systems for new or existing facilities

#### Environmental job posting:

Decentralized Wastewater Engineer

- M.S. plus 2 years experience or B.S. plus 6 years relevant experience
- Proficiency with Microsoft Office software and high computer literacy
- MS Access, and ARCVIEW / AUTOCAD experience desired
- Excellent written and verbal communication skills
- Capabilities to perform preliminary & final design & construction observation desired
- Familiarity with state of the art decentralized wastewater management technologies
- Responsibilities: prepare engineering reports for municipal decentralized wastewater management projects

#### MACTEC, Inc. www.mactec.com

Wakefield

With specialists in over 50 scientific and engineering disciplines, MACTEC offers a variety of services to public and private clients worldwide.

Core Environmental Services:

Air Resources
Data Management and GIS

Pollution Prevention Restoration / Remediation Environmental Assessments, Management & Compliance Risk Assessment & Ecology Environmental Engineering and Design **Indoor Air Quality** Industrial Hygiene / Occupational Health Strategic Environmental Management Services

Waste Management Mixed Waste Services Water Resources & Supply

Private Sector - MACTEC continued

## Environmental job postings:

Senior Project Manager / Program Manager / LSP

• Responsibilities: lead management & execution of site investigations & closure projects & programs; lead diversification, development, & growth of general/environmental services for New England Area focusing on Massachusetts by identification, pursuit, & development of client relationships; lead site investigation remediation & closure activities; manage projects (scope, schedule, budget) & serve as a program manager for at least one major industrial client; provide LSP services, including development of site investigation & closure strategies; mentor mid-level & junior staff with respect to site investigation, site remediation, & strategic design & management of site investigation & closure projects; lead &/or contribute to proposal efforts; participate in LSP review board within New England; contribute to development/revision of marketing materials

#### Senior Scientist / Eco Risk Assessor

- B.S./M.S., Biology or related degree (M.S. preferred)
- Minimum 6-10 years experience in risk assessment, ecological modeling, habitat characterization/impact assessment including technical oversight of ecological risk projects
- Experience in designing & conducting risk assessments under the Massachusetts Contingency Plan, MA hazardous regulations, CERCLA/RCRA, including: development of technical approach, budget and schedule; monitoring project performance; client and regulatory interface; delivery of technically superior work products, on time and within budget
- Strong financial skills including estimating, budgeting, cost management, invoicing and cash management
- Scheduling/schedule management experience
- Proven business development/expansion skills
- Excellent writing and communication skills
- Knowledge of MA and New England environmental regulations (including MCP) preferred
- Existing customer base/contacts preferred
- Responsibilities: direct site investigations & cleanup programs involving both existing & innovative technologies for cleanup/removal of hazardous wastes, contaminated soils and groundwater; oversee in-house staff (engineers, scientists & construction management personnel) & subcontractors in project execution; manage technical, budgetary & schedule performance to achieve client satisfaction and repeat business; provide technical expertise to fellow project managers & other MACTEC offices; prepare proposals & lead or participate in client presentations; develop new business opportunities & expand business with existing clients; report to Principal Engineer & work effectively with minimal supervision

#### South Boston

Our Professional services are offered to private and government clients with emphasis on consulting engineering, geomatics, planning, program and project management. The firm's mission is to be a leader in the development, marketing and provision of high quality, comprehensive consulting professional services for industrial, urban, rural and resource development.

Private Sector – Marshall Macklin Monaghan continued

MMM provides environmental engineering services include planning, design, & contract administration of water & wastewater treatment & conveyance systems for municipal & industrial clients. Water resources services include stormwater management, flood prediction, protection & control, watershed management planning, flow modeling, routing & control. Environmental management services include solid & hazardous waste management, site decontamination, environmental auditing, & hydrogeological studies/designs. Environmental planning services include preparing formal environmental assessment documents under state & Federal legislation.

## Environmental job postings:

Stormwater Management Engineer

- 4-7 years experience in SWM, Project Management, and managing relationships with conservation authorities and other governmental agencies; PE
- Strong working knowledge of: computer modeling, design techniques, analysis approaches, & practices of stormwater management, hydrology, hydraulics systems, floodplain mapping, flood control systems, fluvial analysis, stormwater quality treatment, & watershed analysis
- Excellent technical and communication skills; Familiarity highway design a plus
- Responsibilities: SWM studies, design, quality & quantity, SWM treatment facilities, modeling, & preparation of reports and proposals

## Entry-Level Planner\*

- Work experience in planning preferred; Familiar with Microsoft Office software
- Excellent written and oral communication skills & time management skills
- Responsibilities: prepare municipal planning documents (official plans, secondary plans & zoning by-laws); special planning studies, Class Environmental Assessments, proposal preparation & consulting services to land development industry, including project design & planning approvals

## Maxymillian Technologies, Inc. www.maxymillian.com

Boston, Wilmington

Maxymillian Technologies (MT) is a comprehensive environmental services firm with emphases in remedial construction, earth moving, earth support systems, and complex water management.

Our services include: Site Remediation Brownfields Redevelopment

Mobile Water Treatment Systems Tank Removal and Installation

<sup>\*</sup> Job trending information available.

Industrial Facility Decontamination & Restoration Fixed Soil Facilities Environmental Demolition & Dismantlement Landfill Closures Transportable Thermal Treatment Systems Analytical Laboratory

Site Assessment, LSP, Drilling, Spill Response Services

MT often has employment opportunities for people interested in the following positions:

Engineering (Civil, Mechanical) Estimators

Construction Field Personnel Construction Supervisors / Foremen

Private Sector – Metcalf & Eddy

## Metcalf & Eddy www.m-e.com

Wakefield

Metcalf & Eddy provides a full range of environmental services to meet constantly changing water, wastewater, wet weather & hazardous waste challenges facing public & private clients. M&E projects span entire environmental services spectrum, from initial studies to design & construction:

Planning Construction Management Site Assessment

Engineering Design Design/Build Regulatory Compliance

Program Management GIS Services New Services

#### Environmental job postings:

Environmental—Water / Wastewater / Hazardous Waste Client Service Leaders

- BS Civil, Environmental or Chemical Engineering or BS in Geology (MS or MBA preferred)
- 5+ years experience managing projects, staff, budget, and schedule
- 10+ years experience in planning, design, and construction of water/wastewater projects or remediation of hazardous waste sites
- Active in national and local professional associations such as AWWA and WEF and preferably hold board level chair in organization
- Licensed professional engineer
- Excellent at client development and proficient communication skills
- Demonstrated ability to penetrate customer organizations & develop corporate strategy for capturing future business within their geographical area
- Responsibilities: monitor trends, drivers & changes in geographic markets & lead proposal & business development efforts for defined geographical business unit; act as liaison with senior managers to direct resources for contractual obligations, to solve any management, technical or administrative problems that arise during project execution & ensure project objectives & deliverables are met; oversee office projects to ensure work is conducted with Quality Assurance protocols; develop & foster client relationships

#### Water/Wastewater Project Engineer

- BS (MS preferred) degree in civil or chemical engineering
- 5 to 10 years experience in hydraulic system design, water & wastewater facility sizing, & equipment selection
- Experience participating in design of large municipal wastewater treatment plants a plus
- EIT/FE or ability to become registered in state; PE preferred
- Responsibilities: participate in project meetings, report writing, process design calculation for wastewater treatment processes, equipment & material selection; prepare equipment

## specifications as they apply to wastewater treatment facilities

## Senior Project Engineer / Scientist

- BS in Civil or Environmental
- 8+ years directly related experience, environmental assessment, & remediation investigations
- PE or LEP license and 40 hours of OSHA health and safety training
- Responsibilities: serve as Project Engineer/Scientist for the planning & remediation phases of hazardous waste & environmental compliance projects; oversee preparation of proposals & reports, coordination of field work, & development of client relationships

Private Sector – MWH

## MWH www.mwhglobal.com

**Boston** 

MWH offers comprehensive solutions for a variety of complex infrastructure projects. Services:

Water & Environment Facilities Development Specialized Consulting Services

Energy Solutions Mining Government Relations

Construction Technology Research

Program Management Asset Management Risk Assessment Transportation

## Environmental job postings:

Associate Hydrogeologist

- BS or MS Geology, Hydrogeology or applicable field
- 0-3 years experience geologic or environmental industry; Experience w/DOD clients desired
- Experience preparing data spreadsheets, presenting data, analyzing aquifer test data, & using Geographic Information Systems (GIS) and/or Rockworks desired
- Responsibilities: work in environmental consulting business performing variety of field & office tasks on project teams for federal clients; support assigned project activities through application of scientific principles & techniques to collect & analyze data to support geologic, hydrogeologic & soil investigations; assist in completion of reports & other administrative work; apply standard scientific principles & techniques to collect & analyze data needed to assess geologic, hydrogeologic or soils conditions; conduct field activities under supervision & participate in such activities as test drilling & installing wells, destroying wells, measuring water levels, soil & groundwater sampling, performing aquifer tests, etc.; summarize technical data in plans, reports & memos; assist in project administration including writing reports, gathering information, supporting proposal production, drafting correspondence, tracking project costs & completing progress reports

#### Senior Planner

- BS in Civil Engineering or a related field; MS preferred; Proficiency in Office 97
- 3 to 7 years experience; PE registration or ability to obtain PE registration preferred
- Responsibilities: plan/conduct work requiring judgment in independent evaluation, selection & substantial adaptation & modification of standard techniques, procedures & criteria; develop water master plans & SB 610/221 compliance documents; assist in development of facilities plans for water & wastewater plants; support senior staff in marketing & client development of local, state, federal, & private water purveyors & agencies

#### Associate Environmental Scientist\*

- BS Environmental Science or related field (Geology, Chemistry, Chemical/Civil Engineering)
- 3+ years environmental, Hazardous Waste, or environmental internship experience desirable
- Data analysis & organizational skills, working knowledge of analytical methods & environmental chemistry, computer skills (Word, Excel, Access, and Paradox)
- Responsibilities: conduct database management, prepare data summary tables, data entry, electronic data deliverable (EDD) processing; prepare reports (data analysis/reduction/reporting, map QC); coordinate w/subcontractor labs (coordinate field events, schedule sample delivery/schedule, process laboratory invoices); administrative tasks

Private Sector – Onyx Environmental Services

## Onyx Environmental Services www.onyxes.com

Stoughton

Onyx Environmental Services provides a complete range of services for industrial and municipal customers needing to dispose of hazardous waste.

#### Environmental job postings:

Environmental Specialist - On-site

- BS in Chemistry or related science discipline; Ability to obtain CDL w/in 6 months
- Responsibilities: provide specialized disposal services to client; manifesting, lab packing, labeling, loading & coordinating transportation, sampling/profiling bulked & drummed waste streams while adhering to health, safety & regulatory procedures

## Project Manager

- BS Degree in Science Discipline
- 3-5 years hazardous waste experience & 2-3 years of supervisory experience
- Familiarity with RCRA, TSCA & DOT regulations; 40 Hour Hazwoper training preferred
- Responsibilities: coordinate activities between sales & operations to successfully & safely complete scheduled projects for hazardous waste disposal customers; supervise project teams; identify opportunities for consolidation & cost reduction; maintain project budget & schedule while communicating with sales, customer service & operations personnel to meet assigned goals; assist in development of proposals & bid responses

#### Parsons www.parsons.com

Boston, Burlington

Parsons is a leader in many diverse markets such as infrastructure, transportation, water, telecommunications, aviation, commercial, environmental, planning, & industrial manufacturing.

#### Environmental job posting:

Engineer

- MS in Geotechnical Engineering; 2 to 5 years of experience preferred
- Experience & increasing proficiency in utilization of engineering theories and practices
- Engineer in Training (EIT) Certificate preferred; technical writing & communication skills

Job trending information available.

- Working knowledge CAD & other PC software packages
- Responsibilities: develop & execute investigation programs; complete investigation or
  construction field assignments; support remedial designs, perform engineering analyses
  (including settlement, slope stability, infiltration, etc.) write reports & technical
  specifications, & develop design drawings; complete drawings, specifications, & other
  materials suitable for procurement & construction purposes, utilizing CAE/CAD as
  applicable; prepare standard engineering computations, material quality takeoffs, estimates,
  surveys, & designs; prepare detailed requisitions for equipment & materials; review small &
  portions of larger supplier drawing submittals & assist in performing technical bid analyses;
  prepare & issue specifications, data sheets, & other construction documents; provide input &
  technical guidance to CAD Designer/Drafters, Designers, & lower-level Engineers working
  on same project

Private Sector – Parsons Brinckerhoff

# **Parsons Brinckerhoff** www.pbworld.com Boston

PB is a leader in key sectors of the infrastructure & facilities markets: in buildings, environment, power, telecommunications, & transportation. We offer experienced technical & management skills in transportation infrastructure; build or rebuild complex & high-visibility projects; provide innovative services in power generation; & hone the cutting-edge technical skills needed to plan, design & build a range of facilities. PB supports public & private sector clients' environmental programs & meets the environmental mandates of our own projects. Our experienced staff of registered professional engineers, geologists, chemists, hydrogeologists, environmental scientists & environmental attorneys helps achieve environmental compliance for a wide range of projects.

## Environmental job postings:

Entry-Level Civil / Water Resource Engineer

- BS degree in engineering or relevant subject
  - 0 to 4 years relevant experience in water & water resource facilities, stormwater management, hydraulic structures such as dams, levees, spillways, culverts, weirs, modeling & site work
  - Description: PB Water is water technology division of PB & provides water engineering services for drainage & flood control, hydraulic structures, hydroelectric facilities, irrigation systems, sedimentation & erosion control, hydrogeology, potable water supply & reclaimed water planning & design, desalination planning & design, & wastewater management. We specialize in watershed, conveyance, combined sewer overflow, desalination/AWT, Hydrogeology, Microtunneling/Trenchless Technology, & high purity water

#### Engineer

- BS (MS preferred) in Civil/Water Resource/Environmental Engineering
- 4+ years experience in one or more of following technical areas: hydrology/hydraulics; computer waterway modeling, water resource engineering; watershed studies, stream & wetland restoration, bridge & highway hydraulics, drainage, stormwater management, water quality BMP design
- Working knowledge of TR-20, Hec-Ras, GIS, CADD and related design software
- EIT
- Good technical & communications skills
- Responsibilities: perform related technical tasks under general supervision of senior level

#### engineers on diverse projects

#### Senior Environmental Planner

- Bachelor's Degree in environmental planning, urban studies, or related discipline
- 10+ years experience in environmental planning with municipal, State and Federal agencies
- Registration in American Institute of Certified Planners (AICP) desired
- Project management experience
- In depth knowledge of NEPA & CEQA processes related to transportation & transit projects
- Record of successful environmental documentation.
- Business development capabilities
- Strong oral and written communication skills
- Technical expertise such as community impact assessment & visual analysis desired

#### Private Sector - Parsons Brinckerhoff continued

## Senior Environmental Planning Manager

- Bachelor's degree in Planning, Environmental Sciences, Engineering, or related field
- 15+ years experience in environmental planning, documentation, assessment, permitting, public involvement and related processes; Public project/infrastructure experience helpful
- Demonstrated marketing, project management, and supervision skills
- TxDOT pre-certifications preferred

## Pennoni Associates Inc. www.pennoni.com

**Boston** 

Pennoni Associates offers services in:

Civil/Municipal Environmental **Building Systems** Land Surveying

Water/Wastewater Geotechnical Inspection & Testing

**Underwater Inspections** Site Design & Landscape Architecture **Transportation** 

**Environmental Engineering Services:** 

**Brownfield Redevelopment** Hazardous Waste Management

**Compliance Audits** Asbestos & Lead-Based Paint Surveys

**Environmental Impact Statements** Landfill Design

**Environmental Permit Applications** Wetlands

**Indoor Air Quality Studies** Preliminary Assessments/Site Investigations

Remedial Investigations/Feasibility Studies Clean Air Act Compliance

Soil and Ground Water Investigations/Remediation Spill and Emergency Response Plans Solid and Mixed Waste Management Environmental Health and Safety

Aboveground/Underground Storage Tank Management

## Environmental job postings:

#### Manager Environmental Division

- Minimum of 8-10 years engineering experience; PE or PG preferred
- Experience in environmental site evaluations & soil and ground water investigation
- Knowledge of PADEP Tech. regulations and PADEP Act II regulations
- Able to manage projects & write proposals; Excellent verbal & oral communication skills

## Graduate Landscape Architect\*

- 0-3 years experience in land development
- Strong hand graphics & design skills as well as AutoCAD experience
- Ability to do professional design work including site planning, grading, hardscape & planting design
- Horticultural knowledge and interest in sustainable design a plus

## Associate Environmental Engineer/Geologist\*

- 3- 5 years state experience in Phase I/II Environmental Site Assessments & Soil/Groundwater investigations
- Appropriate state certifications

Private Sector - Pennoni Associates continued

## Project Civil/Environmental Engineer\*

- BS in Engineering
- 5 to 8 years experience in Civil/Environmental or related engineering discipline, including Brownfields underground storagetank closures, site investigations, remedial investigations, analysis & evaluation of environmental sampling data, remedial & engineering design
- Working knowledge of PADEP Act 2 Regulations
- Experience with DNREC HSCA regulations a plus
- OSHA 40-hour training & current OSHA 8-hour refresher; EIT preferred; PE license a plus
- Good organizational and oral and written communication skills

### Malcolm Pirnie www.pirnie.com

Wakefield

We provide comprehensive services for water & wastewater treatment, solid & hazardous waste management, air quality control & a broad range of performance enhancement consulting services for public and private sector clients.

#### Environmental job postings:

Junior-Level Environmental Engineer\*

- BS degree in Environmental or Civil Engineering
- At least 1 2 years relevant work experience or internships
- Strong written & verbal communication skills; Functional w/Microsoft Excel & Word
- Responsibilities: responsible for fieldwork, including groundwater & soil sampling

## Environmental Compliance Specialist

- Bachelor's degree in Environmental Engineering or Science (EMS a plus)
- 4-6 years environmental compliance and regulatory experience
- PE and/or LSP a plus
- Experience preparing SPCC & SWPP plans
- MCP experience a plus
- Responsibilities: environmental compliance auditing (Air, NPDES, SPCC, hazardous waste,

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<sup>\*</sup> Job trending information available.

tanks, storage areas, etc.)

#### Professional Service Industries, Inc. www.psiusa.com

Boston, Wilmington

Distinguished as a leader in environmental consulting, geotechnical engineering, and construction testing services, PSI is nationally recognized in several disciplines, including: construction services, materials testing, roof consulting and asbestos management.

Our environmental managers coordinate with various technical departments and regulatory agencies to bring you a complete range of services:

Phase I - Environmental site assessments

Indoor air quality assessments

Phase II - Sampling and analysis of environmental media Industrial hygiene

Phase III - Site characterization Regulatory compliance assistance
Lead-based paint & asbestos management services Remediation design & implementation

Underground storage tank compliance inspection and management

Private Sector – Professional Service Industries continued

#### Environmental job postings:

#### Environmental Technician

- High school diploma/GED; additional training in technical area preferred
- May require certifications/training such as: OSHA 40-Hour, NICET, ACI, AWS, ASNT, HAZWOPER, etc.
- Responsibilities: assist engineers & professionals by performing testing, project specific
  observations, & site assessment duties; operate equipment, conduct tests/assessments &
  report data; conduct field investigations; work from drawings, specifications, diagrams,
  schematics & specific verbal & written instructions; use specific methods to observe site
  activities; take samples, & perform tests; make minor adjustments & modifications as needed

### Staff Environmental Professional

- BS in Civil Engineering, Environmental or Geological Engineering
- 0-2 years related experience
- Excellent communication and organizational skills
- Responsibilities: perform Phase I/II/III environmental site assessments, underground storage tank evaluations, asbestos & lead based paint services; prepare environmental investigations & recommendation reports; report writing, drilling & data analysis; permitting for environmental jobs; soils testing

#### Project Environmental Professional

- BS in Environmental Engineering, Geology or science related
- 3 5 years related experience
- Experience in asbestos project surveys and design, asbestos abatement designs and project management preferred for asbestos related positions
- Professional registration/certification desired in one's discipline
- Excellent communication and organizational skills
- Responsibilities: work under direct supervision to perform assignments that include

independent evaluations using standard techniques, procedures & criteria; use judgment in making minor adoptions and modifications to these standards; supervise or coordinate work of technical support personnel; plan & conduct projects; review project quality & adherence to project plan, review project documents for technical accuracy; client development, project budgets, & staffing

## Senior Environmental Engineer\*

- BS/MS in Civil Engineering, Environmental Engineering, Geology or science related degree
- 5+ years environmental experience
- Excellent communication and organizational skills
- PE/PG registration a plus
- Responsibilities: evaluate, select & apply standard techniques; supervise work of other professionals & technical support personnel; coordinate environmental engineering projects; report writing & proposal development

Private Sector – PUDDLESTOMPERS

## PUDDLESTOMPERS Nature Exploration www.puddlestompers.com

Brookline, Needham, Wellesley

PUDDLESTOMPERS' mission is to connect naturalists, ages 2 to 5 years to open spaces that surround their homes. By providing families with seeds of interest & tools of exploration, we seek to help build the foundation for a lifelong enjoyment and love of the outdoors.

## Environmental job posting:

Teacher/Naturalist & Administrative Support

- College graduate
- Prior teaching experience (preschool or lower elementary level a plus)
- Experience in outdoor education and/or degree in the natural sciences a plus
- Proficient in Microsoft Word and Excel and willingness to learn Access
- Highly organized and ability to prioritize tasks
- Responsibilities: lead children & parents or teachers in outdoor exploration using hands-on activities, songs, games, stories & projects (number of classes per week varies depending on season); manage registration, class preparations, & customer database; the Director with scheduling, database management, & marketing; perform general office tasks including answering phone & emails & replenishing supplies

## Recycline, Inc. www.recycline.com

Somerville

Recycline provides high-quality recycled content & recyclable products to consumers.

#### Rizzo Associates, Inc. www.rizzo.com

Boston, Framingham

Rizzo Associates is a leading engineering, transportation, telecommunications, & environmental

<sup>\*</sup> Job trending information available.

engineering firm. We work with you throughout the development process to resolve the challenges that arise in the planning, permitting, design, and construction phases of complex projects.

Services in specialty areas:

Transportation Planning and Design Natural Resources

Site/Civil Engineering Remediation, Assessment and Compliance

Water/Wastewater Engineering Technology

#### Environmental job postings:

Civil / Environmental Engineer\*

- Degree(s) in Civil or Environmental Engineering
- Experience with water or wastewater engineering
- Strong AutoCAD, StormCAD and Microsoft Office skills
- Familiarity of hydraulic models such as SWMM, HydroCAD and other programs
- Responsibilities: plan & design projects: water, sewer & storm water system planning/ modeling & water/wastewater pipeline, pump stations & treatment plant planning & design Private Sector – Rizzo Associates continued

## Environmental Scientist / Engineer\*

- Bachelor's degree in Environmental Science, Civil/Environmental Engineering, Geology, Hydrogeology, or Soil Science
- At least 1-5 years experience
- Knowledge in one or more of following areas: ASTM site assessment process; investigative field work including drilling, sampling, data analysis, construction phase field services; familiarity with the Massachusetts Contingency Plan (MCP)
- Strong written and verbal skills
- HAZWOPER certification preferred
- Responsibilities: Environmental Site Assessment work including property research & reconnaissance; field investigations & observations; sample collection; boring log preparation; data evaluation, tabulation & calculations; report preparation. Remediation: remediation system operation, monitoring and maintenance.

#### Transportation Planner

- BS or BA in Urban Planning or Civil/Traffic Engineering
- 1-3 years experience
- Good written and verbal communication skills
- Responsibilities: prepare traffic impact/access studies & improvement plans; corridor/sub-area transportation studies; parking studies; EIRs/EIS'; field investigations & research; traffic analysis; CADD drafting; report writing

#### Sasaki Associates, Inc. www.sasaki.com

Watertown

Green design is good business. Understanding & addressing environmental concerns are hallmarks

Job trending information available.

of the work of our firm. We advance the limits of green design with innovative, interdisciplinary design concepts.

Services:

Planning and Urban Design Landscape Architecture Architecture Interior Design Civil Engineering Graphic Design

## Science Applications International Corp. www.saic.com

Burlington, Watertown

Science Applications International Corporation (SAIC) is a leading provider of outsourcing & IT services, & the largest employee-owned research & engineering company in the U.S. SAIC excels at helping our customers integrate & optimize environment and infrastructure systems and captures the value from aligning and integrating science, business processes and information technology.

Private Sector - Science Applications International Corp. continued

## Environmental job posting:

Junior Environmental Scientist/Engineer\*

- BS (MS preferred) in Civil, Chemical, Environmental Engineering, Geology, Soil Science, Environmental Science or related discipline
- At least 1-2 years experience in environmental consulting industry
- PE preferred
- Familiarity with development of remedial designs, specifications, construction drawings, or construction cost estimates
- Experience in CERCLA & RCRA environmental investigations, engineering studies, design, & action
- Able to interpret and analyze chemical, geotechnical and geological data
- Intermediate or higher knowledge of MS Office (Word, Excel)
- Excellent verbal and written communication skills
- Current OSHA-40 hour HAZWOPER Training preferred
- Groundwater modeling, Phase II stormwater regulations, GIS or CAD experience and/or remediation construction experience a plus
- Familiarity with USACE, AFCE or DOE programs preferred
- Responsibilities: assist in completion of environmental field investigations (RI/FS) in support
  of various government & commercial contracts; operate field equipment: organic vapor
  analyzers, water quality meters, & gas monitors; complete field tasks in accordance with
  sampling plans & quality assurance plans; purge & sample groundwater, collect soil samples
  & surface water samples; complete field sampling forms; assist & direct writing of Remedial
  Investigation/ Feasibility Studies (RI/FS) reports, Remedial Designs & Decision
  Documents; work with project teams in developing remedial designs for contaminated site
  cleanup & groundwater treatment plants.

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<sup>\*</sup> Job trending information available.

#### SEA Consultants Inc. www.seacon.com

Cambridge

SEA's environmental planners, engineers and scientists focus on returning otherwise underutilized

assets to productive use.

Remedial Investigation Environmental Audits/Assessments Waste Characterization
Building Deconstruction Geotechnical Investigation Remedial Design
Feasibility Studies Cleanup & Closure Plans
Local, State, Federal Permitting Waste Minimization/Pollution Prevention Risk Assessment

#### Second Wind Inc. www.secondwind.com

Somerville

Second Wind Inc. provides products to wind energy developers, consulting meteorologists, & government agencies for both wind prospecting (wind energy resource assessment) & windfarm monitoring. Our products make wind energy more appealing to electric utilities & institutional investors by reducing the risk associated with project performance through high-quality, verifiable, third-party information.

Private Sector - Shaw Group

## Shaw Group Inc. www.shawgrp.com

Stoughton

The Shaw Group provides premier engineering, design, construction, & maintenance services to government & private-sector clients in a wide array of industries, including the energy, environmental, infrastructure, & emergency response markets. Uniquely positioned in the energy market, Shaw is a provider of comprehensive engineering, consulting, procurement, pipe fabrication, construction, & maintenance services to the power & process industries.

#### Environmental/Infrastructure services:

Project Management Feasibility Assessments Air Quality & Noise Services Engineering & Design Construction Water/Wastewater Treatment

Environmental Planning Facility Siting Hazardous Waste Mgmt & Remediation

**Facility Permitting** 

#### Environmental job postings:

Project Manager-Water / Wastewater Engineering

- BS or higher degree in engineering; Registered professional engineer in state
- 10-15 years experience in the municipal water/wastewater engineering field including treatment facilities, municipal pumping stations, & collection & distribution systems
- 5-10 years as Project Manager covering all phases of project development, feasibility studies, needs analysis, project regulatory review & approval process, conceptual & schematic design, generation of contract bid documents, engineering services during construction & start-up & commissioning of water/wastewater facilities
- Ability to direct a team of engineers on reimbursable, fixed-price and/or design-build projects

• Responsibilities: assist Business Development staff in identification of potential projects; assist in preparing RFQ & RFP's; establish project teams to pursue potential opportunities; negotiate scopes of work & contracts

#### Fisheries Biologist

- BS in Fisheries Biology; Understand small boat safety; Lift over 40 pounds
- Responsibilities: collect & identify fish; collect plankton samples

#### **Smart Associates** www.smartenvironmental.com

**Boston** 

The Smart Associates, Environmental Consultants, is a team of environmental scientists & planners that provides outreach & environmental services. TSA is recognized for expertise in environmental compliance & auditing, documentation, & permitting requirements.

Areas of service include:

NEPA Documentation Permitting/Agency Coordination
Environmental Auditing/Facility Compliance Vegetation Management Planning
Construction Compliance Water Quality Investigations

Phase I/Phase II Environmental Site Assessments
Wetland Delineation, Assessment and Mitigation
Wildlife Hazard Assessments

Private Sector – STV Group

# STV Group www.stvinc.com/

Boston

STV Group, Inc. is a leading professional firm offering engineering, architectural, planning, environmental & construction management services. Our major markets include transportation, environmental, infrastructure & planning, construction services, buildings & facilities, & industrial & technical services sectors. STV's environmental expertise is sought by clients to assist them in meeting their environmental planning, permitting, design & construction management needs. Our innovative approaches provide realistic & feasible solutions for complex environmental issues. STV has a diverse staff of planners, scientists & engineers who provide air quality, natural resources, hazardous material, water & wastewater, solid waste and environmental documentation services.

### Environmental job postings:

Civil Engineer / Designers

- 3-5+ years experience preparing construction documents for Land Development projects
- Specific knowledge of stormwater management system design
- Proficiency in the utilization of CADD tools a plus MicroStation preferred

#### Land Planner / Landscape Architect\*

- Minimum 5–10 years experience
- Familiarity with local jurisdictions a plus
- Strong communication skills required
- Ability to oversee a team & coordinate Planning Project of various types and sizes

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<sup>\*</sup> Job trending information available.

#### **Tetra Tech, Inc.** www.tetratech.com/

Boston, Burlington, Cambridge, Framingham, Wilmington

Tetra Tech, Inc. is a leading provider of consulting, engineering and technical services. Tetra Tech's services include research and development, applied science and technology, engineering design, construction management, and operations and maintenance.

#### Resource Management Services:

Watershed Management Projects, Waste Management Projects, & Regulatory Compliance Projects

#### Environmental job postings:

Entry and Mid-Level Environmental Scientist\*

- BS (Master's a plus) in Natural Sciences/Environmental Planning/Environmental Engineering
- 1-3 (entry-level) or 4-6 (mid-level) years experience
- Experience in consulting-type practice including environmental assessments, impact reports, planning, and/or wetlands delineation
- Work on energy related projects a plus
- Strong written & verbal communication skills
- Basic computer competence (Word, Excel, PowerPoint, Project)

Private Sector - Tetra Tech continued

#### Senior Hydrogeologist / Engineer

- MS in Hydrogeology, Civil, or Environmental Engineering. PhD preferred
- 10+ years professional experience
- Strong quantitative hydrogeologic/ engineering skills
- Experience with complex numerical simulation software
- Significant groundwater modeling & CERCLA RI/FS experience
- Experience project/program management, ability to identify & develop new projects & clients
- Responsibilities: execute, report, & manage projects involving engineering systems; leadership position; mentor junior staff; serve key role in business development

#### Practice Manager-Sediment Remediation & Management Services

- Bachelor's degree in transportation, engineering, sciences, or technical field or Master's degree in technical field or management with relevant experience
- 10+ years experience in management & remediation of contaminated sediments, consulting, environmental management or related services
- Program & project management experience preferred including Chemical & Biological
  Descriptors of Bioavailability, Sediment Stability: Methods, Contaminant Partitioning &
  Speciation, Contaminant Fate & Transport, Assessment Methods, Risk Management
  Cleanup Decisions, Involving Stakeholder Groups & Peer Reviewers, Challenges of Ports &
  Harbors Management, Policy & Guidance for Decision-Making
- Ability to conduct Risk Assessments, Bioavailability Assessments, Wetlands Restoration & Mitigation, Beneficial Use for Civil Infrastructure, Innovative Capping Methods, Monitored Natural Recovery, Environmental Dredging, In Situ Treatment, Confined Disposal,

Capping, Ex Situ Treatment, Integrating Sediment & Watershed Management

• Responsibilities: establish & manage consulting practice in remediation & management of contaminated sediments; identify potential clients & opportunities, develop proposals & qualification statements, manage projects & lead staff in practice area

## Tetra Tech FW, Inc. www.ttfwi.com

Boston

Tetra Tech FW, Inc. is an environmental consulting, engineering and remediation firm.

Programs & Services:

Unexploded OrdnanceOccupational Safety & HealthRemediationAssessments & InvestigationsOperations and MaintenanceSafetyCoalbed Methane ServicesRisk-based ManagementPerchlorateEcological ServicesPipeline ServicesAir Services

Economic, Social & Cultural Services
Energy, Environmental & Permitting
Geographic Information (GIS)
Ports, Harbors & Waterway Services

LNGGeoscience Services
Water/Wastewater Engineering
Public Involvement Services
Regulatory Compliance & Permitting

Mitigation Banking Remedial Design

Telecommunications Pollution Prevention/Waste Minimization

Waste Management Wind Energy Environmental Permitting Services

Private Sector – Tetra Tech FW continued

# Environmental job postings:

Entry-Level Biologist\*

- BS in biology or ecology; Knowledge of northeast flora & fauna; Demonstrated writing skills
- Training or experience in 1+ of following: wildlife sampling methods; US Army Corps of Engineers 1987 wetlands delineation methods; wetlands assessment & restoration; preparation of environmental impact statements
- Responsibilities: characterization &/or impact assessment of terrestrial & aquatic resources; vegetation identification & mapping, fish & wildlife surveys, threatened & endangered species surveys, data summarization, & preparation of reports & permit applications; sample groundwater, surface water, soil &/or sediments

## Entry and Mid-Level Environmental Scientist\*

- BS (Masters a plus) in Natural Sciences/Environmental Planning/Environmental Engineering
- 1-3 (entry) and 4-6 (mid-level) years experience
- Experience in consulting-type practice including environmental assessments, impact reports, planning, &/or wetlands delineation. Work on energy related projects a plus.
- Strong written and verbal communication skills; Basic computer competence

## Geologist\*

• BS in Geology

• 7-10 years experience; substantial experience soil & groundwater contamination delineation

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<sup>\*</sup> Job trending information available.

- Previous experience with project/task management; written & verbal communication skills
- Knowledge of state environmental regulations

## GIS Application Developer

- Degree in Science or Engineering; Excellent verbal & written communication skills
- 1 year of programming experience; Required programming skills include Java (JSP, Servlet, JDBC) & SQL for customization of web-based ArcIMS/ArcSDE applications with Oracle database; VBA & ArcObjects for customization of desktop-based ArcGIS applications
- Responsibilities: provide programming support for development of web-based & desktop GIS
  applications for natural resources planning & management; participate in other phases of
  software development life cycle such as requirements analysis, geodatabase & interface
  design, documentation, & user training

## Environmental Engineer\*

- BS in Chemical, Mechanical or Environmental Engineering
- Experience in design, construction & operation of environmental process & mechanical systems including groundwater extraction & treatment processes, soil vapor extraction & treatment processes, innovative remedial approaches, project management & engineering
- Experience working with clients & regulators; Business development experience a plus
- State Professional Engineers License
- Effective verbal and written communication skills
- Ability to interface with project management & engineering teams for project execution
- Able to manage a budget, schedule and scope requirements

Private Sector - Tetra Tech FW continued

#### Water Resources Seller Doer

- Masters degree in related Engineering or Sciences discipline
- 15 years environmental experience in business development & project management
- History of successfully working with government regulators
- Knowledge & experience managing sensitive fish/fish habitat projects, watershed analysis
- Responsibilities: develop business opportunities for & support activities of our Water/Natural Resources program.

# **TranSystems Corp.** www.transystems.com Reading

Transportation infrastructure & facilities - that's our focus. From infrastructure & facility design to computer simulation & economic impact analysis to finding alternative financing solutions for transportation projects - we do it. We provide full-scale professional services to both public- and private-sector transportation clients.

Environmental job post	ing:
Wetland/Environmenta	l Scientist

- Bachelors degree in natural resources, biology, environmental science, or related field
- 2 to 5 years experience
- Training & experience in wetland delineation & Section 404/401 permitting
- Knowledge of ODOTs environmental process including evaluating aquatic resources, noise & air quality analysis, environmental site assessment or cultural resources
- Past written material to demonstrate ability to communicate clearly & document the results of field studies in a concise manner

# TRC Companies, Inc. www.trcsolutions.com

Boston

TRC provides specialized services in a range of commercial, industrial, & infrastructure markets: *Environment:* TRC provides a range of services to meet customers' environmental compliance needs for both on-going operations & legacy environmental issues. TRC is provides fixed-cost remediation solutions to solve customer needs from mergers & acquisitions, discontinued operations, Superfund sites, & Brownfield redevelopment.

Energy: TRC provides a wide variety of services to the energy industry, as well as end users of energy. Our environmental and engineering services include permitting and licensing, due diligence review for acquisitions, operational support, and design/construction solutions. TRC has specialized expertise in fossil-fuel projects, renewables, natural gas facilities, pipelines and LNG terminals, and power delivery. For end-users of energy, TRC develops and delivers comprehensive solutions at our clients' sites—on both sides of the meter. These include distributed generation, combined heat and power (CHP), renewable energy applications, turnkey energy efficiency projects, energy information solutions, and energy program development and implementation.

Private Sector – TRC Companies continued

Environmental job postings:

**Emission Testing Scientist** 

- 4-year degree in science (or equivalent)
- Proficiency with EPA test methods, which use electronic gas analyzers & computerized data acquisitions systems
- Good mechanical aptitude; Exceptional communication & troubleshooting skills
- Proficiency w/spreadsheet & word processing
- Responsibilities: support projects involving air pollution measurements on industrial processes; prepare data tables & engineering reports; willingness to set-up, operate & troubleshoot sampling-equipment under often-adverse field conditions

#### Field Technician

- Associate degree in science or equivalent experience
- Interest & experience with test equipment & electrical/mechanical devices helpful
- Exceptional communication & troubleshooting skills
- Knowledge of electronic spreadsheets and word processing
- Good electrical & mechanical aptitude
- Responsibilities: support projects involving air pollution measurements on industrial processes; operate & maintain EPA test method equipment, including vacuum pumps,

filters, gas flow meters, heaters, condensers, laboratory glassware, plumbing connectors, electronic gas analyzers, & computerized data acquisition; prepare test data forms & tables

#### Air Quality Engineer/Scientist

- B.S. or M.S. in Chemical or Environmental Engineering
- 3-7 years experience in state & federal (PSD and Title V) air quality permitting for petrochemical industry

#### Project Manager / Project Biologist

- BS (MS preferred) in ecology, wildlife biology, zoology, conservation planning, environmental science, or related field
- 3+ years survey field experience
- Experience as biological monitor during construction related projects
- General knowledge of NEPA, ESA, and CWA requirements and permit processes
- Written & oral communication skills; technical report writing skills; Computer proficient
- Responsibilities: variety of biological surveying, sampling, data collection, & analytic tasks

## Environmental Engineer / Geologist\*

- B.S. in Environmental Engineering or Hydrogeology
- 5-7 years experience in environmental investigation/remediation
- Experience in preparation & execution of Site Investigation & Remedial Action Work Plans for contaminated soil & groundwater projects
- Good written & word processing skills (e.g., MS Excel and Word)
- Ability to calculate hydraulic gradients & prepare groundwater contour maps from field data
- Experience overseeing detailed field sampling programs
- Working knowledge of state sampling protocols & remedial action requirements

Private Sector - TRC Companies continued

#### GIS Specialist

- Associate degree
- 1 to 4 years experience in GIS with demonstrated ability to design, develop, maintain, & present spatial data for various projects using ArcGIS
- Environmental GIS experience & customization experience in MS Access preferred.

# Triumvirate Environmental, Inc. www.triumvirate.com

Somerville

Triumvirate Environmental is a full-service environmental management firm serving environmental & hazardous waste needs of clients in areas of life sciences, education, industrial, & utilities.

#### Environmental job postings:

Environmental Compliance Advisor

- Degree in Environmental –related discipline
- 3-5+ years Environmental Health & Safety experience; Consulting experience preferred

<sup>\*</sup> Job trending information available.

- Knowledge of state & federal laws & regulations including: Clean Water Act, Clean Air Act, Resource Conservation & Recovery Act, Department of Transportation Hazardous Materials, Occupational Safety & Health Act
- Experience working within biotechnology/pharmaceutical firms, colleges & universities, healthcare facilities and/or manufacturing facilities
- OSHA experience & knowledge of DOT regulations
- Project management & written & verbal communication skills; Public speaking skills a plus
- Computer skills: MS Word, EXCEL, ACCESS, PowerPoint
- Responsibilities: work with clients to execute environmental audits, manage EH&S programs onsite, & conduct facility-specific training; multi-media compliance audits; permitting (e.g., air, wastewater, storm water, etc.); regulations review & research; development of facility plans/manuals (e.g., SPCC, Contingency, Emergency Action, etc.); technical research & reports; EH&S training

#### Environmental Field Chemist

- B.S. in environmental science, chemistry, biology or a related field
- Completion of 40 Hour OSHA; CPR and First Aid Training; CDL Class C or B
- Basic knowledge of chemicals &/or hazardous waste
- Knowledge of DOT, RCRA, & OSHA regulations a plus
- Proficient Microsoft Word & Excel; written & verbal communication & computer skills
- Responsibilities: chemical segregation, waste & document preparation, regulatory & safety review, waste management & emergency response; learn & use basic chemistry in identifying, segregating & handling chemicals for disposal using RCRA, DOT, OSHA & Triumvirate Environmental standard operation procedures; prepare documentation for shipment & transportation to end disposal facilities in accordance with the RCRA & DOT regulations; perform daily onsite safety reviews, laboratory inspections & audits; participate in emergency response rotation; assist management with growth of top accounts & development of standard operating procedures; execute personal time sheets & DOT logbooks with proper information filled out & turned in daily; operate commercial motor vehicle; work with computerized waste tracking system

Private Sector – Triumvirate Environmental continued

#### Wastewater Treatment Technician

- High School diploma or GED
- Working knowledge of pertinent wastewater regulations & effective installation of new equipment such as pumps, valves, flow meters, probes, & other system related equipment
- Understand how to properly maintain various Programmable Logic Control Devices (PLCs)
- Proficient in Microsoft Word and Excel; computer literate & able to learn new applications
- Massachusetts Wastewater License, Grade 2I minimum; CDL a plus
- Responsibilities: operate & maintain wastewater treatment systems & related equipment & components including: Chemical metering pumps, centrifugal transfer pumps, "other" pump types; Calibrate & standardize pH & ORP probes & control loops; Maintain assorted filter types; calibrate & troubleshoot flow measuring devices such as Sigma, ISCO, Foxboro; maintain & complete daily log of maintenance & routine operations at sites; collect industrial wastewater samples using ISCO & similar types of automatic samplers; participate in train personnel in operation & maintenance of industrial wastewater treatment plants; assist in implementing system upgrades; provide technical assistance to customers;

#### repeatedly lift items that weigh up to 75 pounds

## **URS** www.urscorp.com

**Boston** 

URS offers the latest technology and thinking, turning environmental liabilities into assets. Our proactive strategic environmental programs help clients achieve regulatory compliance, enhance operating efficiency and reduce costs. With extensive expertise in pollution control, water resources development and hazardous waste and wastewater management, both communities and corporations rely on URS to help them meet their environmental challenges.

Air, Water, and Environment Services:

Planning and Design:

Environmental Impact Assessments Engineering & Design Archaeology

Planning & Permitting Rehabilitation & Remediation Public Involvement

Construction Services:

Program & Construction Management Dispute Resolution/Claims Testing & Inspection

Remediation & Operating Services Demolition & Environmental Remediation

#### Environmental job postings:

Health, Safety & Environmental Representative

- BS Environmental Engineering
- HAZWOPER 40 trained
- Experience in construction safety desired
- Capable of working on site at construction & remediation field activities, wearing a respirator
- Ability to conduct training & integrate program initiatives into project schedules
- Responsibilities: oversee all HSE program implementation & compliance for URS Boston field operations; conduct site assessments, support field activities through development of safety plans, implement HSE programs, & conduct training of employees & contractors

Private Sector - URS continued

## Civil Engineer\*

- BSCE; 1 to 7 years experience; EIT, PE or ability to obtain
- Knowledge of site grading, utility systems design, MHD & AASHTO design standards
- Strong tech. proficiency w/ Land Desktop civil applications, HydroCadd & MS Office
- Familiarity with DEP stormwater management standards & MA permitting process a plus

#### Vanasse Hangen Brustlin, Inc. www.vhb.com/

Boston, Watertown

Vanasse Hangen Brustlin's knowledge of environmental science, pollution control and remediation, and the regulatory review process helps clients navigate through tough channels.

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Job trending information available.

Environmental Services:

Brownfields Redevelopment
Stormwater, Hydrology and Hydraulics

Stream Restoration
Wetland Mitigation

# Environmental job postings:

Urban Planner<sup>\*</sup>

- 5-7 years experience; Experience & knowledge of MEPA & City of Boston Article 80 permit filings, master planning & zoning
- Strong attention to detail, exceptional communication, presentation, organization & interpersonal skills. Excellent time management skills
- Responsibilities: some document production

#### Environmental Services Project Assistant

- BA or BS in liberal arts and/or environmental studies; 3+ years experience
- Excellent verbal and written communication skills
- Proficiency with MS Word, Excel, PowerPoint, Access, Outlook Calendar Management, & experience in maintaining & updating web-based filing systems

# Senior Environmental Engineer / Manager\*

- 10 years experience; LSP required (or ability to become in near term), PE preferred
- Experience in environmental site assessment, remediation, state/federal environmental regulations, real estate development (especially due diligence), & project permitting
- Extremely knowledgeable about all aspects of MCP
- Supervisory & project management experience; Strong communications skills

# Vollmer Associates LLP www.vollmer.com

Boston

Vollmer Associates provides engineering, landscape architecture, architecture, survey and planning services to public and private clients.

Private Sector - Vollmer Associates continued

# Environmental job posting:

#### Planner\*

• Bachelor's in Planning or an allied profession (Landscape Architecture, Architecture, Engineering) with planning credits

- 2 to 3 years experience in public & private sector
- Experience within interdisciplinary private sector firm or public agency is desired
- Background in land use & zoning controls, urban & suburban land use/transportation planning, adaptive re-use/revitalization/restoration planning & environmental impact statements & assessments (NEPA, SEQRA, CEQRA) desired
- AICP membership and/or architectural registration desirable
- Excellent written and verbal communication skills

<sup>\*</sup> Job trending information available.

• Working knowledge of graphic, database & drawing programs, including AutoCAD, GIS, PhotoShop & Illustrator, desirable

# Weston & Sampson www.wseinc.com

Peabody

#### 3 Companies:

- 1. Weston & Sampson Engineers is a full-service environmental & infrastructure engineering firm committed to developing & implementing solutions for a range of environmental needs & concerns.
- 2. Weston & Sampson Services offers expanded services in operation & maintenance of water & wastewater treatment systems & facilities to municipal, industrial & and commercial clients.
- 3. Water & Waste Equipment provides clients with a cost-effective, hassle-free method to secure the components they need to maintain their equipment.

# Environmental job postings:

Engineer\* (Environmental Science Site Engineering Group)

- Bachelor's in Civil or Environmental Engineering
- 1 to 3 years of experience
- Knowledge of the Massachusetts Contingency Plan (MCP) a plus
- Responsibilities: fieldwork (sample collection, drilling oversight, surveying, construction oversight); office work (engineering design, data tabulation, report preparation)

# Entry-Level Engineer\*

- BS in Civil or Environmental Engineering
- 0 to 5 years experience
- Strong communication skills
- Familiar with Microsoft Office
- Responsibilities: assist senior engineer with engineering studies, designs, & specifications;
   visit job sites to perform project tasks as directed by the senior engineer; prepare reports & proposals, bid, scope, & budget documents

Private Sector - Weston Solutions

#### Weston Solutions, Inc. www.westonsolutions.com

Boston, Burlington

Weston Solutions, Inc. is an environment and redevelopment firm. The company's services encompass environmental remediation, redevelopment, and management and compliance. Services:

Air Quality Management
Design-Build Construction and Engineering
Dredged Materials Management
Ecosystems Impact Management
Environmental Management Consulting
Environmental Remediation and Construction

Information Management
Impaired Properties Redevelopment
Management and Compliance
Remedial Construction and Operation
Site Remediation and Redevelopment
Waste Management

Groundwater Treatment & Management Water Quality Management

High-Hazard Management and Remediation Human Health

Water/Wastewater Design, Delivery, & Contract Operations

# Environmental job postings:

Assistant Engineer

- BS Civil/Environmental Engineering; 0-3 years experience in related fields
- Good written and oral communication skills
- Responsibilities: provide support on various projects including design of facilities & infrastructure, site remediation, landfill closure, erosion & sedimentation control, geotechnical design, & stormwater management

#### Assistant Geoscientist

- BS/MS degree in geology/hydrogeology
- 4 to 8 years experience; Government & private sector experience desired
- Firm understanding of investigative & remedial technology
- Experience with RCRA, CERCLA, & IEPA regulations
- Responsibilities: assist in managing environmental projects & serve as Project Manager intraining; assist with proposals, work plan development, project implementation, cost estimating, & report writing

# Woodard & Curran, Inc. www.woodardcurran.com

Dedham

Woodard & Curran is an environmental consulting firm integrating services in engineering, science, & operations. Our environmental engineers, scientists, operations specialists, regulatory specialists, & support personnel specialize in:

Air Quality General Engineering

Compliance and Permitting Industrial Infrastructure Engineering

Contract Operations & O&M Services SCADA, Automation & Information Technology

Corrective & Remedial Action Solid Waste Environmental Data Management/GIS Stormwater Expert Witness/Litigation Support Wastewater Full-Service Consulting Water

Private Sector - Woodard & Curran continued

#### Environmental job postings:

Entry-Level Geologist / Staff Scientist / Engineer\*

- BS in Geology, Civil Engineering, or Environmental Science; 0-3 years experience
- Strong writing and problem solving skills
- Responsibilities: groundwater & soil sampling, data management/tracking & reporting; develop work plans; support remediation activities; develop plans & specifications; oversee environmental construction projects

#### Environmental Information Systems Program Manager

• BS (MS desirable) in IT related field such as Information Systems or Geographic Information

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<sup>\*</sup> Job trending information available.

Systems (GIS) with practical Environmental Sciences experience

- 5-15 years professional experience
- Demonstrated business development & client management experience
- Solid technical expertise in GIS implementation, application development, database design and/or web system development
- Project management experience in commercial, municipal, & industrial development projects
- Strong written, oral and presentation skills
- Responsibilities: new business development with required sales quota; financial management; strategic plan development; client relationship management; mentor & supervise professional staff; develop & manage project scopes, schedules & budgets; serve as primary author for proposals to clients

#### Senior Environmental Project Manager

- BS (MS preferred) in Civil or Environmental Engineering; PE (environmental preferred)
- 8-10 yrs experience in evaluation, design, & construction of wastewater management systems
- Construction/Construction Management & System Operation and Maintenance
- Experience negotiating with regulatory agencies & obtaining grants & loans for clients
- Strong client relationships & ability to develop new business
- Strong ability to mentor & lead project staff
- Strong organization & written/oral communication skills including work plan & report preparation & presentations to clients & regulators
- Responsibilities: develop & maintain active client base; maintain communication with clients (written/verbal); introduce clients to our service capabilities; plan, schedule & coordinate work of direct reports (engineers) & designers; train staff; prepare environmental reports & review reports prepared by subordinate staff; prepare & present estimates, proposals & schedules on environmental projects ranging from evaluations to designs & construction; participate in Marketing & Business Development Presentations

#### Environmental Scientist\*

- BA or BS (Master's a plus) in Geology, Environmental Science or Engineering
- 1-2 years experience in environmental consulting
- OSHA 40-hour training; Word & Excel familiarity; Strong field & writing skills
- Responsibilities: environmental site assessments, groundwater & soil sampling, data management, technical report writing

Private Sector – Zenon Environmental

# **Zenon Environmental Inc.** www.zenonenv.com Randolph

Our vision was that membrane technology would be the solution needed to overcome water shortages worldwide. Today, ZENON is a world leader in immersed membrane technology, providing solutions for municipalities, industries, land development and emergency applications.

Environmental job postings:	

#### Drinking Water Process Engineer

- University Degree in Civil or Chemical Engineering (M.Eng Degree preferred)
- 3+ years experience in drinking water design
- Detailed knowledge of rotating equipment including pumps, blowers, & compressors
- Ability to complete detailed civil, mechanical, & process engineering calculations
- Responsibilities: provide technical support to sales managers, applications engineers, & pilot
  managers on all Drinking Water projects; prepare process descriptions, attend meetings with
  the client/consulting engineer, review general construction drawings & provide support
  during the commissioning & performance test period; participate in departmental initiatives
  including standardization & cross-training

#### Industrial-Wastewater Process Engineer

- BS & MS Chemical Engineering specializing in Biological wastewater treatment
- 3-5 years relevant Water Treatment Engineering or Technical Support experience
- PE preferred
- Strong writing skills
- Responsibilities: develop Process Flow Diagrams & Process & Instrumentation drawings for
  wastewater treatment designs including: Membrane Bioreactor systems, Suspended &
  attached growth biological systems, fluidized bed bioreactor systems; review & understand
  customer specifications (performance, mechanical &/or electrical); prepare budget &
  detailed cost estimates for various technical flow sheets that are developed; write & prepare
  proposals, from 1 page budget to very detailed, firm proposals; manage pilot plant studies to
  support the sales effort

# **Chapter 2: Environmental Law Firms in Boston**\*

#### Adler Pollock & Sheehan P.C. www.apslaw.com/

AP&S attorneys have represented clients in a wide range of environmental matters, including:

Development of compliance strategies

Superfund & hazardous waste liability & clean-up

Environmental insurance coverage litigation

Consulting on environmental issues

Environmental permitting of large industrial & residential projects

Toxic injuries

#### Bernstein, Cushner & Kimmell, P.C. www.bck.com/

The Firm has far-ranging experience in environmental & land use law & litigation:

- Represent businesses seeking to secure approvals for their projects & advise them on full range of regulations governing use & development of land & water resources
- Represent municipalities & their constituent boards in judicial & administrative proceedings & counsel them on effective environmental planning & permitting

# Bingham McCutchen LLP www.bingham.com/

Environmental Law:

Air Quality Hazardous Waste Superfund

Asbestos Wetlands Toxic Substances Control Act

Civil & Criminal Enforcement International Activities Toxic Torts

Contaminated Sites Mining Occupational Safety & Health

Endangered Species Spill Response Water Quality
Environmental Litigation Real Property & Corporate Transactions
Hazardous Materials Underground & Aboveground Storage Tanks

Environmental and Land Use Litigation:

CERCLA RCRA Clean Water Act Oil Pollution Act of 1990 EPCRA NEPA TSCA Safe Drinking Water Act

Clean Air Act Endangered Species Act Surface Mining Control & Reclamation

#### Bodoff & Slavitt LLP www.bodoffslavitt.com

Bodoff & Slavitt LLP provides environmental counseling & dispute resolution. Our attorneys have experience in all aspects of environmental law at the local, state, and federal levels:

Permit disputes Environmental civil litigation

Administrative hearings Environmental criminal investigations & defense

Siting hearings –Energy and Solid Waste Environmental appeals

Penalty proceedings Insurance coverage analysis and disputes

Public and private cost recovery actions (21E & CERCLA)

\* Job trending information available on lawyers and paralegal assistants.

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# Bowditch & Dewey, LLP www.bowditch.com

Our Environmental Practice Group provides in all areas of environmental law, including:

Lender liability Real estate transfers/brownfields redevelopment

Environmental permitting Public/community relations issues

Site investigations and cleanups (21E) Wetlands, land use & riverfront/coastal development

Business transactions/due diligence OSHA compliance

Environmental litigation & insurance Regulatory compliance/environmental audits

Superfund defense and cost recovery Environmental management systems

# Brown Rudnick Berlack Israels LLP www.brownrudnick.com

### Environmental, Zoning, and Land Use

This combination of practices offers a strong emphasis on environmental due diligence and precise agreements that allocate environmental liability.

- Advise sellers & buyers of businesses, property owners, prospective purchasers, lenders, tenants & licensees on environmental cleanup & remediation standards & strategies
- Land use permitting
- Formulate strategies for risk avoidance
- Manage permitting process (including preparation of environmental impact reports)
- Analyze & document environmental compliance
- Advise clients on cleanup & remediation approaches
- Assess liability under hazardous-waste laws & participate in administrative proceedings
- Appear before city & town boards to obtain zoning, environmental or subdivision approvals

#### Burns & Levinson LLP www.burnslev.com

#### Environmental Law:

- Prosecute, defend, & mediate hazardous waste cases under federal Superfund law & its Massachusetts counterpart, Chapter 21E, Clean Air Act, & several other environmental statutes
- Negotiate agreements & settlements with EPA, state & local environmental authorities under hazardous waste, clean water, clean air acts & wetlands laws
- Apply for & seek transfer of environmental permits for property owners, manufacturing operations & waste disposal firms
- Provide advice on compliance with environmental laws & strategic planning for minimizing exposure to liabilities

#### Cetrulo & Capone LLP www.cetcap.com

#### Environmental:

- Participate in all aspects of negotiation with U.S. Environmental Protection Agency,
   Massachusetts Department of Environmental Protection & other similar federal & state agencies on behalf of owners, operators, generators & transporters
- Prosecute & defend claims by private owners against persons allegedly responsible for existing or threatened on-site contamination

• Engaged in environmental coverage litigation in trial & appellate level of state & federal courts Environmental Law Firms – Craig and Macauley

# Craig and Macauley, Professional Corporation www.craigmacauley.com

#### **Environmental Law**

- Permitting & land use
- Toxic tort & environmental litigation
- Defense of Federal & state enforcement actions in connection with air, water, & waste programs, wetlands protection, & insurance coverage for environmental claims
- Represent plaintiffs seeking remediation costs & damages for loss of property values arising from environmental contamination
- Defend clients against whom government seeks cost recovery
- Regulatory requirements for responding to contamination under Massachusetts Contingency Plan & CERCLA

#### Davis, Malm & D'Agostine, P.C. www.davismalm.com

#### Environmental Law Group:

- Regulatory compliance
  - o Advise & represent businesses & property owners in connection with local, state & federal regulatory requirements involving wetlands, waterways, discharge permits, access permits, environmental policy act compliance & hazardous material releases
  - o Environmental permitting and approvals
- Litigation and civil enforcement
  - Represent clients confronted with compliance violations by federal & state agencies & Superfund litigation
  - o Represent private parties in all aspects of contamination claims
  - o Cost recovery claims
  - o Insurance coverage claims
- Transaction consultation
  - o Real estate & business transactions: coordinate due diligence reviews, negotiate appropriate warranties, releases & indemnifications, & counsel purchasers, sellers, & lenders to aid them in their evaluation of such transactions

Land Use and Real Estate Group - The group's practice involves all aspects of residential & commercial development:

- Permitting & appeals
- Conveyancing
- Commercial leasing
- Appear before local planning boards, boards of appeal, conservation commissions & other local and & agencies
- Advise clients with respect to compliance with local & state regulations
- Work with local communities on clients' behalf through permitting process
- Zoning, Subdivision, & Wetland appeals

• Zoning enforcement & Land registration actions

Environmental Law Firms - Day, Berry & Howard

#### Day, Berry & Howard LLP www.dbh.com/

Environmental & Land Use:

Soil and groundwater contamination

Compliance with environmental laws or regulations

Brownfields redevelopment

Federal, state and local permits

Emergency Planning Criminal prosecution

Renewable energy Superfund

Zoning and land use

Environmental due diligence for major corporate and real estate transactions

Environmental and OSHA Compliance EPA and state enforcement proceedings Solid and hazardous waste

Solid and hazardous waste TOSCA and FIFRA

Nuclear energy Wetlands Cost recovery

Air pollution

Water uses and water rights

#### Dechert www.dechert.com

#### **Environmental Litigation:**

#### Civil Actions:

- Compliance orders & penalties brought by regulatory authorities, citizen groups, & private parties
- Represent clients seeking to recover financial losses arising from adverse environmental conditions
- Represent clients in contractual indemnity, CERCLA, and common law contribution claims, as well as liability cases involving asbestos & contaminated drinking water

#### **Criminal Cases:**

- Defend clients during grand jury investigations involving allegations of noncompliance with environmental statutes, fraud, and false statements
- Conduct document review & witness interviews, negotiate with federal & state prosecutors, & conduct criminal trials & developing plea agreements

#### Superfund Service

#### Regulatory Advice:

- Regulatory and Management Audits
- Compliance
- Obtain Permits from regulatory authorities, including permits for air emissions, water discharges, waste storage, treatment, recycling, & disposal from industrial and waste handling facilities, as well as U.S. wetlands

#### Regulatory and Government Coordination

• Help client participate in legislative & regulatory debate on issues that directly & indirectly affect your interests.

#### Devine, Millimet & Branch, Professional Association www.dmb.com/

#### Environmental

- Complex Brownfields redevelopment projects & business transactions
- Resolve environmental permit transfer & compliance issues, develop environmental duediligence strategies, negotiate remedial action plans, generate liability/risk allocation agreements, draft covenants-not-to-sue, establish regulatory compliance schedules, & stay abreast of changing government policies & legislative developments in the area.
- Represent businesses, municipalities, & individuals in wide range of state & federal environmental enforcement proceedings & private litigation involving toxic tort damage claims, including storm water discharge permit enforcement proceedings, Superfund cost-recovery actions, matters involving wetlands dredge & fill permits, hazardous waste handling & disposal, point source wastewater discharges, Superfund & Clean Water Act reporting obligations, groundwater discharges, toxic mold & lead paint exposure, leaking underground storage tanks, & construction site spills.

# DLA Piper Rudnick Gray Cary US LLP www.dlapiper.com/us/

#### Environmental

- Experience with every major environmental program, spanning air, water, solid & hazardous waste, wetlands, pesticides, chemical substances, right-to-know
- Regulatory Counseling, Permitting, and Enforcement Defense, including Resource Conservation & Recovery Act (RCRA), Clean Air Act (CAA), Clean Water Act (CWA), Federal Insecticide, Fungicide, & Rodenticide Act (FIFRA), Toxic Substances Control Act (TSCA), Emergency Planning & Community Right-to-Know Act (EPCRA)
- Environmental Transactional Work: represent buyers, sellers, & lenders on issues relating to sale or transfer of real estate, securities, and other types of assets.
- Environmental Auditing: manage environmental compliance audits & prepare compliance management programs
- Environmental & Related State Law Litigation
- Advise clients & handle litigation on many other federal & state environmental laws, including EPCRA, National Environmental Policy Act (NEPA), National Historic Preservation Act (NHPA), & Endangered Species Act.
- Insurance Coverage Counseling and Litigation

#### **Donovan Hatem LLP** www.donovanhatem.com

#### **Environmental Practices**

• Prosecute, defend, & mediate environmental claims under federal Superfund law & its

#### Massachusetts counterpart, Chapter 21E, Clean Air Act, Wetlands Protection Act

• Brownfields redevelopment

Environmental Law Firms - Duane Morris

#### Duane Morris LLP www.duanemorris.com

#### Environmental:

Governmental enforcement actions Regulatory counseling and agency advocacy

Environmental audits and compliance
Cost recovery and contribution actions
Real estate and corporate transactions

Risk assessments
Internal investigations
Environmental crimes

Litigation and compliance matters Permitting - both defense and appeals

Development of environmental management systems

Substantive areas - air, water, drinking water, RCRA, Superfund, FIFRA, compliance with above & underground storage tanks requirements, children's health, toxic torts, brownfields & TSCA

The firm represents clients seeking legal representation in:

- NPDES permitting, including industrial & construction storm water discharges
- Wetland permitting and enforcement matters
- Endangered Species Act compliance
- Advising and defending clients in "right to know" matters
- Actions involving chemical constituents in water supplies and discharge waters
- Enforcement & penalty actions under Resource Conservation & Recovery Act & similar state waste management statutes

#### **Energy and Resources**

- Short- and long-term business planning and policy development
- Drafting and negotiating contracts
- Project finance, development and permitting
- Structuring transactions
- Tariff drafting and management
- Intervening in state and federal agency proceedings
- Insolvency
- Compliance with safety and environmental laws
- Litigation
- Advising on Executive Branch and Congressional Strategies

#### Water & Natural Resources

- Water rights
- Ground water management
- Water quality
- Wastewater and point source discharges
- State and federal environmental review and approval processes
- Water supply development

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- Wetlands permitting and mitigation banking
- CEQA, NEPA, ESA, CWA and similar regulatory acts
- Hydropower permitting
- Privatization
- Governmental relations and legislative affairs

Environmental Law Firms – Eckert Seamans Cherin & Mellott

#### Eckert Seamans Cherin & Mellott, LLC www.eckertseamans.com

#### **Environmental Practice Area**

- Compliance, enforcement, government rulemaking, responding to information requests, strategic planning & other matters that are subject to statutes such as Resource Conservation & Recovery Act (RCRA), Comprehensive Environmental Response, Compensation & Liability Act (CERCLA), Clean Air Act, Clean Water Act, Toxic Substances Control Act (TSCA), Emergency Planning & Community Right-to-Know Act, Safe Drinking Water Act, & state & local counterparts
- Defense, permitting & counseling regarding air, water, industrial & hazardous waste, toxic chemical substances, disposal sites & wetlands & other real estate development issues

# Foley & Lardner LLP www.foley.com

Brownfields and Land Use

Manage cost recovery actions under CERCLA, RCRA, & state common law theories

**Environmental Regulation** 

Hazardous & Solid Waste Compliance & Permitting

Clean Air Act Compliance & Permitting

Water Quality Issues

Environmental Insurance Coverage

Litigation, transactional due diligence, consulting, & compliance services

#### Gadsby Hannah LLP www.ghlaw.com

#### Environmental

• Hazardous waste liability issues & related litigation; wetlands & tidelands; water & air permitting compliance; other permitting & regulatory matters; environmental insurance issues; oil & hazardous material remediation & management; general compliance evaluation & counseling; Brownfields evaluation/development arena; Development/Permitting

#### Goodwin Procter LLP www.goodwinprocter.com/

#### Environmental

- Environmental compliance counseling, litigation, dispute resolution, permitting, Brownfields redevelopment & environmental insurance work
- Environmental review & permitting
- Environmental litigation practice in federal & state courts, including CERCLA cost recovery &contribution cases, defense of enforcement actions under all major environmental statutes, defense of "toxic tort" suits alleging personal injury and property damages, defense of "citizen

- suits," land use and environmental impact review litigation and insurance coverage cases.
- Participate in rulemakings & challenges to rules issued by EPA under RCRA, CERCLA, TSCA, Clean Water Act & other federal & state environmental laws
- Advise clients in implementing environmental due diligence, compliance audits & internal financial control systems

Environmental Law Firms – Goulston & Storrs

#### Goulston & Storrs, A Professional Corporation www.goulstonstorrs.com

#### Environmental Law:

• Counsel real estate developers, corporations, insurance companies, banks and & lenders, commercial tenants & businesses on broad range of issues at federal, state & local levels

#### Governo Law Firm LLC www.governo.com

#### Toxic and Mass Torts

 Litigate cases involving many different toxins with specialties in asbestos, mold & lead poisoning claims

#### Environmental / Hazardous Waste

• Defend cases involving variety of types of underground & surface contaminants including sulfuric acid, styrene & hydrocarbons

# Greenberg Traurig, LLP www.gtlaw.com

Environmental practice: Endangered species Environmental permitting Takings litigation Environmental litigation Business transactions and due diligence Environmental/safety audits Defense of enforcement actions Administrative rule development/challenges Utilities Superfund litigation Cost recovery proceedings Insurance coverage litigation Brownfields development Wetland issues Compliance counseling

# Environmental job:

#### Associate

- 3+ years of environmental and/or real estate or transactional experience
- Experience working on both regulatory & business side of transactions that involve environmental impacts, including negotiating voluntary cleanup agreements, consent orders & related regulatory documents, & working with consultants & environmental insurers to develop remedial approaches & bind insurance coverage that mitigates environmental risk
- Corporate or real estate training of some sort preferred

#### Hinckley, Allen & Snyder LLP www.haslaw.com

#### **Environmental Group**

- Regulatory compliance, counseling, real estate & corporate due diligence, permitting, insurance coverage issues, & environmental litigation
- Litigation of toxic tort, hazardous waste, and state and federal Superfund cases
- Siting, permitting, and financing for major cogeneration, public utility, resource recovery, and hazardous waste treatment facilities
- Compliance, permitting, and enforcement issues under state and federal air, water, environmental impact, wetlands and coastal resources laws
- Compliance, permitting, and enforcement issues under state and federal hazardous and non-hazardous waste management laws
- Litigation of private cost-recovery actions
- Litigation of insurance coverage disputes for costs of contaminated site cleanups
- Protection of real estate owners, sellers, purchasers and lenders against liability for past or future releases of hazardous substances
- Negotiation of cleanup requirements for owners of contaminated property and for alleged generators of hazardous waste at sites owned by others.

#### **Keegan Werlin LLP** www.kwplaw.com

#### **Environmental Law**

- Regulatory Permitting and Land Use
- Resolution of Contaminated Site Liabilities
- Resolution of Compliance & Enforcement Matters

#### Kirkpatrick & Lockhart Nicholson Graham, LLP www.klng.com

**Environment and Natural Resources** 

• Environmental Litigation

Enforcement Actions Private Party and Citizen Suit Litigation

Administrative Appeals Challenging Regulatory Authority Rules/Policy

• Compliance Counseling

Project Development & Permitting Legislative & Regulatory Policy Transactions

Environmental Justice Energy & Natural Resource Management

• Environmental Insurance Coverage

• Representative Matters:

Air Hazardous Materials
Water/Wastewater Nuclear/Radiological
Contaminated Land - Remediation & Redevelopment Solid/Hazardous Waste

#### **Kopelman and Paige, P.C.** www.k-plaw.com/

Environmental law:

Chapter 91 Permitting, Tidelands
Community Preservation Act

Conservation Restrictions

Coastal Zone Management/Harbor Regulation

Wetlands

Conservation Restrictions

MEPA/Facility Siting

Hazardous Waste Law/Brownfields Parks, Commons, Conservation Land & Playgrounds

Environmental Law Firms – McDermott, Will & Emery

### McDermott, Will & Emery www.mwe.com

#### **Environmental Practice:**

- Brownfields Redevelopment
- Compliance Counseling
- Environmental Transactional Experience
- International Environmental

- Life Sciences Environmental & OSHA
- Toxic Torts
- Trustee Liability Services

# McGregor & Associates, P.C. www.mcgregorlaw.com

#### Environmental:

- Legal representation
- Real estate transactions
- Administrative hearings
- Insurance claims
- Property damages
- Personal injuries
- Cleanup cost recovery
- Government relations
- Compliance counseling
- Code rewrites
- Policy formulation

- Project management
- Real estate permitting
- Industrial plant expansions
- Land use planning
- Mediation and negotiation
- Feasibility studies
- Enforcement orders and fines
- Superfund issues
- Brownfield redevelopment
- Environmental litigation
- Environmental planning

#### Melick, Porter & Shea, LLP www.melicklaw.com

Environmental and toxic tort litigation

#### Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, PC www.mintz.com

**Environmental** 

Facility planning and permitting Environmental litigation & enforcement actions

Compliance Counseling
Project and Infrastructure Permitting

Brownfield Redevelopment Clean Up Cost Recovery Enforcement Defense

Transactional Representation

Advise hazardous materials remediation & compliance

#### Energy and Environment

- Permitting
- Litigation

Environmental Law Firms - Moehrke, Mackie & Shea

#### Moehrke, Mackie & Shea, P.C. www.lawmms.com

#### Real Estate and Land Use Development

- Permitting
- Permit hearings at all regulatory levels

#### **Environmental Transactions**

- Environmental due diligence
- Environmental and zoning opinions

#### Litigation

- Hazardous Waste Cost Recovery
- Permit Appeals

#### Wetlands, Waterways, Oceanfront

- Public hearings and appeals
- Compliance and enforcement defense

#### **Solid Wastes**

- Project and feasibility assessment
- Impact analysis
- Board of Health hearings & appeals
- Agreements and contracts

#### Hazardous Wastes

- Liability assessment & limitation
- Brownfields development
- Access and cleanup agreements
- Contaminated land purchase & sale agreements
- Insurance coverage

#### • Litigation supporting project approvals

- Brownfields redevelopment
- Government procurement & contract
- Commercial Litigation
- Federal, state and local permitting
- Permit negotiation
- Compliance & enforcement defense
- Special, medical & radiological waste management
- Cost recovery litigation
- Compliance & enforcement defense
- State & federal superfund defense
- TSD facility permitting

# Environmental Compliance and Enforcement Defense

- Compliance counseling
- Regulatory interpretation and negotiation
- Environmental audits

- Negotiation of consent decrees and administrative orders
- Federal, state and local administrative hearings and trials

# Renewable Energy

- Landfill gas sale and lease agreements
- Resolution of contract disputes
- Gas facility permitting
- Defense of enforcement actions

#### Environmental Law Firms – Morrison Mahoney

# Morrison Mahoney LLP www.morrisonmahoney.com/

#### **Environmental and Toxic Torts**

- Superfund defense work & defense of litigation
- Counsel owners & developers of properties with respect to environmental issues
- Counsel sellers & purchasers of commercial & residential real estate regarding environmental regulation & contamination issues
- Counsel manufacturers property owners & operators with respect to toxic exposure, workplace safety issues, & OSHA regulation
- Counsel product manufacturers & advise product development with respect to environmental risk & potential for impact on human health & safety issues
- Defend toxic tort claims on behalf of manufacturers & suppliers of various products including chemicals, gases, & industrial production machinery & HVAC equipment
- Counsel & represent with respect to insurance coverage issues.

#### Murtha Cullina LLP www.murthalaw.com

#### Environmental and Land Use

- Expertise in air, water, & noise pollution, solid & hazardous waste management, chemical regulation, & wetland & other land use controls.
- Liability and Risk Management
- Land Conservation
- Waste Management
- Real Estate and Business Transactions
- Compliance Management
- Energy and Environmental Projects
- Environmental Permitting
- Environmental Litigation, including government enforcement actions, federal and state citizen suits, toxic torts, private cost recovery actions, environmental insurance claims

#### National Environmental Law Center www.nelconline.org/

The National Environmental Law Center (NELC) is a non-profit litigation center dedicated to enforcing anti-pollution laws & promoting long-term solutions to the nation's most pressing environmental problems.

#### Environmental jobs:

#### Staff Attorney

- 2 to 5 years of litigation experience. Advanced degrees in related fields may count toward professional experience.
- JD required
- Excellent writing and research skills
- Additional relevant experience, such as political, policy, legal, journalistic, or government experience, a plus.

Environmental Law Firms – National Environmental Law Center continued

# Paralegal / Office Administrator

- At least a college degree
- Excellent verbal, writing & analytical skills
- Ability to debate & speak persuasively in a charged atmosphere
- Relevant professional experience, post-college, a plus

# Job Responsibilities:

- Perform basic legal research and prepare motions and pleadings for filing in court
- Factual research, in such areas as industry compliance with environmental laws & environmental & health effects of particular pollutants
- Develop & maintain good working relationships with local, state & national environmental organizations & citizen groups
- Coordinate media strategy, organize press conferences, & maintain NELC's list of press contacts
- Prepare & track organization's budget & business plan
- Coordinate website updates, newsletters, and other publications
- Administer NELC's Boston office.

#### Nixon Peabody LLP www.nixonpeabody.com

#### Energy & Environment

- Energy & Project Finance Team
- Environmental Team
  - o Advise companies on risk management
  - o Siting, permitting, and development
  - o Broad litigation experience includes toxic tort and oil spill compensation

#### **Nutter McClennen & Fish LLP** www.nutter.com/

#### **Environmental Law**

- Hazardous waste management and litigation
  - o Toxic tort claims
  - o Indoor air quality issues

Asbestos remediation

- o Site remediation & brownfields redevelopment
- o State & federal superfund matters, including third-party cost recovery & insurance coverage
- Solid waste regulation
  - o Facility siting & regulations

Solid waste enforcement matter

- Water pollution control
  - o Industrial pretreatment & discharge
- o Groundwater withdrawal
- o Wastewater and stormwater permitting & enforcement matters
- o Water supply, development & regulation
- Wetlands and waterways regulations
  - o Chapter 91 permitting & regulation
  - o Federal §404 administration & enforcement
- Air pollution control
  - o State and federal permitting and enforcement for major facilities
- Zoning and land-use control

Environmental Law Firms – Nutter McClennen & Fish continued

#### Environmental Law continued

• Land Use, Permitting & Development: Chapter 40B affordable housing issues, urban redevelopment programs, Chapter 21E, hazardous materials issues such as brownfields & superfund sites; Waterfront development, including Chapter 91 & coastal wetlands permitting, & federal permitting; Land Use Litigation; Urban Redevelopment

# Palmer & Dodge LLP www.palmerdodge.com

#### Environment and Land Use

- Advise clients on wide range of regulatory matters including Clean Water Act, Clean Air Act, Resource Conservation & Recovery Act & Comprehensive Environmental Response, Compensation, & Liability Act
- Obtain federal, state & local permits for an array of facilities
- Handle environmental & land use disputes in federal & state court

#### Perkins Smith & Cohen www.pscboston.com/

#### **Environmental Group**

- Represent & advise in regulatory compliance matters
- Environmental impact reviews & enforcement challenges
- Environmental issues associated with corporate transactions & property development
- Hazardous waste disposal, contamination and remediation
- Enforcement Actions
- Permitting: wetland protection; water & air pollution control; underground storage tank regulations; National & Massachusetts Environmental Policy Acts
- Redevelopment
- Superfund

#### Rackemann Sawyer & Brewster www.rackemann.com

#### Environmental and Land Use Department

- Represent commercial, industrial, governmental & individual clients in areas of development
  permitting, hazardous waste assessment & remediation, Brownfields redevelopment, wetlands,
  tidelands, Title 5 septic issues, historic preservation, environmental impact review,
  environmental auditing, environmental compliance & enforcement proceedings, zoning &
  subdivision.
- Highly specialized areas: waterfront development, including tidelands permitting under Chapter 91, assessment & remediation of contamination under Chapter 21E, & municipal permitting & approval of commercial & residential developments
- Represent landowners seeking zoning, wetlands, subdivision & other municipal permits required
- Environmental Litigation Group: assessment & remediation of contaminated property, identification of responsible parties, cost recovery, contract disputes, insurance coverage & permitting

Environmental Law Firms – Rubin & Rudman

#### Rubin and Rudman LLP www.rubinrudman.com

#### **Environmental Practice**

• Regulatory compliance matters; environmental impact reviews & enforcement challenges; environmental issues associated with corporate transactions & property development; hazardous waste disposal, contamination & remediation

#### Sherin and Lodgen LLP www.sherin.com

#### Land Use and Environmental Law

- Assist with planning & development strategies
- Provide complete local administrative appeal & litigation services
- Land Use Permits & Litigation such as Zoning, Wetlands, Highway Access, Environmental Impact Analysis
- Regulatory Counseling, Permitting
- Enforcement Defense
- Strategic Advice, Planning and Permitting of Real Estate Development Projects
- Environmental Transactional Work
- CERCLA and Related Litigation
- Massachusetts Contingency Plan (MCP) and other State Hazardous Materials Acts
- Environmental Auditing
- Hazardous Materials Litigation
- Conservation and Preservation Issues
- Insurance Coverage Litigation and Counseling
- Advising Lenders and Property Owners on Brownfields Issues

#### Sullivan & Worcester LLP www.sandw.com/

# **Energy and Environmental Practice**

- Comprehensive regulatory, transactional, legislative, and litigation assistance
- Environmental attorneys provide strategic guidance to array of corporate, governmental, & ecommerce clients on regulatory compliance matters, environmental liabilities associated with business transactions, & cutting edge legislative issues. They also represent clients in complex litigation across the spectrum of environmental law

# **Chapter 3: Education**

# A. Primary and Secondary Education\*

Science teachers of various disciplines teach at primary and secondary schools.

# **B. Postsecondary Education - College and Universities in Boston Metro-Area**\*\*

Bentley College www.bentley.edu/

Waltham

**Environmental Sciences Concentration** Marine Studies Consortium

Boston College www.bc.edu/

Chestnut Hill

Biology Department: www.bc.edu/schools/cas/biology/

Chemistry Department: http://chemserv.bc.edu/

Environmental Studies: www.bc.edu/schools/cas/envstudies/

Geology and Geophysics Department: www.bc.edu/schools/cas/geo/

Physics Department: www.physics.bc.edu/index.shtml Pre-veterinary program: www.bc.edu/schools/cas/premed/

#### Boston University www.bu.edu

**Boston** 

Biology Department: www.bu.edu/biology/

Chemistry: www.bu.edu/chemistry/ Earth Sciences: www.bu.edu/es/

Center for Energy and Environmental Studies: www.bu.edu/cees/

Environmental Health: www.bu.edu/dbin/sph/departments/environmental health/index.php

Geography: http://geography.bu.edu/ Marine Program: www.bu.edu/bump/

Research Integrating Molecular & Environmental Science: www.bumc.bu.edu/Dept/Home.aspx?DepartmentID=389

Sargent Center for Outdoor Education: www.bu.edu/outdoor/

\* Job trending information on postsecondary teachers available.

Job trending information on primary and secondary school teachers available.

#### Brandeis University www.brandeis.edu

Waltham

Undergraduate Degrees: www.brandeis.edu/departments/ugrad\_degrees.html

Biology/Life Sciences: www.bio.brandeis.edu/

Chemistry: www.chem.brandeis.edu/ Physics: www.physics.brandeis.edu/

Environmental Studies: www.brandeis.edu/departments/environmental/index.shtml

# Harvard University www.harvard.edu/

Cambridge

Field of Concentrations: www.registrar.fas.harvard.edu/handbooks/student/chapter3/index.html

Biology Chemistry

Chemistry and Physics

Earth and Planetary Sciences

**Engineering Sciences** 

**Environmental Science and Public Policy** 

**Physics** 

# Massachusetts Institute of Technology www.mit.edu/

Cambridge

Departments, Sections, and Programs: http://web.mit.edu/education/index.html

Civil and Environmental Engineering: http://cee.mit.edu/

Ocean Engineering: http://oe.mit.edu/

Urban Studies and Planning: http://dusp.mit.edu/

#### Northeastern University www.northeastern.edu/

**Boston** 

Biology: www.biology.neu.edu/

Chemistry and Chemical Biology: www.chem.neu.edu/web/

Earth and Environmental Sciences: www.casdn.neu.edu/%7Egeology/

Physics: www.physics.neu.edu/

Marine Science Center: www.marinescience.neu.edu/

Marine Studies: www.casdn.neu.edu/%7egeology/marine/marine.html

Civil & Environmental Engineering: www.coe.neu.edu/Depts/civil/CIV\_Website/pages/Home.htm

Environmental Law Courses: www.slaw.neu.edu/course/upper.html

#### Education - Salem State College

# Salem State College www.salemstate.edu/

Salem

Biology: www.salemstate.edu/biology/

Chemistry and Physics: www.salemstate.edu/chem\_physics/

Geography: http://dgl.salemstate.edu/ Geology: www.salemstate.edu/geology/

# Suffolk University www.suffolk.edu

**Boston** 

College of A&S: www.cas.suffolk.edu/Biology: www.cas.suffolk.edu/biology/

Chemistry: www.cas.suffolk.edu/chemistry/chemistry.html

Environmental Science: www.cas.suffolk.edu/environmental science/

Environmental Engineering: www.cas.suffolk.edu/environmental\_engineering/

Physics: www.cas.suffolk.edu/physics/

#### Tufts University www.tufts.edu

Medford

College of Liberal Arts

Biology: http://ase.tufts.edu/biology/ Chemistry: http://chem.tufts.edu/ Geology: http://ase.tufts.edu/geology/ Physics: http://ase.tufts.edu/physics/

Urban and Environmental Policy and Planning: http://ase.tufts.edu/uep/

Civil and Environmental Engineering: http://ase.tufts.edu/cee/ Environmental Studies Program: www.tufts.edu/tie/EnvStudies/

Global Development and Environment Institute: http://ase.tufts.edu/gdae/

#### **Graduate Programs:**

Agriculture, Food and Environment: http://nutrition.tufts.edu/school/admissions/programs/afe/ School of Veterinary Medicine: www.tufts.edu/vet/phd/comparative\_microbial\_pathogenesis.html

#### University of Massachusetts www.umb.edu

**Boston** 

College of Science and Math: www.umb.edu/academics/csm/index.html

Biology: www.bio.umb.edu/ Chemistry: www.chem.umb.edu/

Earth and Geographic Sciences: www.geog.umb.edu/

Environmental Coastal and Ocean Sciences: www.es.umb.edu/

Environmental Studies: www.envsty.umb.edu/

Physics: www.physics.umb.edu/

# **Chapter 4: Federal Government Jobs in the Boston Metro-Area**

# A. Environmental Protection Agency (EPA) www.epa.gov

The mission of the U.S. Environmental Protection Agency is to protect human health and to safeguard the natural environment - air, water, and land - upon which life depends.

Position Titles at EPA:

Community Planner\* Environmental Protection Assistant Environmental Protection Specialist Program Management Analyst Archivist

Scientists:

Life Scientist\* Administrator Microbiologist
Toxicologist\* Botanist Plant Pathologist

Plant Physiologist Horticulturist Geneticist
Soil Scientist Agronomist Health Physicist
Physicist/Research Physicist Geophysicist Hydrologist\*
Physical Science Technician Chemist/Research Chemist\* Meteorologist
Physiologist/Research Physiologist Oceanographer Geologist\*

Entomologist/Research Entomologist Ecologist\*: Aquatic, Research, Wetlands

Environmental Scientist/General Physical Scientist

Biological Science Lab Tech\*: General, Animal, Biochemistry, Microbiological

Biologist\*: General, Aquatic, Fishery, Marine, Wildlife

Health.

Safety Specialist/Safety & Occupational Health Specialist

Public Health Program Specialist

Consumer Safety Officer

Veterinary Medical Officer

Environmental Health\*: Specialist, Epidemiologist, Research Health Scientist

Engineering:

Architect Civil Engineer\* Environmental Engineer\*

Legal:

Investigator: Civil Investigator Criminal Investigator Contracts

General Attorney \*/Attorney Advisor/Attorney Examiner/Judicial Officer

Paralegal Specialist

*Math and Computer:* 

Economist Mathematical Statistician Statistician

Technical Information Specialist Computer Scientist Information Technology Management Mathematician

\* Job trending information available.

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# **EPA Region 1: New England** www.epa.gov/region01/

# 1. Office of Environmental Stewardship (OES)

EPA New England's Office of Environmental Stewardship (OES) contains both the Region's Enforcement Office and the Assistance and Pollution Prevention (A&P2) Office. OES is a 155-person office comprised of a team of scientific, engineering, technical, legal, and support staff from the Region's air, water, waste, Superfund, drinking water, toxics, and pesticides programs. OES promotes improved environmental performance from the regulated community. OES takes enforcement actions against those who do not follow the law. The A&P2 Office provides outreach and technical assistance to the regulated community, principally in the form of workshops, printed materials, and oral advice.

#### 2. Office of Administration & Resource Management (OARM)

OARM is responsible for the leadership, support, communications and direction necessary to ensure efficient operations and a productive work environment in the region, and provides management advice, services, and support to the Regional Administrator and to all components of the regional office. The Office also provides management of the region's Safety, Health and Environmental Management program which includes a Center of Excellence with responsibility for providing nationwide expertise in the area of chemical risk assessment.

#### 3. Office of the Regional Administrator (ORA)

The ORA advises the Administrator/Deputy Administrator on program issues within the region, provides a regional perspective on national policy issues, and makes decisions in delegated areas of responsibility.

#### 4. Office of Ecosystem Protection (OEP)

The Office of Ecosystem Protection (OEP) is multi-media in focus, incorporating staff from the air, pesticides and toxics, water and RCRA programs. Its mission is to establish environmental standards and goals and build state and community capacity for meeting them. This Office is responsible for identifying those places in New England most in need of protection from future environmental degradation or those most in need of immediate attention to remediate past environmental degradation.

#### 5. Office of Environmental Measurement & Evaluation (OEME)

The Office of Environmental Measurement & Evaluation encompasses our laboratory, field and quality assurance functions.

#### 6. Office of Site Remediation & Restoration (OSRR)

The Office of Site Restoration and Revitalization (OSRR) focuses on restoring currently contaminated properties through management of all our responsibilities under CERCLA, the RCRA corrective action program and the Underground Storage Tank program.

# B. Department of the Interior www.doi.gov

The Mission of the Department of the Interior is to protect and provide access to our Nation's natural and cultural heritage and honor our trust responsibilities to Indian Tribes and our commitments to island communities, Goals:

- o Protect the Environment and Preserve Our Nation's Natural and Cultural Resources.
- o Provide Recreation for America.
- o Manage Natural Resources for a Healthy Environment and Strong Economy.
- o Provide Science for a Changing World.
- o Meet Our Trust Responsibilities to Indian Tribes and Our Commitments to Island Communities.

#### 1. National Park Service www.nps.gov

The National Park Service (NPS) preserves, unimpaired, the natural & cultural resources & values of the national park system for enjoyment, education, & inspiration of this & future generations.

a. Boston Harbor Islands www.nps.gov/boha/ & www.bostonislands.org/

The Boston Harbor Islands national park area includes 34 islands situated within Greater Boston shoreline.

The purpose of Boston Harbor Islands national park area is:

- Preserve & protect a drumlin island system within Boston Harbor, along with associated natural, cultural, and historic resources
- Enhance public understanding & appreciation of the island system as a whole
- Provide public access to islands & surrounding waters for education, enjoyment, and scientific research of this and future generations

Staff of Department of Conservation and Recreation:

The Massachusetts Department of Conservation and Recreation (DCR) hires seasonal interpreters to work on DCR-managed islands within the Boston Harbor Islands State Park.

#### Staff of National Park Service:

The National Park Service hires Boston Harbor Islands interpretive park rangers and visitor use assistants to provide parkwide information and orientation from the Boston waterfront.

# C. Department of Health and Human Services (HHS) www.hhs.gov/

Region 1: www.atsdr.cdc.gov/DRO/r1.html

**1.Agency for Toxic Substances and Disease Registry (ATSDR)** http://www.atsdr.cdc.gov ATSDR is directed by congressional mandate to perform specific functions concerning the effect on public health of hazardous substances in the environment. These functions include public health assessments of waste sites, health consultations concerning specific hazardous substances, health surveillance and registries, response to emergency releases of hazardous substances, applied research in support of public health assessments, information development and dissemination, and education and training concerning hazardous substances.

Staff: Senior Regional Representative, Otis AFB Coordinator, Regional Representatives, Secretary

# **D. Coast Guard** www.uscg.mil/

The United States Coast Guard is a military, multimission, maritime service and one of the nation's five Armed Services. Its mission is to protect the public, the environment, and U.S. economic interests – in the nation's ports and waterways, along the coast, on international waters, or in any maritime region as required to support national security.

#### Missions:

# 1. Maritime Safety

- a. Search and Rescue
- b. Marine Safety

The U. S. Coast Guard Environmental Standards Division (G-MSO-4) develops national regulations and policies on marine environmental protection and represents U. S. interests in the development of global marine environmental protection agreements to integrate U.S. and international environmental standards and public policy.

#### Brief Overview of Activities:

- i. Developing the regulations and non-regulatory compliance policy for the prevention of ship mediated introductions of aquatic nuisance species.
- ii. Serving as principal environmental liaison for coordination & concurrence on environmental standards as required by international conventions or Congressional legislation iii. Recommending regulations, policy, and guidance for marine commercial pollution prevention and response.
- iv. Coordinating with appropriate federal, state and international organizations to minimize conflicting environmental requirements.
- v. Providing technical assistance to appropriate international organizations dealing with environmental prevention, preparedness, and response issues
- vi. Representing the U.S. interests in national and international fora, including the International Standards Organization (ISO) and the International Maritime Organization (IMO) Marine Environmental Protection Committee (MEPC), to integrate U.S. and international marine environmental standards.
- c. Recreational Boating Safety
- d. International Ice Patrol
- e. Port Security

#### 2. Maritime Mobility

- a. Aids to Navigation
- b. Icebreaking Services
- c. Vessel Traffic / Waterways Management
- d. Bridge Administration
- e. Rules of the Road

# 3. Maritime Security

- a Drug Interdiction
- b. Alien Migrant Interdiction
- c. EEZ & Living Marine Resource
  - 1. Protecting the U.S. Exclusive Economic Zone from foreign encroachment
  - 2. Enforcing domestic fisheries law
  - 3. International fisheries agreements
- d. General Maritime Law Enforcement
- e. Law / Treaty Enforcement

#### 4. National Defense

- a. General Defense Duties
- b. Homeland Security

- c. Port and Waterways Security
- d. Polar Icebreaking

#### **5. Protection of Natural Resources**

- a. Marine Pollution Education, Prevention, Response & Enforcement
- b. Foreign Vessel Inspections
- c. Living Marine Resources Protection
- d. Marine and Environmental Science

Staff positions available at the Coast Guard  $^{*}$ :

**Outdoor Recreation Planning Series** 

Park Ranger Series

**Environmental Protection Specialist Series** 

**Environmental Protection Assistant Series** 

# E. Department of Energy (DOE) www.energy.gov/

Goals of DOE:

Defense Strategic Goal: To protect our national security by applying advanced science and nuclear technology to the Nation's defense.

Energy Strategic Goal: To protect our national and economic security by promoting a diverse supply and delivery of reliable, affordable, and environmentally sound energy.

Science Strategic Goal: To protect our national and economic security by providing world-class scientific research capacity and advancing scientific knowledge.

Environment Strategic Goal: To protect the environment by providing a responsible resolution to the environmental legacy of the Cold War and by providing for the permanent disposal of the Nation's high-level radioactive waste.

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<sup>\*</sup> Job trending information available.

#### 1. Energy Efficiency and Renewable Energy www.eere.energy.gov/

Northeast Regional Office in Boston: www.eere.energy.gov/regions/northeast/

#### **EERE Vision**

• To bring you a prosperous future, where energy is clean, abundant, reliable and affordable.

#### **EERE Mission**

To strengthen America's energy security, environmental quality, and economic vitality in publicprivate partnerships that enhance energy efficiency & productivity & bring clean, reliable, and affordable energy technologies to the marketplace

#### Northeast Regional Office Mission

- Implement & support Energy Efficiency & Renewable Energy policies & programs by demonstrating excellence in partnership development, project management, education, & outreach activities
- Increase use of energy efficiency & renewable energy technologies in Northeast Region
- Provide information to EERE Programs about the needs of Northeast Region for energy efficiency technologies thereby making programs more effective & efficient
- Effectively administer the statutory energy grant programs of Department

#### Staff:

Regional Director

**Business Management Assistant** 

Weatherization Assistance Program (NY, ME, NH, CT) and Bioenergy

Utility Technologies, Hydrogen, Fuel Cells, and Renewable Technology Special Projects

State Energy Program (NH), National Industrial Competitiveness through Energy, Environment and Economics (NICE3), and Industrial Technologies

Rebuild America and Community Initiatives

Public Affairs/Communications

Contracting Officer (Grants/Acquisitions)

Federal Energy Management Program (FEMP)

Million Solar Roofs, Wind Powering America, Brightfields, SEP Renewable Special Project Grants, and Lighting R&D Grants

Weatherization Assistance Program (VT, MA, RI), State Energy Program (VT), and Climate Change

Lead Program Analyst

**Energy Program Assistant** 

Clean Cities, FreedomCAR, and Hydrogen Fuel Cells and Infrastructure

State Energy Program (CT, MA, ME, NY, RI) and Fuel Supply

Building Energy Codes, ENERGY STAR®, and Distributed Energy

# F. Department of Housing and Urban Development www.hud.gov/

Region 1 Office located in Boston

HUD's goal: a decent home and a suitable living environment for every American family. This goal is carried out today in all HUD programs & through enforcement of a system of environmental rules & policies.

Staff:

Regional Director Deputy Regional Director Public Affairs Officer Operations Specialist Operations Analyst Regional Environmental Officer

#### 1. Ceq/Nepa

The US Council on Environmental Quality (CEQ) establishes policy for implementation of the National Environmental Policies Act (NEPA)

#### 2. Special Flood Hazard Areas & Wetlands

#### 3. Sustainable Development/Growth Management

#### 4. Brownfields Economic Development Initiative (BEDI)

BEDI grant funds are primarily targeted for use with a particular emphasis upon the redevelopment of brownfields sites in economic development projects and the increase of economic opportunities for low-and moderate-income persons as part of the creation or retention of businesses, jobs and increases in the local tax base.

#### 5. Environmental Justice

#### 6. Toxins

# **Chapter 5: Outline of Massachusetts' State Government**

# **A. Executive Office of Environmental Affairs (EOEA)** www.mass.gov/envir/ Mission: direct & coordinate all state policy aimed at preserving & protecting the natural resources & the environmental integrity of the Commonwealth. Initiatives of EOEA:

- World-class parks: provide all citizens of Commonwealth & visitors a park & recreation system that is clean, safe, & accessible
- Smart conservation: brings conservation of air, land, oceans, & water resources into a single comprehensive conservation approach that includes topics of traditional environmental protection & restoration
- Lean & green: focuses on efficient & effective service, better information, technical assistance, & increased enforcement to achieve environmental results & compliance & advance green technology
- Sustainable development & urban environments: ensure that state infrastructure & facilities promote sustainable development & state policy/programs encourage municipalities to do same

#### Offices:

#### 1. Coastal Zone Management (CZM) www.mass.gov/czm/czm.htm

Mission: to balance impact of human activities with protection of coastal and marine resources through planning, public involvement, education, research, and sound resource management

To achieve this mission, CZM has many programs in place. These programs include: *a. Aquatic Invasive Species* 

Through the development of this plan, the Working Group has designated priority species for control & management, developed a coordinated monitoring & prevention strategy, & developed objectives for educating industry representatives, government employees, and the general public about the aquatic invasive species problem.

#### b. Coastal Geology

A major component of CZM's coastal geology program focuses on understanding coastal hazards, which result from the on-going risk that winds, waves, storm surge, & flooding pose to coastal development. CZM's historic shoreline change project is aimed at measuring & estimating changes in Commonwealth's coastline as a result of natural erosion & accretion (deposition), as well as relative sea level rise. CZM's coastal geology program also proactively develops management strategies to balance competing interests on the hundreds of barrier beaches that are part of the Massachusetts coastline. CZM facilitates the preparation & implementation of site-specific barrier beach management plans.

#### c. Coastal Water Quality Protection

CZM is working to develop enforceable measures to restore & protect coastal waters from nonpoint source (NPS) pollution.

#### d. Coordination

Local, state, federal, nonprofit, and private groups work on coastal issues. CZM takes the responsibility to bring all these groups together by actively coordinating coastal policy-making and implementation with local, state, regional, national, and international organizations.

# e. Data and Information Management

CZM has embarked on a long-term project to develop the Massachusetts Ocean Resource Information System (MORIS). MORIS will be a comprehensive database providing access to the broad range of information necessary to carry out the CZM mission.

#### f. Education and Public Information

Through this program, CZM produces a variety of brochures, guidebooks, maps, and other materials to help inform and educate the public on issues that affect the coast.

#### g. Emergency Management

CZM is involved in Operations & Response to coastal disasters, by serving as the leader of the Commonwealth's Rapid Response Storm Damage Survey Team. This team gathers information about storm damage and gets this information to the Massachusetts Emergency Management Agency Operations Center within one to two days of when the storm hits.

### h. Federal Consistency Review

CZM's Federal Consistency Review gives the Commonwealth the power to ensure that federal actions meet state standards.

#### i. Ocean Resources Management

CZM sponsored development of aerial orthophotographs of coastal Massachusetts & is developing Massachusetts Ocean Resource Information System (MORIS) & Dredged Material Management Plan (DMMP) Technical Reports. The DMMP Technical Reports characterize the environmental and economic issues surrounding dredged material management in the Commonwealth, providing information on marine resources (sediment type and quality, seafloor habitat, fisheries, and archaeology) and the impacts associated with dredging and dredged material disposal.

#### j. Port and Harbor Planning

CZM encourages the creation or expansion of water-dependent facilities in developed port & harbor areas. CZM also helps communities develop harbor plans to promote sustainable development in these vital economic areas.

#### k. Regional Program

l. Shoreline Public Access - CZM supports a variety of initiatives that promote public access.

# m. Special Natural Areas Protection

CZM coordinates closely the DEM to provide technical assistance, state environmental review, and federal consistency review for all coastal ACECs [Areas of Critical Environmental Concern].

#### n. Technical Assistance

CZM's staff of scientists, planners, attorneys, regional coordinators, & other specialists focuses on providing technical assistance to local decision-makers & concerned citizens. CZM's areas of technical expertise include harbor planning, dredging, tidelands protection, water quality management, special natural areas designations, planning, geology and coastal hazards identification and mitigation, and public access to the coast.

# o. Underwater Archaeological Resources

#### p. Wetland Ecology and Assessment

CZM has been actively working on projects to advance wetland assessment methods & approaches

#### q. Wetlands Restoration

Help people voluntarily restore the state's degraded and former coastal wetlands. Programs:

Restoring Tidal Hydrology Removing Fill / Re-grading Re-planting

Addressing a Pollution Source Invasive Species Control

#### 2. Division of Conservation Services (DCS) www.mass.gov/envir/dcs/default.htm

DCS is dedicated to helping communities, nonprofits & private landowners protect open space & provide quality outdoor recreation experiences across the Commonwealth by providing access to financial support, planning tools & technical assistance. DCS achieves this goal by awarding grants to municipalities for conservation land acquisition, parkland acquisition, and park development. DCS also gives technical assistance to communities to develop an Open Space and Recreation Plan.

# Programs:

#### a. Self Help

The Self-Help program assists municipal conservation commissions acquiring land for natural resource and passive outdoor recreation purposes. This program pays for acquisition of land, or a partial interest (such as a conservation restriction), & associated acquisition costs such as appraisal reports & closing costs.

#### b. Urban Self Help

The Urban Self-Help Program assists cities & towns in acquiring & developing land for park & outdoor recreation purposes.

#### c. Land and Water Conservation Fund

Federal Land & Water Conservation Fund (P.L.88-578) provides up to 50% of total project cost for acquisition, development & renovation of park, recreation or conservation areas.

#### d. Conservation Partnership

This program is a grant program that provides reimbursements to Non-profit Corporations for cost of acquiring land or interests in land for conservation or outdoor recreation purposes.

#### e. Conservation Restrictions

The Director of DCS has been assigned to make recommendations for approval, modification, or rejection of requests for approval by the Secretary. The DCS provides assistance to landowners, municipalities, and land trusts regarding conservation restrictions and has produced "The Massachusetts Conservation Restriction Handbook" as a guide to drafting conservation restrictions and to obtaining Secretariat approval.

#### f. Conservation Districts

**3. Mass Environmental Policy Act (MEPA) Office** www.mass.gov/envir/mepa/index.htm Through the MEPA office, Secretary of EOEA conducts environmental impact reviews of certain projects requiring state agency action. Agency actions include granting state permits or licenses, providing state financial assistance, or transferring state land. The MEPA Office is the staff of the Secretary of Environmental Affairs responsible for day-to-day implementation of the MEPA review process. Its job is to solicit comments from the public and agencies, represent the Secretary at the public consultation sessions on projects, coordinate project review with the proponent, consultants, and interested agencies and citizens, and make a recommendation to the Secretary regarding the need for - and adequacy of - environmental documentation submitted for a project.

Staff: director, assistant director, environmental analysts, & program coordinator

- **4. Mass Environmental Trust** www.agmconnect.org/massenvironmentaltrust/default.htm Mass Environmental Trust is a grant making organization that protects & restores water resources & related ecosystems throughout Commonwealth. Our mission is to fund & coordinate projects that:
- Encourage cooperative efforts to raise environmental awareness
- Support innovative approaches that can protect and restore our natural resources

The staff of Mass Environmental Trust is made up of three employees: the executive director, the program coordinator, and the executive assistant.

**5. Mass Geographic Info System (MassGIS)** www.mass.gov/mgis/massgis.htm MassGIS is the Commonwealth's Office of Geographic and Environmental Information. Through MassGIS, the Commonwealth has created a comprehensive, statewide database of spatial information for environmental planning and management.

MassGIS Services:

Digital Data Distribution and Map Production Scanning

Global Positioning System (GPS) units

Coordination and Assistance

# **6. Office of Law Enforcement** www.mass.gov/dfwele/dle\_toc.htm

Our agency's role is the enforcement of fish & game laws and regulations, including those laws and regulations pertaining to commercial and recreational marine fisheries resources along our coastline, is the foundation of our law enforcement mission. Our environmental police officers (EPOs) spend considerable time in educating the public about wildlife and natural resource protection in their daily contact with them or through formal classroom or civic presentations.

#### **Bureaus:**

# a. Inland Enforcement Bureau

Enforce statutes regarding hunting, fishing, trapping, boating, and ATVs & investigate cases of illegal waste disposal, wetlands violations, and assist in search and rescue efforts.

#### b. Hazardous Waste Bureau

Six EPOs are assigned to the Strike Force, which investigates and prosecutes environmental crimes that have serious public health consequences—cases involving illegal hazardous and solid waste disposal, water pollution, air quality violations, illegal pesticide application, and violations of

#### wetland protection statutes.

State Government - Office of Law Enforcement continued

# c. Coastal Enforcement Bureau

Coastal officers monitor fishing and other activities both on land and at sea.

#### d. Marine Theft Bureau

Marine Theft Bureau personnel work closely with the U.S. Coast Guard, federal enforcement agencies, state and local police, harbormasters and insurance agencies to prosecute criminals and recover stolen marine equipment.

# 7. Office of Public/Private Partnerships (OPPP) www.mass.gov/envir/opp/default.htm

#### Projects of OPPP:

- a. World Class Parks
- Create, support, & sustain a Friends Group & corporate partners to invest in every park & recreational facility in the state parks system
- Create a new "Culture" of Public Stewardship
- Oversee numerous parks-related projects for EOEA, including the Boston Harbor Islands National Park Partnership, the Historic Parkways Initiative; and new Charles River Basin Parks

#### b. Revenue Development

- Review, standardize and track existing sources of revenue to maximize funds coming into DCR through various park system fees, permits, license agreements, standard contracts, and leases
- Generate new revenue from private sector sources, both individual and corporate
- Monitor contracts thru new financial reporting system & collect all data related to existing revenue-generating contracts
- Create cross-agency teams to focus on specific revenue opportunities or new sources of revenue within parks system (i.e., cell antennas, forestry management, statewide vendors)

#### c. Diversity Enhancement in DCR Parks and Recreation Facilities

- Workforce Development Initiative Project work with city, state & community agencies (EOEA, DCR, Workforce Development and Law Enforcement agencies) to create jobs with career opportunities that get young people interested in their environment & in environmental programs
- Lifeguard Training Project continue the successful lifeguard training program to promote youth of diversity to be trained and placed in state-run pools

# **8.** Office of Technical Assistance for Toxics Use Reduction (OTA) www.mass.gov/ota/OTA helps manufacturers & industrial facilities, municipalities, schools & hospitals, households & others reduce or eliminate their use of toxics & generation of hazardous byproducts. OTA promotes pollution prevention & environmental compliance through comprehensive on site assistance & outreach & education services. OTA is staffed by engineers, scientists & technical professionals.

Staff: director, assistant director, technical staff employees (each with major sector expertise), deputy director of administration, senior analyst, communications manager, program coordinator (communications), events coordinator, information systems manager

# Departments:

#### 1. Agricultural Resources (MDAR) www.mass.gov/agr/

Massachusetts Department of Agricultural Resources' mission is to support, promote & enhance the long-term viability of Massachusetts agriculture with the aim of helping this state's agricultural businesses become as economically and environmentally sound as possible.

#### Divisions:

#### a. Administration

i. Legal: The Department's General Counsel and legal staff represent MDAR in various legal matters, review contracts and other legal documents, and assist Department staff in interpreting laws relating to agriculture and other topics relevant to Department programs."

Staff: General Counsel and Land Use Attorney

# b. Agricultural Development

- i. Bureau of Markets: promotes viability & sustainability of Massachusetts' food & agricultural businesses through marketing and educational activities
- ii. Bureau of Land Use
- iii. Bureau of Fairs: allots prize monies to agricultural fairs and supports 4-H activities in National Competitions

#### c. Animal Health and Dairy Services

- i. Bureau of Dairying
- ii. Bureau of Milk Marketing
- iii. Bureau of Animal Health: works to prevent the spread of infectious disease in domestic animals by enforcing laws, regulations and orders relative to the inspection, examination, quarantine and care of animals.

# d. Regulatory Services

- i. Bureau of Farm Products and Plant Industries: ensures the quality of farm inputs such as fertilizer, animal feed, and seeds
- ii. Pesticide Bureau: protects public health and the environment by licensing individuals who apply pesticides. The bureau protects the public drinking water supply, provides guidelines for the mixing, loading, storage, and disposal of pesticides and registers chemicals

State Government - Department of Agricultural Resources continued

Staff of Department of Agricultural Resources:

Legal: General Counsel & Land Use Attorney

Division of Agricultural Development: Director & Aquaculture Coordinator

Bureau of Markets:

Direct Marketing Specialist/Ag-tourism

Program Coordinator/Foreign Trade, Specialty Foods

Program Coordinator/Farmers Market Program/Foodservice Liaison

Bureau of Land Use:

Agricultural Preservation Restriction [APR] Program

**APR Program Coordinator** 

Farmland Leasing Program/Environmental Reviews

Division of Animal Health, Biosecurity and Dairy Services: Program Coordinator

Division of Dairy Services: Inspector

Bureau of Milk Marketing & Policy Analysis: Economic Program Planner

Bureau of Animal Health:

Rabies Program Coordinator Animal Health Inspector State Veterinarian

Poultry Inspector Veterinarian

Veterinary Epidemiologist Poultry Inspector

Bureau of Farm Products & Plant Industries:

Phyto Sanitary; Apiary Inspector Marketing & Product Utilization Specialist

Pesticide Bureau:

Toxicologist/Health & Safety State Entomologist Coordinator, Licensing

Environmental Analyst Integrated Pest Management (IPM), Environmental Justice Pesticide Inspector Environmental Analyst, Chemistry, Environmental Fate

Miscellaneous:

Commissioner of Agricultural Resources

Regional Planner/Farm Viability Enhancement Program

#### **2. Conservation and Recreation (DCR)** www.mass.gov/dcr/

Mission: protect, promote & enhance our common wealth of natural, cultural & recreational resources for the well being of all.

#### Divisions:

a. Division of State Parks and Recreation

Maintains nearly 300,000 acres of the state's forests, beaches, mountains, ponds, riverbanks, trails, & parks outside of Greater Boston area. Protects land & resources on privately & municipally held land through technical assistance, grant & planning programs, & policy development

#### b. Division of Urban Parks and Recreation

Broad management responsibilities for preservation, maintenance, & enhancement of the natural, scenic, historic, and aesthetic qualities of the environment within the Greater Boston area.

# c. Division of Water Supply Protection

Manages & protects drinking water supply watersheds for Greater Boston. Provides technical support to other state agencies, monitors lakes & ponds, dam safety, well drillers, and rainfall. Watershed Management section manages & protects the drinking water supply watersheds for residents of Massachusetts, primarily in Greater Boston.

Division also provides technical staff support to Water Resources Commission, developing water resources policy & watershed planning efforts, coordinating review of proposed interbasin transfers, administering cooperative programs with US Geological Survey, maintaining & repairing 200 dams/recreational impoundments in state park system, including 25 small watershed flood control projects, & manages statewide Lakes and Ponds Program.

#### Staff:

Director, State Parks & Recreation

Director, Urban Parks & Recreation

Deputy Commissioner of Operations

Deputy Commissioner of Planning & Engineering

Director, External Affairs

Acting Commissioner

General Counsel

Chief of Staff

Acting Deputy Commissioner of Administration & Finance

#### **3. Environmental Protection (DEP)** www.mass.gov/dep/dephome.htm

#### a. The Commissioner's Office

The Commissioner is appointed by Secretary of Environmental Affairs. The Managers reporting directly to the Commissioner include:

Deputy Commissioner for Operations & Programs General Counsel

Deputy Commissioner for Policy and Planning Director of Public Affairs

Deputy Commissioner for Administrative Services Director Legislative & Budgetary Affairs

#### b. Operations

Deputy Commissioner for Operations oversees MA DEP operations & the field activities of the agency's four regional offices in Lakeville, Springfield, Boston and Worcester. The Regional Offices are the focal point for most of DEP's permitting, compliance, enforcement, emergency response and site cleanup activity that protects Massachusetts citizens and their environment on the local level. Staff based in these offices spend most of their time in the field and are very familiar with the businesses and communities they regulate.

Associate Commissioner reports directly to Deputy Commissioner for Operations & Programs & oversees enforcement related activities, specifically:

- Environmental Strike Force (interagency environmental law enforcement unit comprised of scientific & technical staff from DEP, uniformed police officers from other environmental agencies, & prosecutors from the Office of the Attorney General)
- Office of Enforcement Policy and Assistance (responsible for coordinating DEP's overall enforcement program, to ensure consistent treatment of environmental law violators in all regions of state)

# c. Policy and Programs

Deputy Commissioner for Policy & Programs is responsible for ensuring that Department's policies and programs are coordinated, effective and result in measurable environmental results.

The Deputy Commissioner for Policy & Programs establishes DEP priorities & evaluates the success of DEP's efforts based upon environmental & public health indicators & monitoring. The Deputy Commissioner oversees DEP's three programmatic bureaus as well as DEP's:

- Information Technology Office
- Geographic Information Systems (GIS)
- Innovative Technology & Green Business Program
- Office of Research and Standards

- Internet Strategy Unit
- Performance Partnership Agreement & Program Planning
- Program Evaluation
- Wall Experiment Station

# DEP's programmatic bureaus are:

#### i. Resource Protection

Bureau of Resource Protection (BRP) is responsible for identifying critical inland & coastal water resources, devising strategies for protecting & preserving them, safeguarding public drinking water supplies & ensuring public access to the waterfront. BRP administers grants & revolving loan programs that help Commonwealth's cities, towns, municipal water or sewer districts & other regional entities improve their environmental infrastructure. BRP consists of following divisions:

# A. Municipal Services Division

Mission: preserve water quality & abate pollution by providing financial assistance for municipal water & wastewater infrastructure projects & encouraging implementation of innovative & alternative decentralized solutions to municipal water & wastewater management problems. Primary responsibilities of the Division include implementing the State Revolving Loan Fund Program, which oversees construction project financing for wastewater treatment projects and drinking water infrastructure projects, including the development, construction, payment, inspection, and closeout of SRF-financed projects.

#### B. Watershed Management Division

The Watershed Management Division, charged with monitoring and regulatory activities that affect water quality and quantity within the state's major river basins, focuses on building local and regional coalitions to bring about the next major increment of water quality improvement. The Division's programs oversee drinking water quality, wetlands and waterways regulation, the regulation of septic systems under Title 5 of the state's environmental code, and the management of watersheds and their conservation.

#### Within Watershed Management:

1. Drinking Water: Program regulates water quality monitoring, new source approvals, water supply treatment, distribution protection, & reporting of water quality data. It coordinates with DEP's Office of Watershed Management, Water Resources Commission, & DEM's Division of Water Resources in regulating quantity of water used for drinking water supplies & in promoting water conservation. Program maintains a community technical assistance program to assist public water suppliers, Boards of Health, & other local groups to develop drinking water source protection plans, write local water supply bylaws, & comply with state & federal water

supply regulations.

State Government - Department of Environmental Protection continued

- 2. Stormwater
- 3. Waterways
- 4. Wetlands: Ensures protection of Massachusetts' inland & coastal wetlands, tidelands, great ponds, rivers and floodplains. It regulates activities in coastal and wetlands areas, and contributes to the protection of ground and surface water quality, the prevention of flooding and storm damage and the protection of wildlife and aquatic habitat.

The Program administers and enforces:

- Wetlands Protection Act (Chapter 131 s 40) Inland & Coastal Wetlands Restrictions Acts
- 401 Water Quality Certification Program.
- 5. Septic Systems/Title 5
- 6. Water Management
- C. Evaluation and Planning Group

Other programs under Bureau of Resource Protection:

- 1. Estuaries Project
- 2. Groundwater: seeks to ensure groundwater quality is protected for its highest use. Groundwater quality standards are established to coincide with drinking water standards in order to promote maximum protection of groundwater as a drinking water source.
- 3. Residuals and Biosolids
- 4. Surface Water, including industrial wastewater and stormwater

#### ii. Waste Prevention

Bureau of Waste Prevention (BWP) is charged with preventing pollution before it happens & promoting maximum reuse & recycling of residential, institutional & industrial waste.

BWP consists of the following divisions:

#### A. Business Compliance Division:

Mission: ensure that all regulated businesses operate in a manner that protects the environment & human health. Tools such as certifications, permits, outreach, performance assessments & enforcement are used to achieve desired outcomes. The Division consists of these programs:

- 1. Special Projects Staff: Associate Director
- 2. Regulatory Standards

Staff: Deputy Director, Air Branch Chief, Waste Branch Chief, Water Branch Chief

- 3. Enforcement and Audits
  - i. This Unit reports enforcement activities for Department & EPA & provides enforcement strategy support for Regional & Boston operations
  - ii. Staff: Deputy Directory, Performance Tracking Branch Chief, Strategy & Support Branch Chief, Assessment & Business Reporting Branch
- 4. Environmental Results Program
  - i. ERP features a multimedia, sector-based regulatory approach that replaces facility-specific state permits with industry-wide environmental performance standards & annual certifications of compliance
  - ii. Staff: Program Manager

Bureau of Waste Prevention Divisions continued:

- B. Consumer and Transportation Division: promotes environmental citizenship so that each resident of Massachusetts realizes the part s/he can play in ensuring clean air, water, and land. The Division consists of two units:
  - 1. Consumer Programs
    - i. Recycling
  - 2. Transportation Programs
    - i. Enhanced Emissions & Safety Test
    - ii. Low Emission Vehicles
    - iii. Rideshare Program
    - iv. School Bus Idling Reduction Initiative Staff: division director
- C. Evaluation and Planning Division: performs long-range planning for traditional air, water & waste programs while moving toward an integrated Bureau-wide approach to pollution prevention planning and evaluation, based on shared and integrated environmental, engineering and program data that is accessible to all. The Division consists of three programs:
  - 1. Air Program Planning Unit
    - i. Design, maintain & operate all ambient air quality networks
    - ii. Staff: Air Assessment Branch Acting Chief, Air Planning Branch Chief
  - 2. Waste Programs Planning Unit
    - i. Managing Toxics Use Reduction Program. Staff: Program Manager
    - ii. Waste Planning and Evaluation Services Branch: design & plan Bureau's waste programs. Staff: Chief
    - iii. Staff: Deputy Director
  - 3. Systems Integration and Data Analysis Unit
    - i. Data Systems Branch: coordinate BWP's work on variety of information systems. Staff: Chief
    - ii. Reporting and Analysis Branch: ensure that Bureau is collecting & maintaining data of high & consistent quality, & develop information for planning & evaluation. Staff: Chief
    - iii. Staff: Deputy Director

#### D. Program Support

#### iii. Waste Site Cleanup

Ensure immediate & effective response to environmental emergencies, such as oil spills, as well as timely assessment & cleanup of hazardous waste sites by private parties responsible for them.

BWSC consists of the following divisions:

A. Policy and Program Development Division

- B. Response and Remediation Division: responsible for statewide implementation of Massachusetts Contingency Plan's (MCP) Waste Site Cleanup Program activities. These responsibilities focus on coordinating & implementing responses to oil & hazardous material spills, as well as assessment & cleanup of hazardous waste sites & spills across the state, auditing private sector compliance with site & spill assessment & cleanup regulations, & appropriate enforcement actions when violations are discovered.
- C. Technical and Financial Support Division
- D. Board of Registration of Hazardous Waste Site Cleanup www.mass.gov/lsp/
  - 1. The Board determines whether an applicant meets the qualification criteria to obtain a license to work as an Licensed State Professional (LSP), administers a licensing exam, issues the licenses, ensures that LSPs meet requirements for continuing education, & disciplines individuals who do not uphold professional standards
  - 2. Staff: Executive Director, General Counsel, Assistant General Counsel, Investigator, Executive Assistant & Program Coordinator
- **4. Fish and Game** www.mass.gov/dfwele/dpt\_toc.htm
- a. The Commissioner's Office
- i. Riverways Program

Mission: promote restoration, protection & ecological integrity of Commonwealth's rivers, streams & adjacent lands.

Staff: Director, Stream Team Organizer, Adopt-a-Stream Program Coordinator, Rivers Advocate, Stream Ecologist and Urban Rivers Coordinator, Program Manager, Staff Scientist, Watershed Ecologist and RIFLS Coordinator, River Restore Coordinator, Stream Team Organizer

#### Programs:

- Adopt-A-Stream Program
   Urban Rivers Program
- an Rivers Program Small Grants Program
- Technical Assistance Team River Restore
- Lake/Watershed Stewardship Program

- ii. Habitat and Land Protection Program
- iii. Departmental GIS Program

Mission and Goals:

- Provide GIS products, applications & services to Commissioner's office & to those Programs & Divisions without GIS capability
- Provide technical leadership & oversight to Divisional & other Departmental agency GIS efforts including design & development of GIS systems, related applications & data development efforts
- Advise on purchase of GIS related technology & services by Commissioner & other programs
- Provide GIS related information & training to Departmental personnel

Three staff positions: GIS Specialist and Program leader and two GIS Specialists

#### iv. Clean Vessels Act Program

State Government - Department of Fish and Game continued

# b. Division of Fisheries and Wildlife (MassWildlife):

Staff in Boston: Director, Deputy Director, Employees of Permit Office

5 major components of the Division of Fisheries and Wildlife:

Fisheries, Wildlife, Heritage & Endangered Species, Realty & Public Information, Education

# Programs:

- i. Land Protection
- ii. Wildlife Monitoring and Restoration
- iii. Providing Recreational Opportunities
- iv. Regulating Wildlife Possession and Use
- v. Supporting Wildlife Research and Management

There are research grants for study of rare species & habitats available from Natural Heritage and Endangered Species Programs. Our biologists & ecologists also review potential impacts of development on fisheries, aquatic systems and rare species habitats to prevent or minimize damage to these irreplaceable resources.

# vi. Spreading the Wildlife Message

MassWildlife offers information and education services to teachers, sportsmen, youth group leaders, school children, town board members, conservation and civic organizations, the news media and many other people interested in wildlife.

# c. Division of Marine Fisheries

Manage Commonwealth's living marine resources & harvesting of those resources by the commercial and recreational fisheries, while maintaining a diverse number of self-sustaining fish populations at healthy levels of abundance in balance with the ecosystem.

#### **Programs and Projects:**

- i. Anadromous Fisheries
- ii. Boating Infrastructure Grant
- iii. Cape Ann Marine Science Lecture Series
- iv. Conservation Engineering

Develops & tests modifications to commercial fishing gear & innovative designs that minimize impacts on non-target species and habitat.

- v. Clean Vessel Act
- vi. Diving Program
- vii. Environmental Impact Assessment

Marine Fisheries maintains an ongoing Environmental Impact Assessment Program to review activities & alteration projects in coastal waters and advise local, state, and federal regulatory agencies on measures to protect fishery resources and habitat. Program staff coordinate efforts of other staff biologists to complete reviews, conduct directed surveys, provide technical assistance, & submit formal recommendations for reduction & restoration of impacts.

#### viii. Hubline Program

ix. Industry Based Survey for Gulf of Maine Cod

#### x. Lobster Investigations

Conduct annual coastwide commercial lobster sea sampling program which provides

biological & catch/effort data from six coastal regions during the major lobstering season

State Government – Department of Fish and Game continued

# xi. Management Information Systems [MIS] & Fisheries Statistics

Collects, analyzes, & distributes catch/effort & economic data from lobster, shellfish & "regulated" fisheries through catch reports from licensed fishermen. These data are used to assist managers in the development of fisheries management plans.

#### xii. Northern Shrimp

Our approach, which integrates data collection, data analysis/assessment, & fisheries management, helps ensure long term well being of Gulf of Maine Northern shrimp resource.

# xii. Fisheries Dependent Investigations

Monitors catch & by-catch composition of some of state's fisheries. Program is staffed by 3 full-time biologists & collects data at-sea & shore-side from commercial fisheries to document fishery performance and collect biological samples for stock assessment research.

# xiv. Policy and Fisheries Management

Our fisheries policy & management staff gathers & analyzes biological & economic data, communicates with media & public on state/interstate/federal fisheries management issues, & ensures agency adherence to administrative & regulatory protocol & procedures. This process also relies on our scientific/technical staff to provide biological analyses & technical reviews of management options to conserve marine fisheries resources for sustainable fisheries & fisheries habitat protection.

#### xv. Recreational Fisheries Research

Artificial Reef Project Shark Research Striped Bass Research

Salem Sound Project Bluefin Tuna Investigations Tournament Monitoring Smelt Spawning Habitat

Tautog Age and Growth Catch and Release Survivorship of Big Game Fish

# xvi. Right Whale Conservation

Survey & monitor Northern Right Whales & their habitat in Cape Cod Bay Critical Habitat & adjacent waters

xvii. Shellfish Sanitation and Management

xviii. Resource Assessment Project

Staff of Marine Fisheries: Aquatic Biologists, Bacteriologist, Program Coordinators, Research Analysts, Directors, Assistant Director – Administration, Systems Analysts, Deputy Director, Field Technician, Laboratory Supervisor, Fisheries Supervisor

Other Programs under EOEA:

#### 1. Strategic Envirotechnology Partnership (STEP) www.mass.gov/envir/STEP/

Mission: promote & stimulate private development & investment in environmental technologies.

We prioritize envirotechnology needs that are identified by Massachusetts agency staff and seek external funding to obtain environmental results from projects based in addressing these needs.

Staff: STEP Director, STEP Coordinator

# **B. Department of Telecommunications and Energy (DTE)** www.mass.gov/dte/

#### 1. Gas Division

Responsible for regulation of 10 investor-owned natural gas utilities -- also called local distribution companies ("LDCs")-- in Massachusetts. The regulation of the natural gas industry requires Division to review seasonal Cost of Gas Adjustment Clause (CGAC) filings, Local Distribution Adjustment Clause (LDAC) filings, Environmental Remediation Costs filings, forecast & supply plan filings, long-term supply contracts, numerous non-tariffed contracts for sale & transportation of natural gas, conservation & load management programs, & oversee the transition to a competitive gas commodity market as well as the adherence by LDCs to service quality standards.

#### 2. Siting Division

The Siting Division assists the Commission & the Energy Facilities Siting Board (EFSB) in review of long range forecast & supply plans of Commonwealth's electric & gas utilities, & the review of applications by both utilities & non-utilities to construct jurisdictional energy facilities. The Siting Division acts as the staff of the EFSB on jurisdictional matters before & reports to the Commission on facility siting related department cases such as eminent domain & zoning exemption cases. The staff also intervenes at Federal Energy Regulatory Commission (FERC) on behalf of EFSB to represent Commonwealth's environmental interests & coordinates hydropower-licensing reviews for the EFSB.

#### 3. Pipeline Safety and Engineering Division

The Pipeline Engineering and Safety Division is responsible for technical and safety oversight of 10 natural gas companies, 4 municipal gas departments & distribution systems of privately owned water companies as well as enforcement of the state's Dig-Safe Law. The Division is concerned with the inspection of gas facilities for compliance with federal & state regulations; investigation into gas related accidents to determine their cause & make recommendations to minimize recurrences; enforcement of the Dig-Safe Law; inspection & testing of gas meters for accuracy and safety prior to installation; and analysis of technical information in petitions pertaining to the installation of interstate gas transmission pipelines or roadways proposed to be built over existing transmission pipelines.

# C. Division of Energy Resources (DOER) www.mass.gov/doer/

Mission: implement energy policies that ensure an adequate supply of reliable, affordable & clean energy for the businesses and residents of Massachusetts & improve & streamline energy regulation, promote greater efficiency in all energy uses, reduce energy costs & mobilize energy education.

# 1. Policy Advocacy through Negotiation and Intervention

DOER works with energy suppliers & interest groups through negotiations & partnerships to:

- 1) Create a competitive energy industry
- 2) Encourage energy suppliers to pursue environmentally sound methods of energy production & transportation

# 2. Residential Energy Efficiency Programs

#### 3. Alternative Fuel Transportation Development

DOER promotes development & use of vehicles fueled by compressed natural gas, electricity, propane & other alternative fuels. The Electric Vehicle Demonstration Program tests the viability of electric vehicles for commuting & other uses. The MASSPORT Heavy Duty Vehicle Demonstration demonstrates the use of CNG-fueled buses at Logan Airport. Through the Greater Boston Clean Cities Initiative, DOER is working with a consortium of public and private sector interests to support the development of alternative fuel transportation in the greater Boston area

# 4. Renewable Energy

DOER supports the development of fuel cell, wind, photovoltaic and other environmentally sound energy production technologies through demonstration and testing in partnership with the private sector and cities and towns.

# 5. Landfill Gas Recovery Program

DOER promotes the recovery of landfill gas for energy production and the long-term reduction of this source of greenhouse gas.

# 6. Energy Conservation Improvement Program

This program provides grants to public schools to help cut energy costs. Grants fund eligible energy conservation projects identified through an energy audit provided by DOER.

# D. Massachusetts Water Resources Authority (MWRA) www.mwra.state.ma.us/

MWRA is an independent authority that provides wholesale water and sewer services to its customer communities, and funds its operations primarily through user assessments and charges.

Mission: provide reliable, cost-effective, high-quality water & sewer services that protect public health, promote environmental stewardship, maintain customer confidence, & support a prosperous economy.

Staff: Executive Director, Chief Operating Officer - Operations Division, Chief Financial Officer - Finance Division, General Counsel – Law Division, Managing Director – Support Services Division

# E. Metropolitan Planning Organization (MPO) www.bostonmpo.org/

The Boston Metropolitan Planning Organization is one of 13 Massachusetts regions established to carry out federally funded transportation plans and programs.

The Boston Metropolitan Planning Organization is composed of 7 agencies, 7 municipalities, & a public advisory committee that collectively carry out federally mandated "continuing, comprehensive and cooperative" (3C) transportation planning process for the region. The MPO members are:

Cities of Boston, Everett, Newton, & Salem Towns of Bedford, Hopkinton, & Framingham Regional Transportation Advisory Council Federal Transit Administration (ex officio) Federal Highway Administration (ex officio) MBTA Advisory Board

The Central Transportation Planning Staff (CTPS) provides technical & policy-analysis support to Boston Metropolitan Planning Organization (MPO) & other members of the regions transportation community. CTPS is a staff of highly trained professionals who perform transportation analyses for & provide information to a wide variety of organizations in both the public & private sectors. The staff is multidisciplinary & includes transportation analysts, planners, & engineers, as well as other professionals working in the areas of geographic information systems, cartography, graphic design, technical editing, computer systems operation, & administrative services.

CTPS operates under the direction of the MPO. The seven member agencies & seven member municipalities of the MPO oversee the administration & work program of CTPS.

The work that CTPS performs falls into 4 major categories: travel modeling & forecasting; transportation planning & analysis; certification activities; & data, maps, & graphics.

#### 1. Metropolitan Area Planning Council (MAPC) www.mapc.org

MAPC is a regional planning agency representing 101 cities and towns in the metropolitan Boston area. It serves as a forum for state and local officials to address issues of regional importance. As one of 14 members of the Metropolitan Planning Organization (MPO), MAPC has oversight responsibility for the region's federally funded transportation program. MAPC works with its 101 cities & towns through 8 subregional organizations. Each subregion has members appointed by chief elected officials & planning boards. Council membership consists of community representatives, gubernatorial appointees & city & state agencies who collaborate in development of comprehensive plans & recommendations in areas of population & employment, transportation, economic development, regional growth & environment.

#### Staff:

Executive/Office Group: Executive Director, Deputy Director,

Regional/Planning: MetroFuture Project Director, Manager of Regional Planning, Manager of Government Services, Chief Housing Planner, Land Resources Planner, Environmental Planner, Senior Regional Planner, Senior Project Manager, Regional Planning Intern, Regional Planners

Transportation: Manager/ Transportation Planning, Transportation Planners Data & GIS: GIS Manager, GIS Analysts, Data Center Manager

# **2. Executive Office of Transportation (EOT)** www.eot.state.ma.us/

The Executive Office of Transportation is charged with the responsibility of providing efficient, safe, clean and cost-effective transportation systems and services. The agency carries out this vital function by overseeing the design, operation and construction of superior facilities, and by developing and implementing quality programs and services for its highways, mass transit systems, railroads, airports and watercraft.

Staff: Secretary, Undersecretary of Transportation, Chief of Staff, General Counsel, Director of Communications, Director of Legislative and Intergovernmental Affairs, Chief Information Officer, Deputy Secretary for Transit and Policy, Deputy Secretary Planning

a. Massachusetts Bay Transportation Authority (MBTA) www.mbta.com

#### b. Massachusetts Highway Department www.mhd.state.ma.us/

The Environmental Section is responsible for overseeing the environmental compliance activities for MassHighway to ensure that roadway & bridge construction & repair program as well as maintenance depot operations are conducted in an environmentally sound manner. This includes preparing & reviewing various environmental documents such as: Environmental Impact Reports, Standard Operating Procedures (SOPs), & developing environmental policy. Environmental staff are engaged in numerous permitting activities across a broad spectrum of environmental resource areas. They also conduct training & provide regulatory guidance & technical expertise to support the Engineering, Maintenance, Construction & Right of Way functions of the department to insure that all activities are in compliance with current regulations. These duties and responsibilities are carried out within four units: Project Development, Cultural Resources, Wetlands and Water Resources and Hazardous Waste/Materials, which perform a common function of ensuring that impacts to the environment and cultural resources are avoided, minimized and mitigated to the maximum extent practicable and providing guidance for environmental enhancement.

# c. Massachusetts Port Authority (MASSPORT) www.massport.com

The Environmental Management Unit is responsible for maintaining Massport compliance with proper environmental practices through pollution prevention and remediation measures. The unit works closely with all departments within Massport to ensure that Massport and tenants are in compliance with applicable laws and regulations. The Environmental Management Unit manages all of the environmental programs for all of Massport's facilities. Some of these programs include:

- MCP Compliance/Remediation program monitoring
- Stormwater management
- Storage Tank compliance
- Compliance auditing and inspections
- Environmental Management Systems
- · Asbestos and lead survey and abatement
- Air permitting and monitoring

#### d. Massachusetts Turnpike Authority (MTA) www.massturnpike.com/

# **F. Department of Public Health** www.mass.gov/dph/

Environmental Health Assessment www.mass.gov/dph/dphorg2.htm

#### Programs:

#### a. Childhood Lead Poisoning Prevention Program

The Childhood Lead Poisoning Prevention Program (CLPPP) was established for the prevention, screening, diagnosis, and treatment of lead poisoning, including the elimination of sources of poisoning through research and educational, epidemiologic, and clinical activities as may be necessary.

#### b. Community Assessment Program

The Community Assessment Unit (CAU) was established to provide a coordinated government response for citizens with regard to environmental health issues. The Community Assessment Unit's goals are to educate the public on the relationship of human health effects and the environment, keep an open line of communication between the Massachusetts Department of Public Health and concerned citizens, and to perform efficient and appropriate preliminary analyses of reports of suspected elevations in disease occurrence and the potential relationship to the environment.

# c. Environmental Health Education Program

The Environmental Health Education Unit enables the Bureau to provide educational sessions and information materials about environmental exposures and health effects to health professionals and residents of Massachusetts. The objectives of this project is to increase the awareness and understanding of health effects identified at National Priority List or Superfund sites, exposures to various environmental hazards, and the results of BEHA studies and investigations.

#### d. Emergency Response/Indoor Air Quality Unit

Staff in this unit work closely with the Environmental Toxicology Unit in providing Massachusetts residents with health hazard evaluations. This unit also maintains the Massachusetts Substance List and assures overall public health compliance pursuant to state Right-to-Know Laws (MGL c.111F) and the federal Emergency Planning and Community Right-to-Know Act.

#### e. Environmental Epidemiology Program

The Environmental Epidemiology Unit follows up on problems identified during the environmental health assessment work conducted by the CAU and Environmental Toxicology Units.

#### f. Environmental Public Health Center on Cape Cod

# g. Environmental Toxicology Program

The Environmental Toxicology Unit provides to communities toxicological assessments of environmental data provided by the Massachusetts Department of Environmental Protection and the U.S. Environmental Protection Agency. In addition, the Environmental Toxicology Unit provides support for the Massachusetts Department of Public Health pesticide and fish toxics programs in collaboration with the MDPH Division of Food and Drugs.

# **Chapter 6: Examples of State Government Jobs in Boston Metro-Area**

# **Department Of Agricultural Resources**

Program Coordinator / TA Coordinator for Environmental Stewardship Boston

- Proven ability to work with farmers; Agricultural background
- Excellent organizational & communication skills
- Working knowledge of Massachusetts' regulatory info about non-point source pollution
- Proven ability to maintain & work effectively with confidential information & files
- Demonstrated ability to provide meaningful educational messages
- Computer Skills: Proficiency in MSWord, Excel, Access
- Responsibilities: execute educational & technical assistance program with farmers about causes
  of & solutions to non-point source pollution; assist livestock farmers to remain in compliance
  with the Animal Feeding Operations regulations for US EPA

Attorneys / Legal Services / Legal Counsel\* Boston

- Interpersonal skills, Knowledge of MA agriculture, Member in good standing of MA Bar Responsibilities under direction of General Counsel:
- Advise agency staff on interpreting, applying & revising laws. In particular: identify & interpret
  laws, rules, regulations & judicial or quasi-judicial decisions & opinions related to agency
  operations; draft, & review drafts of, statutes, regulations, guidelines & contracts & ensure
  conformity with applicable laws & regulations; coordinate promulgation of regulations; conduct
  legal research on matters related to agency functions; perform related duties such as writing
  decisions, correspondence, memoranda, media releases & reports.
- Provide advice & representation in administrative law actions. In particular: evaluate legal basis for noncompliance complaints & advise agency administrators on possible approaches to obtain compliance; represent the agency at administrative hearings; draft & negotiate settlement agreements or administrative decisions, & when necessary, refer cases for civil or criminal litigation
- Provide information to public. In particular: answer inquiries related to agency functions, rules & regulations; comment on general principles of preemption when state & local laws relating to agriculture or pesticide regulation conflict; lead farmers & their legal counsel to pertinent laws, regulations & cases; respond to formal requests presented to Department under the Public Records Act
- Provide guidance on new legislation. In particular: identify & evaluate relevant proposed legislation; review draft testimony on legislation; suggest & draft new legislation
- Provide legal review & advice in procurement. In particular: review & sign off on Requests for Response, grant applications & contracts; explain procurement process to staff; respond to questions about procurement process
- Perform special projects as needed. Sample projects include: recruit & supervise legal interns; serve as Alternative Dispute Resolution Coordinator; help train Greyhound Care & Adoption Program's Executive Director; edit & revise guide to Massachusetts agricultural law; represent

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<sup>\*</sup> Job trending information available.

# agricultural interests on Massachusetts Drought Management Task Force State Government Jobs – Department of Conservation and Recreation

# **Department Of Conservation And Recreation**

# Civil Engineer\*

- (A) 4+ years full-time, or equivalent part-time, technical or professional experience in civil engineering work in such areas as construction, survey, design, transportation, hydraulics, structural, sanitary, drafting, environmental, highway, architectural, airport, soils & materials of which (B) 2+ years must have been in a professional capacity, or (C) any equivalent combination of the required experience and the substitutions below:
- I. Associate's degree with major in civil engineering or civil engineering technology may be substituted for maximum of 1 year of required (A) experience
- II. Bachelor's degree with major in civil engineering or civil engineering technology may be substituted for maximum of 2 years of required (A) experience
- Graduate degree with major in civil engineering may be substituted for maximum of 2 years of required (A) experience & 1 year of required (B) experience

# **Preferred Qualifications:**

- Bachelor's degree in engineering (Civil or Mechanical) & advanced degree in engineering
- 4+ years experience in design & construction related to Construction Inspection
- Background in civil, structural or architectural engineering or construction
- Familiarity with Commonwealth's design, bid & construction laws
- Demonstrated awareness of & compliance with protection of Commonwealth's natural, cultural & historical resources
- Understanding & appreciation of importance of aesthetics & environmental protection in design of DCR facilities
- Working knowledge of DCR facilities to articulate clearly all goals & objectives of agency
- Superior written and oral communication skills
- Ability to speak confidently & competently with municipal entities, State Agencies & Authorities
- Ability to utilize Microsoft Office to prepare spreadsheets, charts & presentations Responsibilities:
- Work primarily in field overseeing construction for compliance with project drawings & specifications, handling contract discrepancies, disputes & general day to day issues
- Perform duties consistent with mission of ensuring maintenance & technical integrity of parks system & associated structures, parkways, bridges & facilities; provide public safety & access to such; integrate technical concepts with overall goal of protecting environment & public open space
- Determine constructability of engineering design & execution of projects involving rehabilitation, retrofitting &/or replacement of existing structures & facilities
- Work with consulting firms or in-house design staff to accomplish construction
- Develop recommended field policies to provide process for construction & payment
- Prepare, monitor & maintain contract budgets & schedules
- Provide information & support to division's project tracking group on assigned projects

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<sup>\*</sup> Job trending information available.

• Coordinate & represent the Division at regular project meetings

State Government Jobs – Department of Conservation and Recreation continued

Boat Ramp Monitors - Contracted Seasonal Employees

Natick - Cochituate State Park

- High school graduate; Credits towards BS in Limnology, Environmental Science, Environmental Education or related science preferred
- Demonstrated ability to organize & carry out data sampling, analysis & management
- Communication skills; Knowledge of 2<sup>nd</sup> language (Spanish, Russian etc) highly desirable Responsibilities:
- Participate in training conducted by DCR Lakes & Ponds staff on identification of invasive aquatic species, procedure for conducting boat inspections & procedure for plant removal
- Conduct inspections for aquatic plants or animals attached to the boats/trailers/gear of voluntary participants
- Distribute educational materials including materials on invasive aquatic species, boater safety, & non-point source pollution; provide information regarding boat inspections & boat washing to boaters that volunteer to participate in program
- Conduct brief survey of boater attitudes & knowledge towards invasive aquatic species & their spread
- Work within park to address specific water quality issues identified by the Lakes & Ponds Programs & facility supervisor (i.e., goose waste removal, waterfowl counts, sediment control, water quality sampling)

#### Forest And Park Supervisor

Framingham - Callahan State Park

• (A) 2+ years of full-time, or equivalent part-time, technical or professional experience in field of forestry, parks or recreational management, or (B) Associate's degree or higher with major in forestry, natural resources management or parks & recreation management

- Assist in seasonal operation, management & maintenance of facilities to provide integrated program of natural & cultural resource protection, resource-base recreation, community education & public safety
- Supervise & perform work relative to seasonal operation, administration & maintenance of facility including grounds maintenance, building & equipment maintenance & repair & recreational programming
- Supervise staff performing visitor recreation &/or education services, facility maintenance & resource protection programs including: work assignment & scheduling; work performance review & evaluation; staff development & training
- Maintain, communicate & enforce professional standards for quality of visitor services, staff appearance, facility maintenance, public safety & resource protection
- Develop & maintain professional &/or service relationships with Friends Group, users & other organizations having particular interest in assigned area
- Communicate park activities, incidents, & programs to Departmental staff including prepare written reports, electronic communication via computer, telephone & radio transmission
- Prepare reports & maintain records regarding daily, weekly, monthly & seasonal operation of assigned area to provide information & make appropriate recommendations
- Coordinate activities & work of volunteers, court referred individuals, etc.

• Determine supply needs; operate & perform routine maintenance on equipment & vehicles; provide information to general public; interview candidates for employment; provide on the job training

State Government Jobs - Department of Conservation and Recreation continued

# Assistant General Counsel\*

• Responsibilities: analyze legal issues for office; represent department at administrative hearings; communicate positions to various entities, such as other environmental agencies, environmental organizations, the business community, federal & local agencies, other departments of the executive branch, legislative branch, & Attorney General's Office; represent Department in employment & labor matters, including associated administrative hearings, grievances or other proceedings & negotiations; research & advise internal staff on range of legal matters; draft, review or analyze bills, legislation & regulations; assist in review & development of policies; represent General Counsel at meetings; respond to inquiries & correspondence; act as litigating attorney & agency representative for formulating defense trial strategy in lawsuits with Office of the Attorney General; assist in watershed & park land acquisition programs, negotiating transactions with landowners, legal representatives & attorneys, & working directly as necessary with consulting professionals contracted by Department to prepare targeted parcels of open space for acquisition

# Geologist\*

#### **Boston**

- 4+ years of full-time, or equivalent part-time, technical or professional experience in field of geology, of which (B) 2+ years must have been in a professional capacity, or (C) any equivalent combination of the required experience and the substitutions below:
- I. Bachelor's degree with major in geology may be substituted for a maximum of 2 years of required (A) experience
- II. Graduate degree with major in geology may be substituted for 3 years of required (A) experience and 1 year of required (B) experience

# **Preferred Qualifications:**

- Thorough knowledge of geological principles & practices
- Working knowledge of geohydrology, surface geology, aquifer analysis & water resources engineering & planning
- Skill in writing clear and concise reports
- Professional hydrogeologic experience, including experience in engineering & planning Responsibilities:
- Collect & interpret geologic & hydrogeologic data to be applied to water resources planning & management
- Prepare reports for planning of water resources on state-wide & river basin basis
- Review geologic & hydrogeologic components of proposed interbasin transfers
- Prepare geologic & hydrogeologic sections of technical reports & river basin studies & plans
- Prepare specifications for surface water & ground water studies & develop new & improved methods for obtaining precise geological & hydrogeologic data for water planning & management
- Review projects to develop finite plans & specifications leading to final design for geologic &

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Job trending information available.

State Government Jobs – Department of Environmental Protection

# **Department Of Environmental Protection**

# Safety and Emissions Environmental Analyst Boston

- (A) 4+ years of full-time, or equivalent part-time, technical or professional experience in field of environmental science, biology, chemistry, earth science, environmental health, meteorology, natural science, toxicology or public health, of which (B) 2+ years must have been in professional capacity, or (C) any equivalent combination of required experience and substitutions below:
- I. Associate's degree with major in field of environmental science, biology, chemistry, earth science, environmental health, meteorology, natural science, toxicology or public health may be substituted for maximum of 1 year of required (A) experience
- II. Bachelor's degree with major in field of environmental science, biology, chemistry, earth science, environmental health, meteorology, natural science, toxicology or public health may be substituted for maximum of 2 years of required (A) experience
- III. Graduate degree with major in field of environmental science, biology, chemistry, earth science, environmental health, meteorology, natural science, toxicology or public health may be substituted for maximum of 3 years of required (A) experience & 1 year of required (B) experience

#### **Preferred Qualifications:**

- Strong communication and organization skills
- Familiarity with common automotive repair terminology & concepts
- Knowledge of typical emissions failures & their repair
- Knowledge of onboard diagnostic testing
- Familiarity with environmental program development & implementation
- Good writing skills including using graphic elements
- Ability to analyze progress reports & draw conclusions from technical documents
- Ability to participate in field audit work requiring an ability to lift 50 pounds to a height of 4 feet

- Respond to consumer & station issues & concerns particularly with on-board diagnostic testing
- Provide oversight of inspection stations relative to Enhanced Safety & Emissions (IM) Program
- Assist with implementation of Program's Vehicle Maintenance Initiative (VMI)
- Outreach to emissions repair technicians
- Coordinate with contractor to implement all aspects of VMI
- Handle routine calls from repair shops & consumers on emission waiver requests & other general consumer questions about the IM program
- Coordinate Vehicle Maintenance Initiative subcommittee
- Facilitating some of I&M-based advisory groups, encompassing consumers, repairers, & emissions inspectors
- Participate in field inspections to audit equipment used in transient IM tests

# Commercial Waste Reduction Branch Chief - Regional Planner

- Report to Deputy Division Director of Consumer Programs
- Manage implementation of commercial waste reduction activities/programs outlined in Massachusetts Beyond 2000 Solid Waste Master Plan (commercial food waste, construction & demolition debris, etc.)
- Oversee regulations pertaining to waste prevention & environmental protection (Bottle Deposit Law, Waste Bans, etc.), & coordinate with other bureaus, agencies & stakeholders in implementation of initiatives
- Supervise professional staff of 6+, provide direction, establish teams, & lead initiatives
- Participate in Department strategic planning activities & administering grant & technical assistance programs

# Branch Chief for Brownfields Program - Regional Planner\* Boston

- (A) 6+ years full-time, or equivalent part-time technical or professional experience in urban or regional planning, environmental planning, transportation planning or land use planning, & (B) of which 4+ years must have been in professional capacity, & (C) of which 2+ years must have been in supervisory capacity, or (D) any equivalent combination of required experience & substitutions below:
- I. Bachelor's degree with major in urban or regional planning, environmental planning, urban studies, architecture, landscape architecture, civil, environmental, or transportation engineering or environmental sciences may be substituted for 2 years required (A) experience
- II. Graduate degree with major in urban or regional planning, environmental planning, urban studies, architecture, landscape architecture, civil, environmental, or transportation engineering or environmental sciences may be substituted for 3 years of required (A) experience and 1 year of required (B) experience

#### Preferred Qualifications:

- 5+ years professional experience in environmental planning, real-estate law, or community economic development
- Working knowledge of MGL c. 21E & MA Contingency Plan & MA Brownfields Program
- Experience in property development & community revitalization
- Experience working with municipal & state officials & community groups
- Ability to express ideas clearly & succinctly in written & verbal form
- Established working relationships with: municipal officials & non-profit leaders across Commonwealth; Massachusetts developers, lenders, insurance brokers, & other parties undertaking brownfields projects; following agencies: MassDevelopment, MassBusiness, MA Department of Business Technology, MA Executive Office of Environmental Affairs, MA Department of Revenue, MA Office of the Attorney General, MA Department of Housing & Community Development, Mass Historic, Federal EPA, Federal Department of Housing & Urban Development, US Army Corps of Engineers

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<sup>\*</sup> Job trending information available.

- Knowledge of database management & experience with IBM compatible computers
- Ability to communicate & interpret often-complex liability & financial policies

State Government Jobs - Department of Environmental Protection continued

# Branch Chief for Brownfields Program - Regional Planner continued Responsibilities:

- Serve as Branch Chief within Cost Recovery, Fees & Revenues Section of BWSC
- Under direction of Section Chief & Division Director of Division of Technical & Financial Support (TFS)
- Lead & implement Department's Brownfields Program, promote environmental Protection & Brownfields Redevelopment via a coordinated inter-agency approach
- Lead coordination efforts between state, federal & local parties, & develop approach to strengthen agency's involvement at early stages of project development
- Conduct active outreach to municipalities, non-profits & redevelopment authorities
- Assist businesses, developers, lenders & community groups by providing information & guidance on brownfields cleanup & redevelopment
- Run monthly meetings with Brownfields Partner Agencies
- Approve projects for Federal Brownfields Tax Deduction Program
- Coordinate regional brownfields efforts ensuring consistent approach; run regular meetings with regional points of contact to coordinate on projects, policies & approaches
- Support Cost Recovery Section Chief in marketing priority lien sites, & assist municipalities in preparation of Request for Proposals & other mechanisms to convey sites
- Assist in statewide effort to identify & inventory brownfields sites for state tracking & federal funding purposes
- Assist in statewide evaluation of brownfields programs, supporting policy & program planning
- Develop & publish reports, handouts, articles & other documents, & update DEP brownfields website
- Represent agency at state & federal brownfields conferences, workshops & meetings

#### Wetlands Technical Specialist

Boston

- Provide outreach & training to local conservation commissions on implementation of Wetlands
   Protection Act as amended by the Rivers Protection Act
- Conduct & participate in meetings with local boards, commissions, & conservation agents to assist interpreting regulations, policies & guidance
- Conduct training workshops & assist in making presentations at other forums that provide an opportunity to explain regulations
- Respond to requests for information from conservation commissions, the public, & other concerned parties in writing, electronically & via telecommunications
- Provide conservation commission feedback to DEP's Wetlands & Waterways Program Chiefs, Regional Wetlands Section Chiefs on wetlands & other related issues
- Develop working knowledge of other BRP programs, particularly the Water Management Act,

Safe Drinking Water Act, Title 5, & other Water Pollution Control Programs

• Develop working knowledge of Public Waterfront Act

State Government Jobs - Department of Environmental Protection continued

Environmental Analyst - Contract Specialist / Evaluation Leader - Emissions & Safety Boston

- (A) 5+ years of full-time technical or professional experience in field of environmental science, biology, chemistry, earth science, environmental health, meteorology, natural science, toxicology or public health, of which (B) 3+ years must have been in professional capacity, & of which (C) 1+ year must have been in supervisory, managerial or administrative capacity, or (D) any equivalent combination of required experience & following substitutions:
- I. Associate's degree with major in field of environmental science, biology, chemistry, earth science, environmental health, meteorology, natural science, toxicology or public health may be substituted for maximum of 1 year of required (A) experience
- II. Bachelor's degree with major in field of environmental science, biology, chemistry, earth science, environmental health, meteorology, natural science, toxicology or public health may be substituted for maximum of 1 year of required (A) experience
- III. Graduate degree with major in environmental science, biology, chemistry, earth science, environmental health, meteorology, natural science, toxicology or public health may be substituted for up to 3 years of required (A) experience & 1 yr of required (B) experience
- **Preferred Qualifications:**
- Familiar w/contract oversight/coordination, program planning, development, & implementation
- Ability to write, interpret, & apply regulations, policy, & contract language
- Ability to quantitatively evaluate complex programs, analyze complex data, select appropriate evaluative measures & statistical methods, & effectively present analyses
- Oral/written communication skills & ability to present technical analyses to non-tech. audiences
- Familiarity with assessment & evaluation techniques & procedures, quantitative models, & cost effectiveness assessment; Excellent computer skills & use of analytical tools (Excel/ACCESS)
- Air quality and/or automotive issues & program experience
- Experience managing controversial issues and diverse constituencies Responsibilities:
- Track progress of enhanced emissions & safety (IM) Network Contractor for emissions program in more than 1500 stations across Commonwealth; Document effectiveness of program's ability to reduce pollution from motor vehicles
- Work with IM team, network contractor, RMV, & state & federal agencies to ensure IM program contract is accurately tracked & evaluated, recommend changes in program to increase program effectiveness, & ensure EPA approves any changes made to program
- Track & Oversee Contract Requirements including: document deliverables & assess damages, assess current oversight systems & recommending improvements
- Track & Oversee Task Orders by assessing current systems & recommending improvements for managing task orders to technical support contractors
- Documentation/Recordkeeping: Develop systems & specific procedures for internal documentation of: Receipt & response to contractor inquiries; contract interpretation items/issues; Detailed staff assessments of contractor performance & necessary documentation

- Train staff on importance of contract management & contract management procedures
- Develop procedures to manage revisions to contract requirements (e.g., change orders)
- Develop & implement assessment & evaluation plans & direct work of team members to carry out those plans
- Coordinate, write, & present reports which analyze effectiveness of program using appropriate analytical tools, methods, & procedures for various audiences

State Government Jobs - Department of Environmental Protection continued

# Data Environmental Analyst

#### Boston

- (A) 4+ years full-time technical or professional experience in field of environmental science, biology, chemistry, earth science, environmental health, meteorology, natural science, toxicology or public health, of which (B) 2+ years must have been in professional capacity, or (C) any equivalent combination of required experience & substitutions below:
- I. Associate's degree with major in field of environmental science, biology, chemistry, earth science, environmental health, meteorology, natural science, toxicology or public health may be substituted for maximum of 1 year of required (A) experience
- II. Bachelor's degree with major in field of environmental science, biology, chemistry, earth science, environmental health, meteorology, natural science, toxicology or public health may be substituted for maximum of 2 years of required (A) experience
- III. Graduate degree with major in field of environmental science, biology, chemistry, earth science, environmental health, meteorology, natural science, toxicology or public health may be substituted for up to 3 years of required (A) experience & 1 year of required (B) experience Preferred Qualifications:
- Knowledge & demonstrated experience: developing appropriate data queries, data analysis, tracking data issues, & writing reports to meet program assessment, evaluation or Quality Assurance needs; developing, implementing, evaluating or conducting environmental audit, assessment or evaluation program, including significant use of data queries & data analysis to prepare reports; working with diverse stakeholder groups to audit, assess or evaluate environmental programs; writing reports, including principles of effective report writing & appropriate use of graphic elements
- Demonstrated skill using range of appropriate computer software (e.g., ACCESS)
- Strong interpersonal skills & excellent written & oral communication skills Responsibilities:
- Plan & implement data inquiries for quality assurance & write required reports (e.g., to EPA) to support goals of Enhanced Emissions Test program

Develop appropriate queries, analyze data, prepare reports & do appropriate follow-up based upon consultation with staff of DEP's I&M Branch, the RMV staff & the network contractor; evaluation of current queries & reports

# Program Coordinator - Bottle Bill Coordinator Responsibilities:

- Report to Deputy Division Director of Consumer Programs within Bureau of Waste Prevention
- Program coordination & implementation of MA Bottle Deposit Law (M.G.L. Ch.94 S. 321-327) & other regulatory driven waste prevention programs
- Oversee implementation of Bottle Deposit Law System, which includes development of policies, guidance & procedures; analyze & interpret data; administration grants & redemption

- center registration processes; resolve disputes & interpret statute & regulations; respond to general inquires from public
- Support implementation of other waste prevention regulations, policies & programs impacted by the Bottle Bill including Waste Bans, Department Approved Recycling Program, municipal grants & general education
- Contribute to regulatory & policy formulation; coordinate with stakeholders; fiscal oversight of programs; implement various waste prevention & environmental initiatives

State Government Jobs - Department of Environmental Protection continued

#### Environmental Analyst

#### **Boston**

- (A) 5+ years of full-time, or equivalent part-time, technical or professional experience in field of environmental science, biology, chemistry, earth science, environmental health, meteorology, natural science, toxicology or public health, of which (B) 3+ years must have been in professional capacity, & of which (C) 1+ year must have been in supervisory, managerial or administrative capacity, or (D) any equivalent combination of required experience & following substitutions:
- I. Associate's degree with major in field of environmental science, biology, chemistry, earth science, environmental health, meteorology, natural science, toxicology or public health may be substituted for maximum of 1 year of required (A) experience
- II. Bachelor's degree with major in field of environmental science, biology, chemistry, earth science, environmental health, meteorology, natural science, toxicology or public health may be substituted for maximum of 1 year of required (A) experience
- III. Graduate degree with major in environmental science, biology, chemistry, earth science, environmental health, meteorology, natural science, toxicology or public health may be substituted for maximum of 3 years of required (A) experience & 1 year of required (B) experience

#### **Preferred Qualifications:**

- Strong knowledge of & considerable experience with laws, rules, regulations, policies & principles of science for assessment & cleanup of disposal sites, including 21E/MCP, CERCLA, & Brownfield regulations
- Experience in overall program management
- Experience in inter-agency coordination, particularly related to site remediation
- Experience in managing federal Superfund & Brownfield programs & data management
- Experience in working with federal government
- Experience in supervising staff in review of: complex remediation feasibility studies, site assessment, hydrogeology, risk assessment, & public involvement plans
- Experience in use of alternative dispute resolution techniques
- Public speaking, risk communication, dispute resolution, & negotiation ability & experience
- Excellent oral and written communication skills

- Assist Section Chief in managing Bureau's involvement in investigation & remediation of federal Superfund & Brownfield sites, coordinating efforts between EPA, other State & Federal agencies, & DEP Boston & Regional offices, establishing priorities, resolving disputes internally & between agencies, & making recommendations to management
- Supervise project managers of lower grade in overseeing remediation projects at federal Superfund & Brownfield sites

- Manage complex remediation projects
- Recommend remedy selection & other program issues to Section Chief
- Represent Department in meetings with other agencies & general public
- Assist in development of Bureau positions & policies related to federal Superfund & Brownfield site program
- Participate on national work groups related to federal facility remediation & track & disseminate information on national federal Superfund & Brownfield site issues, policies, & guidance

State Government Jobs – Department of Environmental Protection continued

# Environmental Engineer\*

#### Boston

- (A) 4+ years of full-time technical or professional experience in field of environmental, civil, sanitary, mechanical, chemical or public health engineering (B) of which 2+ years must have been in professional capacity, or (C) any equivalent combination of required experience & substitutions below:
- I. Associate's degree with major in civil engineering or civil engineering technology may be substituted for maximum of 1 year of required (A) experience
- II. Bachelor's degree with major in environmental, civil, civil technology, sanitary, mechanical, chemical or public health engineering may be substituted for up to 2 years of required (A) experience
- III. Graduate degree with major in environmental, civil, sanitary, mechanical, chemical or public health engineering may be substituted for maximum of 3 years of required (A) experience & 1 year of required (B) experience

#### **Preferred Qualifications:**

- Experience in sampling, analysis, & field screening techniques
- Knowledge of principles and practices of environmental science
- Experience in project management with respect to organizing & prioritizing complex projects
- Knowledge of state & federal statutes & regulations relating to site remediation at federal Superfund & Brownfield sites
- Experience in reviewing, evaluating & analyzing environmental data as it relates to assessment of conditions as waste disposal sites
- Experience in evaluation & selection of appropriate remediation technologies
- Experience in reviewing, evaluating & interpreting design plans for remediation systems
- Experience in review & oversight of remediation on construction projects
- Experience in working with other state & federal agencies
- Strong oral & written communication skills

- Work in Superfund Sites Section of BWSC & manage complex disposal site remediation projects on federal Superfund & Brownfield sites
- Prepare &/or review scientific reports, studies & analytical data on environmental impacts & processes including review, evaluation & oversight of development & implementation of technical work plans, reports & field work related to investigation & assessment of nature & extent of contamination; evaluation of public health & environmental risk; development & implementation of remedial measures
- Participate in meetings with state & federal agency officials & contractors

Job trending information available.

- Attend public meetings
- Review & comment on work plans, reports & other documents within allotted timelines
- Manage site files
- Participate in enforcement activities & settlement negotiations
- Conduct briefings for supervisors & management within department
- Identify applicable or relevant & appropriate standards
- Recommend remedial alternatives
- Analyze environmental impact & public health risk assessments associated with hazardous waste/material treatment

State Government Jobs – Department of Environmental Protection continued

# Assistant Commissioner for Bureau of Waste Site Cleanup Boston

• (A) 6+ years of full-time, or equivalent part-time, supervisory or managerial experience in business administration, business management, or public administration (B) of which 3+ years must have been in managerial capacity

#### **Preferred Qualifications:**

- Proven managerial, supervisory, interpersonal, & leadership skills
- Proficient in writing & public speaking
- Thorough knowledge of environmental laws & regulations, particularly in area of oil and hazardous material releases, including understanding of technical & management concepts related to emergency response, site assessment, health impacts, remedial actions, natural resource damages, cost recovery, & information management

- Manage, direct & oversee Commonwealth's oil & hazardous material emergency response, site assessment & cleanup programs
- Direct & supervise Bureau staff & direct management responsibility for programs that ensure that:
  - o Emergency or time-critical response actions are taken to address sudden releases of oil or hazardous material and imminent hazards
  - o State funds are utilized to conduct response actions when necessary & state costs are recovered
  - o Response actions conducted by private parties are audited &, when necessary, appropriate enforcement actions are taken to ensure compliance
  - o State participation in response actions at federal Superfund sites is coordinated & managed
  - o Several federal grant programs in Bureau are maintained & implemented in accordance with grant requirements
  - o Bureau maximizes its billing & collection of annual compliance fees & hazardous waste transporter fees
  - o Bureau helps facilitate & coordinate brownfields projects in accordance with Commonwealth's Sustainable Development principles
- Set cleanup standards, establish operational procedures & policies to guide program operations, evaluate program, including recommending & implementing appropriate changes to regulations, polices & procedures
- Coordinate operations & program implementation issues with Regional Directors & Deputy Regional Directors
- Chair Advisory Committee, routinely making presentations & taking comment on numbers of

issues associated with regulation & policy development & implementation

• Active participation & presentations at state, national, & international forums

#### Assistant Commissioner for Bureau of Resource Protection Boston

• (A) 6+ years of full-time, or equivalent part-time, supervisory or managerial experience in business administration, business management, or public administration (B) of which 3+ years must have been in managerial capacity

State Government Jobs – Department of Environmental Protection continued

Assistant Commissioner for Bureau of Resource Protection continued Preferred Qualifications:

- Good working knowledge of state & federal environmental regulations & statutes, particularly in areas of water resource issues
- Proven negotiation & facilitation skills particularly with multiple parties having many competing & divergent interests
- Demonstrated policy leadership abilities & stakeholder relationship building skills
- Technical understanding of BRP programs
- Proven experience with developing & implementing programs to ensure effective & efficient delivery of services
- Continuous quality improvement approach to their responsibilities to include: streamlining bureaucratic processes & decision making; innovation in regulatory approaches; & modifying & adjusting programs to meet changing issues & technologies

#### Responsibilities:

- Manage, plan & direct Commonwealth's programs for: protection of ground & surface waters, preservation of wetland/river/waterway resources, safety of public water supplies, management of watershed resources, & activities related to water resource protection
- Oversee State Revolving Fund, which loans approximately \$300m annually for water infrastructure planning projects, & which is jointly administered by DEP, State Treasurer's Office & Executive Office of Administration & Finance
- Represent Commissioner on various boards & commissions that address water resource issues
- Lead Bureau management team in Boston office consisting of two Division Directors (Divisions of Watershed Management & Municipal Services) & Director of Office of Planning & Program Support, & routine coordination with Directors of 4 DEP Regional Offices & 4 Deputy Regional Directors for Bureau of Resource Protection on day to day program implementation issues
- Active within many state & regional forums, where they represent DEP & make presentations
- Keep up on emerging issues in areas of Bureau's responsibility & identify issues to be elevated to Department's senior management team
- Provide input on key policies, regulations & initiatives beyond those of Bureau of Resource Protection

# Chief Counsel for Bureau of Waste Site Cleanup Boston

- Degree from recognized degree-granting school of law; Membership in Massachusetts Bar
- 1+ year professional experience in practice of law or in a position requiring membership in Bar Preferred Qualifications:

- Knowledge of & practice in environmental law, particularly M.G.L. c.21E & CERCLA
- Excellent legal, research, oral & written communication skills
- 4 years experience as practicing attorney, as well as significant supervisory experience
- Experience with or knowledge of regulatory practice
- Transactional experience (including, business transactions, contracting & conveyancing)
- Familiarity with use & application of modern computer technology

# Responsibilities:

- Supervise attorneys assigned to assist BWSC
- Provide legal advice to Assistant Commissioner & staff on all aspects of statutes, regulations & policies implemented by Department (primarily state privatized cleanup program & the federal superfund program)

State Government Jobs - Department of Environmental Protection continued

# Household Hazardous Waste Reduction Planner - Contractor

**Boston** 

#### **Preferred Qualifications:**

- Demonstrated ability to plan & lead time-sensitive, high profile projects, coordinate teams, & define & meet specific objectives
- Demonstrated understanding of solid waste management principles & practices, including: toxicity reduction, reuse, recycling & disposal, household hazardous waste, universal waste & difficult to manage waste
- Ability to understand, explain & apply laws, rules, regulations, policies & procedures governing Bureau, Division, Unit & Branch
- Ability to write concisely, express thoughts clearly, & prepare information for distribution & presentation to public
- Ability to collect, organize & analyze data as part of program planning & management process
- Experience writing or reviewing Requests for Proposals or grant applications; contract negotiation & management
- Expertise in Microsoft Office, Windows, Word, Excel required; expertise in Microsoft Access & other PC compatible software desired

- Coordinate Branch's Household Hazardous Waste program including: technical, planning, & regulatory compliance assistance on HHW collection & management to municipalities, schools, institutions, small businesses, & regional groups; public information via web, training, workshops, publications & information hotlines; manage statewide contracts for HHW & mercury collection/disposal; manage municipal grants for HHW & toxicity reduction initiatives; research best management practices & recycling or disposal options for HHW & difficult to manage wastes; liaison with DEP Business Compliance staff, DEP regional office staff, & private vendors
- Coordinate mercury diversion programs such as the Municipal Waste Combustors' Mercury Separation Plans
- Coordinate public information on cathode ray tube disposal ban & oversee state contract for electronics recycling vendors
- Coordinate toxicity reduction in schools, such as school chemical management program
- Collect & analyze data to monitor effectiveness of HHW & recycling programs
- Assess HHW & recycling program needs & assist in development & implementation of related

# **Department of Fish And Game**

Scientists - Tern Colony Site Assistants

Responsibilities:

Assist Site Managers with:

- Discouragement of nesting gulls
- Census colonies of common & endangered roseate terns, herring & great black-backed gulls
- Monitor tern productivity, trap & band adult terns, band tern chicks
- Predator control
- Data management & write end-of-season report

State Government Jobs - Department of Fish and Game continued

# Scientists - Tern Colony Site Managers

#### Responsibilities:

- Discouragement of nesting gulls
- Census colonies of Common & endangered Roseate Terns & Herring & Great Black-backed Gulls
- Monitor tern productivity, trap & band adult terns, band tern chicks
- Predator control
- Data management & write end-of-season report
- Supervise workers, including one full-time assistant each, on island
- Operate outboard motorboats in marine environment

#### Fisheries Technician

#### Responsibilities:

- Collect biological, environmental, & fisheries data in coastal waters, including work on small craft in bays & estuaries & ocean-going fishing & research vessels
- Assist with summarizing & presenting biological & environmental data
- Perform literature surveys of scientific journals, newspapers, magazines & trade publications
- Record & organize data including computer coding & data entry for computer analysis
- Prepare technical & non-technical letters, memoranda, & reports
- Operate & maintain field equipment including specialized environmental data recording equipment; motor vehicles, including small craft & trailers; sampling gear

#### **Department of Public Health**

#### Environmental Analyst

- Primary staff person responsible for emergency planning & response for Bureau of Environmental Health Assessment
- Assist Emergency Response/Indoor Air Quality & Toxicology programs in responding to threats

- of terrorism regarding biological, chemical & radiological threats of mass destruction
- Represent Bureau in various public meetings, seminars, interagency meetings, professional society meetings, & other events in areas of emergency response, & chemical/biological terrorism topics

State Government Jobs – Department of Public Health continued

#### Senior Scientist

#### Boston

- (A) 4+ years of full-time, or equivalent part-time, technical or professional experience in field of environmental science, biology, chemistry, earth science, environmental health, meteorology, natural science, toxicology or public health, of which (B) 2+ years must have been in professional capacity, or (C) any equivalent combination of required experience & substitutions below:
- I. Associate's degree with major in field of environmental science, biology, chemistry, earth science, environmental health, meteorology, natural science, toxicology or public health may be substituted for maximum of 1 year of required (A) experience
- II. Bachelor's degree with major in field of environmental science, biology, chemistry, earth science, environmental health, meteorology, natural science, toxicology or public health may be substituted for maximum of 2 years of required (A) experience
- III. Graduate degree with major in field of environmental science, biology, chemistry, earth science, environmental health, meteorology, natural science, toxicology or public health may be substituted for maximum of 3 years of required (A) experience & 1 year of required (B) experience
- Knowledge of principles & practices of environmental science & public health
- Knowledge of terminology & standard abbreviations used in environmental science & public health
- Knowledge of properties & characteristics of carcinogens, mutagens, teratogens & other toxicological agents
- Knowledge of entry & fate of acute toxins in human body
- Knowledge of mathematical computations used in solving environmental problems
- Knowledge of probability & statistics
- Knowledge of methods of general & technical report writing
- Knowledge of methods used in preparation of charts, graphs & tables
- Ability to: read & interpret documents such as risk assessments, chemical analysis, biological analysis & hydrogeology reports; prepare technical & general reports; prepare & use charts, graphs & tables; write concisely & express thoughts clearly; give oral & written instructions in a

- precise, understandable manner; assemble items of information according to established procedures; analyze & determine applicability of environmental science data to draw conclusions & make appropriate recommendations
- Ability to supervise, including planning & assigning work according to the nature of the job to be accomplished, the capabilities of subordinates & available resources; control work through periodic reviews & /or evaluations; determine subordinates training needs & provide or arrange for such training; determine need for disciplinary action & either recommend or initiate disciplinary action

# **Preferred Qualifications:**

- Masters degree in public health or epidemiology, with minimum of 2 years experience working in area of cancer, behavioral, occupational & environmental health sciences or health education
- Knowledge of behavioral, occupation & environmental health sciences
- Strong writing skills
- Ability to make effective & clear oral presentations on cancer & environmental health issues to professionals & lay audiences
- Ability to supervise junior staff working on descriptive epidemiological investigations of cancer State Government Jobs – Department of Public Health continued

# Senior Scientist Preferred Qualifications continued:

- Ability to understand & explain to lay audiences, information contained in technical environmental public health documents produced by CEH
- Ability to understand, apply, & explain policies, procedures, specifications, standards, guidelines, laws, rules & regulations governing assigned Bureau activities, specifically in environmental health & cancer related research
- Knowledge of variety of computer software programs Responsibilities:
- Serve as senior scientist working on federal government health assessment activities in Center
  for Environmental Health (CEH). Responsible for projects conducted under CEH's cooperative
  agreement with U.S. Agency for Toxic Substances & Disease Registry, including completing
  health consultations & public health assessments for hazardous waste sites throughout
  Commonwealth in which potential health effects from environmental exposure opportunities are
  assessed.
- Assist Deputy Director of CEH with technical support, such as evaluating draft letters or documents prepared by other CEH staff.
- Represent CEH at interagency or public meetings
- Responsible for related projects conducted under CEH cooperative agreement with US Agency for Toxic Substance Disease Registry (ATSDR); conduct reviews of environmental data for possible public health concerns
- Prepare draft health consultations & public health assessment for review by Deputy Director
- Assist Deputy Director in review of other CEH letters & documents for technical content & clarity
- Assist in review of toxicological & epidemiologic research. Assemble & review findings regarding specific chemicals, exposures &/or health effects. Interpret & critique study reports & prepare summaries for review by Deputy Director
- Conduct epidemiologic investigations in cases where exposure to pollutants is suspected.
   Assemble exposure information & summarize it in a form which is scientifically valid & appropriate

- Represent CEH at environmental health informational meetings for local officials such as boards of health & public. Arrange for meetings, compile & distribute informational packages. Prepare presentations on technical information. Present technical information for public meetings & meetings of inter & intra-agency groups
- Provide information on toxic substances to public. Compose fact sheets & educational materials for public on effects of pollutants in air, water, soil, surface water & food
- Assist in investigation of complaints from public regarding health impacts of air, water, soil & noise pollution. Assist in investigations regarding overexposure to chemical, microbial, or physical hazards
- Assist local boards of health, other agencies & public on interpretation of environmental health, toxicology & epidemiology
- Assist in design & development of testing or sampling programs to determine public health hazards from toxic chemical, biological, or physical hazards to provide results to physicians & other authorized personnel
- Review MDEP & USEPA files on hazardous waste sites
- Perform site inspections to identify potential environmental hazards & pathways of exposure State Government Jobs – Department of Public Health continued

#### Environmental Analyst

#### Boston

- (A) 4+ years of full-time technical or professional experience in field of environmental science, biology, chemistry, earth science, environmental health, meteorology, natural science, toxicology or public health, of which (B) 2+ years must have been in professional capacity, or (C) any equivalent combination of required experience & substitutions below:
- I. Associate's degree with major in field of environmental science, biology, chemistry, earth science, environmental health, meteorology, natural science, toxicology or public health may be substituted for maximum of 1 year of required (A) experience
- II. Bachelor's degree with major in field of environmental science, biology, chemistry, earth science, environmental health, meteorology, natural science, toxicology or public health may be substituted for maximum of 2 years of required (A) experience
- III. Graduate degree with major in field of environmental science, biology, chemistry, earth science, environmental health, meteorology, natural science, toxicology or public health may be substituted for maximum of 3 years of required (A) experience & 1 year of required (B) experience
- Knowledge of principles & practices of environmental science & public health
- Knowledge of terminology & standard abbreviations used in environmental science & public health
- Knowledge of types & uses of instruments & equipment, both portable & stationary, used in measuring environmental conditions
- Knowledge of environmental properties of soils including transmissivity, bacteriological activity, & absorption
- Knowledge of methods of soil testing including soil classification, chemical content, trace metals analysis & aquifer characteristics
- Knowledge of properties & characteristics of carcinogens, mutagens, teratogens & other toxicological agents
- Knowledge of entry & fate of acute toxins in human body

- Knowledge of chemical properties of water including pH, conductivity, presence of trace metals, volatile organic compounds, turbidity, nutrient levels & seasonal temperature characteristics
- Knowledge of principles & techniques of toxicology including risk analysis & regression analysis
- Knowledge of types & uses of toxicological testing
- Ability to supervise, including planning & assigning work according to nature of job to be
  accomplished, capabilities of subordinates & available resources; control work through periodic
  reviews &/or evaluations; determine subordinates' training needs & provide or arrange for such
  training; determine need for disciplinary action & recommend or initiate disciplinary action

# Responsibilities:

- Lead Center for Environmental Health (CEH) in linkage efforts associated with health & environmental data related to birth defects environmental public health tracking project
- Identify exposures of interest to be linked to birth defects data available from Massachusetts Birth Defects Registry. Be the CEH liaison with Birth Defects Registry staff & evaluate readily available environmental data for linkage with health data. Develop detailed protocol that provides an evaluation of scientific literature on possible association between birth defects captured by Massachusetts registry & environmental exposure opportunities

State Government Jobs - Department of Public Health continued

# Environmental Analyst Responsibilities continued:

- Coordinate all aspects of environmental public health tracking project related to birth defects tracking project
- Ensure regular coordinated meetings with Mass Birth Defects Registry staff
- Ensure all applicable confidentiality requirements are met to carry out goals & objectives of project
- Develop preliminary draft protocol & work plan for health & environmental linkage project related to exposures of interest & birth defects
- Work with Environmental Public Health Tracking team to assign geocodes to various health & environmental data including birth defects data & low birth weight data using GIS geocoding engine
- Process electronic environmental public health surveillance databases into standardized database schema; work with CEH contacts to define variable required for electronic database
- Evaluate usefulness of existing environmental databases and serve as liaison with MDEP for this project
- Assist in development of geographic display of health & environmental data including major birth defects database from 1999 forward
- Respond to public inquiries about Environmental Public Health Tracking Project & general
  inquiries regarding birth defects & environmental exposure, including drafting relevant
  correspondence for Associate Commissioner review

# Director of the Community Assessment Program Responsibilities:

- Supervise program staff including staff supported by federal monies
- Perform analyses of health & environmental data to determine public health impacts from environmental hazards & recommend public health strategies for reducing them
- Develop methodologies & conduct studies to determine public health risks associated with

- various environmental hazards through analyses of health, environmental, meteorological, & hydrogeological data
- Manage program triaging of requests to evaluate cancer or other health outcomes suspected to be related to environmental exposure opportunities
- Conduct or oversee description or analyze environmental epidemiology analysis of health outcome data
- Be familiar with statistical methods for analyzing health & environmental data
- Provide direct supervision to two senior professional staff
- Develop methodology for collection of environmental & health data
- Prepare scientific reports eventuating possible health concerns related to environmental exposure opportunities
- Make recommendations for reduction of environmental risks
- Develop risk communication strategies
- Review scientific proposals from consultants, select contractors, oversee work of contractors, & develop recommendations from results of their studies
- Prepare testimony for hearings on environmental public health issues
- Direct public meetings on public health issues and projects
- Direct establishment of computerized environmental & health database
- Represent CEH at inter- or intra-agency meetings

State Government Jobs – Department of Public Health continued

# Senior Scientist in Environmental Toxicology Program Boston

- (A) 3+ years full-time, or equivalent part-time, technical or professional experience in field of environmental science, biology, chemistry, earth science, environmental health, meteorology, natural science, toxicology or public health, of which (B) 1+ year must have been in professional capacity, or (C) any equivalent combination of required experience & following substitutions:
- I. Associate's degree with major in field of environmental science, biology, chemistry, earth science, environmental health, meteorology, natural science, toxicology or public health may be substituted for maximum of 1 year of required (A) experience
- II. Bachelor's degree with major in field of environmental science, biology, chemistry, earth science, environmental health, meteorology, natural science, toxicology or public health may be substituted for maximum of 2 years of required (A) experience
- III. Graduate degree with major in environmental science, biology, chemistry, earth science, environmental health, meteorology, natural science, toxicology or public health may be substituted for required experience
- Knowledge of principles & practices of environmental science & public health
- Knowledge of terminology & standard abbreviations used in environmental science & public health
- Knowledge of probability & statistics
- Ability to: prepare technical & general reports; prepare & use charts, graphics & tables; maintain accurate records; write concisely, express thoughts clearly & develop ideas in logical sequence; work accurately with numbers, codes, &/or symbols; assemble items of information according to established procedures; analyze & determine applicability of environmental science data, draw conclusions & make appropriate recommendations

### **Preferred Qualifications:**

- Knowledge of basic epidemiological & toxicological principles
- Knowledge of risk assessment methodologies
- Knowledge of principles of statistics, general biology, toxicology, microbiology & environmental science
- Ability to critically evaluate toxicologic & epidemiological literature regarding environmental pollutants & other environmental health problems
- Ability to prepare written technical & and to write clearly & concisely
- Knowledge of toxicological modeling techniques & their interpretation
- Knowledge of analytic chemistry methods & their environmental applications
- Ability to make effective oral presentations

## Responsibilities:

- Assist with tasks related to exposures/hazard endpoints of environmental public health tracking pilot projects
- Assist in coordination & program direction with development of detailed scientific protocols for pilot demonstration projects, particularly with respect to environmental exposure data to be linked with health data
- Implement study protocol tasks, particularly for developmental effects & PCBs pilot demonstration project
- Develop & implement guidelines for environmental toxicology program tasks for tracking program

State Government Jobs - Department of Public Health continued

Senior Scientist in Environmental Toxicology Program Responsibilities continued:

- Coordinate with CEH IT coordinator to develop electronic data reporting capabilities
- Perform evaluations of exposure databases to be linked to health outcomes
- Assists in review of toxicologic research for chemicals thought to be related to targeted health outcomes of tracking program. Interpret & critique study reports, & prepare summaries for review by program director
- Assemble exposure information & summarize it in a scientifically valid & appropriate form. Interpret epidemiological results with respect to environmental exposures
- Development information meetings on tracking initiatives for local officials such as board of health. Arrange for meetings, compile & distribute information packages; prepare presentations on technical information to meetings of inter & intra-agency groups
- Provide information on toxic substances to public
- Assist local boards of health, other agencies & public on interpretation on environmental health, toxicology, & epidemiology

#### **Executive Office Of Environmental Affairs**

The Executive Office of Environmental Affairs (EOEA) directs & coordinates all state policy aimed at preserving & protecting natural resources & environmental integrity of Commonwealth.

State Sustainability Program Manager

## Responsibilities:

• Collect & compile information from agencies & incorporate information into first

- Massachusetts State Government Sustainability Report
- Annually update agency greenhouse gas inventory, analyze energy consumption trends, & write yearly reports
- Develop baselines for other environmental indicators, including water consumption & waste generation
- Coordinate State Sustainability Agency Pilot Project Program, oversee funding process, project prioritization, write, bid & coordinate consultant contracts, project follow-up & reports
- Participate as staff for various State Sustainability Committees & work with Program Director to assist Committees in prioritizing & implementing identified strategies from State Sustainability Implementation Guide & Massachusetts Climate Protection Plan
- Develop annual goals & objectives for program & workplace & timeline for achieving goals
- Develop training & education sessions for statewide & targeted audiences
- Educate state agencies on variety of environmental topics, including recycling, energy efficiency, water conservation, sustainable design, toxics reduction, & environmental purchasing
- Assist Director in working with agencies to develop Agency Sustainability Plans
- Develop agendas & write minutes for monthly State Sustainability Coordinating Council meetings & Steering Committee meetings
- Update & expand State Sustainability website
- Develop fiscal analysis of sustainability efforts

State Government Jobs – Executive Office of Environmental Affairs continued

Assistant Secretary of Massachusetts Policy Act (MEPA)

The Massachusetts Environmental Policy Act (MEPA) office is an agency of the Commonwealth of Massachusetts & is part of the EOEA. Through the MEPA office, the Secretary conducts environmental impact reviews of certain projects requiring state agency action. Agency actions include granting state permits or licenses providing state financial assistance, or transferring state land.

#### **Boston**

• (A) 5+ years of full-time or equivalent part-time, supervisory or managerial experience in business administration, business management or public administration (B) of which 2+ years must have been in management capacity

### **Preferred Qualifications:**

- State, federal, or local government, or private sector experience related to environmental law, regulation & analysis
- Familiarity with MEPA statute & regulations
- Excellent written & oral skills
- Thorough knowledge of Massachusetts environmental laws & regulations
- Broad scope of knowledge to review information concerning project planning, design, transportation, energy & impacts associated with major project development
- Ability to review & evaluate proposed project mitigation Responsibilities:
- Administer all aspects of state's environmental review process, including: review proposed

public & private projects to determine whether environmental impact report should be prepared, establish scope of review, evaluate adequacy of reports, interpret MEPA regulations, review project changes, publish Environmental Monitor, train & outreach, & respond to numerous requests from developers, citizens, agencies, & legislators for information & assistance

Special Assistant for Water Policy Implementation Boston

### **Preferred Qualifications:**

- 5 years private sector experience
- 5 years policy development experience
- Experience with wastewater & water supply systems
- Excellent written & oral presentation skills

# Responsibilities:

- Oversee implementation of November 2004 Water Policy & direct action on specific tasks within Water Policy to ensure timely completion of tasks in accordance with Implementation
- Plan & full involvement of staff across all EOEA & OCD agencies
- Provide policy guidance on issues related to variety of water policy issues from reviewing agency policy actions to guiding policy development on items not included in Water Policy

# **Chapter 7: Local Government Jobs in Boston Metro-Area**

# **A. City of Boston** www.cityofboston.gov/

# 1. Environment Department www.cityofboston.gov/environment/

The City's Environment Department aims to protect our built & natural environments & provide information on environmental issues affecting Boston. The Department is involved in all Environmental Review processes undertaken in the City.

## Environmental programs:

# a. Boston Environmental Strike Team

Aims to stop polluters, illegal dumping and other environmentally hazardous situations

## b. Central Artery Environmental Oversight

Oversees the environmental aspects of the Big Dig.

### c. Pilot Project Pesticide Training

Audits & trains residents & employees of Boston Housing Authority (BHA) in integrated pest-management techniques

# d. Boston Brownfields Project

Department oversees many Boards, Partnerships & Commissions including:

# a. Boston Conservation Commission

This commission protects & preserves open space & other natural areas of the City including wetlands. The BCC administers the Massachusetts Wetlands Protection Act (M.G.L.c131s.40), Massachusetts Rivers Protection Act (HB s. 18.26), Conservation Commission Act (HB s. 18.9)

### b. Air Pollution Control Commission

The Environmental Reviewer evaluates development, infrastructure & transportation projects; proposed regulatory changes; & permitting applications. Reviews are conducted pursuant to the Massachusetts Environmental Policy Act (MEPA); Article 80 of the Boston Zoning Code; MGL Chapter 91, administered by Massachusetts Department of Environmental Protection; National Environmental Policy Act (NEPA); & other regulatory processes. The department analyzes projects for potential environmental impacts on the City of Boston and its residents. The reviews identify specific environmental impacts and the department suggests potential solutions.

### c. Historic District Commissions

Each local district commission has a Preservation Planner located in the Environment Department to provide information and to assist with the application process.

## d. Boston Landmarks Commission

The City's preservation commissions, all headquartered within the Environment Department, provide information and assistance concerning the regulatory process, preservation planning, archaeology, sources for historical information, and technical assistance.

# e. Central Artery Environment Oversight

The responsibilities of the Environment Department Central Artery Environmental Compliance Team include: oversight of environmental mitigation measures, administering issuance of permits, review of CA/T documents, resolution of environmental complaints, enforcement of applicable environmental laws, regulations, and ordinances in addition to any environmental coordination, outreach, and monitoring necessary throughout all phases of the Project's planning, design, and construction stages. The team members are also involved in the development of new open space and wildlife habitat areas that the Project is creating to compensate for construction impacts upon the community and environment.

# 2. Parks and Recreation Department www.cityofboston.gov/parks

The Boston Parks and Recreation Department oversees 2,200 acres of parkland including 215 parks and playgrounds, 65 squares, urban woodlands and street trees.

# a. Park Rangers www.cityofboston.gov/parks/ParkRangers/

The responsibilities of Boston Park Rangers include park security and safety, visitor services, resource management and interpretive programming. Rangers provide services in the nine Emerald Necklace parks, as well as Boston's historic burying grounds, neighborhood parks and playgrounds. The Boston Park Rangers have three primary areas of responsibility: public assistance, public safety and park protection and interpretive programming.

- i. Jamaica Pond www.cityofboston.gov/parks/parkrangers/jamaicapond.asp
- ii. Mounted Unit www.cityofboston.gov/parks/parkrangers/mountedunit.asp
- iii. Patrol and Safety www.cityofboston.gov/parks/parkrangers/patrolandsafety.asp
- iv. Interpretative Programming www.cityofboston.gov/parks/parkrangers/int\_programming.asp

# $b.\ Urban\ Forestry\ www.cityofboston.gov/parks/streettrees/default.asp$

The Parks Department is the agency with regulatory and operational responsibilities for public shade trees. The Department's maintenance program includes pruning, disease control, removals, and storm damage repairs. We plant public shade trees throughout Boston's 22 neighborhoods.

### c. Urban Wilds www.cityofboston.gov/parks/UrbanWilds/default.asp

The Urban Wilds Initiative (UWI), run through the Boston Parks and Recreation Department, seeks to protect the city's publicly owned urban wilds and thereby ensure access and enjoyment of natural treasures to present and future Boston residents. The goals of Urban Wilds Initiative are:

- Protect city-owned urban wilds and other natural areas from development, encroachment, and uses that degrade their natural character.
- Manage & maintain city-owned urban wilds & natural areas to promote their ecological integrity
- Promote the use of city-owned urban wilds and other natural areas for passive recreation, environmental education, and other uses in keeping with their natural character.
- Develop administrative, fiscal, and programmatic resources to ensure on-going, long-term maintenance and management of city-owned urban wilds and other natural areas
- Advocate for the long-term protection and stewardship of other (non-city) publicly- and privatelyowned urban wilds and other natural areas.

# 3. Boston Public Health Commission www.bphc.org/

The Environmental Health Program oversees the environmental health of Boston residents by monitoring environmental conditions and hazardous waste and working to prevent childhood lead poisoning and asthma.

- 4. Public Works Department www.cityofboston.gov/publicworks/
- *a. Recycling* www.cityofboston.gov/publicworks/recycling/ Services:
- Curbside Recycling
- Paint & Motor Oil
- Hazardous Waste

- Large Apartment Buildings
- Seasonal Yard Waste
- Electronics

# **B. Town of Brookline** www.town.brookline.ma.us/

1. Conservation Committee www.townofbrooklinemass.com/Conservation/Index.html
The Brookline Conservation Commission is responsible for administration of environmental laws & policies, open space protection & management, water management, preservation of natural features of environment, & coordination for joint action with many town bodies. The Commission administers & enforces Massachusetts Wetlands Protection Act & Massachusetts Rivers Protection Act through its review of permit applications & issuance of Determinations of Applicability, Orders of Conditions, Certificates of Compliance, & Enforcement Orders. The Commission also administers Federal Flood Protection Program. It initiates & helps guide studies concerning open space, water quality, flooding, & other aspects of local environmental quality. It prepares & oversees implementation of Town's Open Space Plan & manages conservation areas owned & conservation restrictions held by Town. The Conservation Commission seeks & administers grants from state agencies & other sources to support Town's environmental protection efforts, & guides many volunteer open space maintenance & improvement activities.

Staff: Conservation Administrator and Conservation Assistant

## 2. Health Department, Environmental Health

www.townofbrooklinemass.com/Health/Environmental.html

Protect public health by maintaining comprehensive program of environmental health services, which includes inspections, compliance, & enforcement activities, monitoring of environmental hazards, & consultation & guidance to citizens & governmental agencies regarding environmental health issues

Staff: Chief Environmental Health, Senior Inspector, Code Enforcement, Sanitarian, Senior Inspectors, Environmental Health Intern

# C. City of Cambridge www.cambridgema.gov/

# 1. Public Health Department, Environmental Health Unit

www.cambridgepublichealth.org/prog\_serv/env\_healthunit.html

## Responsibilities:

- 1. Respond to citizen concerns about exposure to chemical and biological agents
- Work with residents to understand risks in the home or the community
- Consult with Cambridge Health Alliance Department of Occupational Medicine, Division of Occupational Safety & Massachusetts Department of Public Health on health hazards
- Conduct on-site investigations of possible threats to health from environmental exposures: mold, indoor air quality, and other chemical exposures
- 2. Develop environmental health policies at the request of the City Manager
- 3. Enforce state environmental health and public health statutes
- 4. Administer Healthy Homes program to provide environmental home assessments, medication reviews and asthma education to families with children suffering from asthma
- 5. Manage Mass. Department of Environmental Protection records and notices (21E sites, Mass. Contingency Plan sites and other "brownfield" sites)
- Resultant database will serve as the foundation for geographic information systems (GIS) mapping project in coordination with the Health Information Unit
- Hazardous materials database and GIS mapping will facilitate public information requests and local regulatory functions.
- GIS maps and databases will also provide metrics for assessing future priorities
- 6. Guide the site assessment and risk characterization process for sites of concerns
- 7. Serve as liaison for environmental concerns between the department and all other City of Cambridge departments with shared responsibilities (e.g. Inspectional Services, Water, Public Works, Community Development)
- 8. Maintain health information material on environmental and occupational health concerns in our files and our library

Staff: Director, Environmental Health Officer, Healthy Homes Case Worker, Healthy Homes Coordinator

# 2. Community Development Department www.cambridgema.gov/CDD/

Protects & improves environmental quality in Cambridge through programs & projects that prevent pollution, encourage environmentally friendly alternatives, & remediate contamination. Current activities include coordination of Cambridge's participation in Cities for Climate Protection; conducting environmental reviews of major development projects under local, state, and federal regulatory processes; and managing environmental investigations.

### a. Climate Protection

City of Cambridge has made a commitment to reduce greenhouse gas emissions that contribute to global warming.

### b. Environmental Investigation

The City is currently engaged in environmental clean up activities.

Staff:

Project Administrator Environmental Planner PTDM Officer Project Planners
Director of Environmental & Transportation Planning
Associate Planner/Transportation Demand Management Planner

Associate Planner/Traffic Calming Project Manager

Associate Planner/Transportation Improvement Coordinator

# **3. Conservation Commission** www.cambridgema.gov/CCC/

The Conservation Commission protects & enhances City's natural resources through regulatory review, planning, advocacy, & education. The Commission administers Massachusetts Wetlands Protection Act Regulations, reviewing & permitting projects proposed in or near Cambridge's wetlands & floodplains. The Commission works toward protection of Cambridge's water resources through review of Environmental Impact Reports and other environmental documentation and permit applications for projects proposed in Cambridge. The Commission also advises other City departments on natural resources issues, works with regional, state, and federal agencies and groups to address issues of environmental concern and works to inform and advise the public on environmental issues. In addition, the Commission coordinates the fourteen community gardens, which serve more than 400 Cambridge gardeners each year.

Staff: Director

- **4. GIS** www.cambridgema.gov/GIS/
- **5. Public Works Department** www.cambridgema.gov/TheWorks/

# **6. Water Department** www.cambridgema.gov/CWD/

Water board: http://www.cambridgema.gov/CWD/waterboard.cfm

The Cambridge Water Departments' (CWD) responsibilities include:

- Protect tributaries & reservoirs in watershed within & outside of Cambridge City limits
- Operate, maintain & improve 24-million gallon per day water treatment facility to purify water to level that meets & exceeds Federal and State drinking water standards
- Protect, maintain & improve Fresh Pond Reservation as City's terminal water supply reservoir
- Operate, maintain & improve 190 miles of piping network, including pipeline that brings raw water from upcountry to Fresh Pond & subsurface water distribution system throughout city
- Provide engineering, design, permitting, construction services & contract administration for water & other City projects
- Protect purified water from potential hazardous contamination through improper connections to the piping network & Removal of lead water services wherever possible

# **Chapter 8: Environmental Nonprofit Organizations in the Boston Metro-Area**

# **Alternatives for Community & Environment** www.ace-ej.org Roxbury

Mission Statement: ACE builds the power of communities of color and lower income communities in New England to eradicate environmental racism and classism and achieve environmental justice. We believe that everyone has the right to a healthy environment and to be decision-makers in issues affecting our communities.

### Programs:

- a. Roxbury Environmental Empowerment Project REEP develops environmental justice leadership among youth in our home neighborhood through an environmental justice curriculum, internship program, and youth-led projects.
- b. Roxbury Safety Net ACE organizes public housing residents and others in Roxbury to develop a voice and vision for a sustainable Roxbury and equitable metropolitan development.
- c. Environmental Justice Networks ACE staffs the Greater Boston Environmental Justice Network, bringing together 30 neighborhood groups and is the New England coordinator for the Northeast Environmental Justice Network.
- d. Transportation Justice ACE facilitates On the Move: Greater Boston Transportation Justice Coalition and is home to the T Riders Union, a group organizing transit riders with 500+ members. Both seek to improve environment and quality of life for low income neighborhoods and neighborhoods of color through transportation improvements.
- e. Legal & Technical Assistance ACE attorneys work in close partnership with community groups in greater Boston, providing legal representation in combination with capacity building and organizing assistance. In addition, ACE coordinates the Massachusetts Environmental Justice Assistance Network (MEJAN), a network of more than 100 attorneys, public health professionals, and environmental consultants, who provide pro bono assistance to groups throughout the state.

### Staff:

Community Organizer
REEP Co-Director/Community Organizer
Staff Attorney\*
Program Director
Development Coordinator

Executive Director
REEP Coordinator
T Riders Union (TRU) Coordinator
Program Director/REEP Co-Director

# **Appalachian Mountain Club** www.outdoors.org

**Boston** 

Founded in 1876, AMC is America's oldest conservation & recreation organization. We fulfill our mission through 3 interconnecting pillars of AMC: conservation, education, & recreation.

<sup>\*</sup> Job trending information available.

### Conservation

We work to conserve the region's woodlands, mountains, and waterways, and to provide clean air and water for future generations. We use research, advocacy, community outreach, and education, and place a value on strong local economies.

#### Education

People of all ages, abilities, and backgrounds participate in our outdoor and environmental education programs, developing the skills and understanding to enjoy, protect, and advocate for the Northeast outdoors.

#### Recreation

AMC staff and volunteers lead trips, manage lodging and trails, teach outdoor skills, and provide resources and information on outdoor activities. We use advocacy and education to help protect natural recreation areas for generations to come.

### Arnold Arboretum www.arboretum.harvard.edu/

Jamaica Plain

# Statement of Purpose:

The historical mission of the Arnold Arboretum is to increase knowledge of woody plants through research and to disseminate this knowledge through education. Today this mission is carried out by 1) Development, curation, and maintenance of a well documented collection of living woody plants.

- 1) Development, curation, and maintenance of a well-documented collection of living woody plants from around the world that are hardy in the Boston area; and the execution of these responsibilities within the landscape of the Arboretum designed by Frederick Law Olmsted
- 2) Development and curation of an herbarium, library, and related information systems to support research on woody plants, their associations in nature and their future conservation
- 3) Development of related programs for instruction, publication, and public information

### Staff:

Living Collections:

Plant Propagator Head Arborist Manager of Plant Records Horticultural Technologist Plant Records Assistant Curatorial Assistants

Working Foreman Curator Emeritus Gardener
Arborist Assistant Superintendent of Grounds

Co-Director of Living Collections & Superintendent of the Grounds
Co-Director of Living Collections and Manager of the Greenhouse

## Public and Professional Programs:

Horticultural Research Archivist Director, Landscape Institute

Editor of *Arnoldia*Children's Education Coordinator
Manager of Adult Education

Office Manager, Landscape Institute
Manager of Horticultural Information
Registrar, Landscape Institute

### Research:

Assistant Director, Collections of the Harvard University Herbaria, and Research Taxonomist

Systems Administrator Science Director Senior Research Scientist

Curatorial Assistants Staff Assistant Database Applications Developer

Botanical Project Manager Research Assistants Botanical Taxonomist

Tropical Plant Systematist Mercer Fellow Sargent Fellow

Catalog Librarian

Library Assistants

Collection Development Librarian

Director, Botany Libraries

Sargent Fellow

Manager, Systematics Collections

# Boston Greenspace Alliance www.greenspacealliance.org/

**Boston** 

Through outreach, education and advocacy, Boston GreenSpace Alliance is making open space preservation and stewardship a reality. Since its founding, Boston GreenSpace Alliance has: improved park and street tree quality in Boston; raising the standard for natural resource stewardship; created a strong coalition of public and private open space groups in Boston to affect sustainable public policy and planning citywide; promoted open space measures that have helped preserve such great places as Franklin Park and the Charles River basin.

Staff: Executive Director, Office Manager, Program Coordinator

# Boston Harbor Association www.tbha.org/

**Boston** 

TBHA brings together diverse interests -- harbor users, environmentalists, developers, waterfront businesses, and decision makers -- to develop balanced solutions for maritime industrial activities, commercial development, environmental protection, and public access around Boston Harbor. TBHA advocates for greater public access and open space along Boston Harbor, promotes the Port of Boston's economy, educates urban youths about Boston Harbor and related career opportunities through our Harbor Bound program, promotes affordable public water transportation throughout the Harbor, monitors water quality improvements, and works for the restoration of Boston Harbor Beaches.

Staff: Executive Director, Project Consultant, Educational Coordinator, Public Access Coordinator

# Boston Natural Areas Network www.bostonnatural.org/

**Boston** 

Working for a Greener City, BNAN brings community groups, public agencies, non-profit organizations and businesses together to develop common visions and to combine resources. Our work is often described as "community building through greening."

Staff:

President Garden Educator Horticulturist/Garden Services Manager

Programs Manager Program Assistant Community Garden Council Staff

Operations Manager Vice President, Development & Special Projects

**Boston Nature Center** www.massaudubon.org/Nature\_Connection/Sanctuaries/Boston/index.php Mattapan

This urban sanctuary offers public programs year-round. Through its Boston Schools Initiative, the Boston Nature Center provides environmental education programs to Boston elementary schools weekly. Two miles of wheelchair accessible trails and boardwalks traverse meadows and wetlands where wildlife abounds, including coyotes, pheasants, and many species of migratory birds. The sanctuary's George Robert White Environmental Conservation Center is one of the "greenest" buildings in Boston, teaching environmentally sustainable design by example. The site also includes the Clark-Cooper Community Gardens, Boston's oldest and largest, providing food and a green oasis for 260 local families.

# **Brookline GreenSpace Alliance** www.bgsa.net/

**Brookline** 

Mission: To preserve, protect and enhance the open spaces of Brookline, Massachusetts. We work to achieve our mission by advocating for policies and practices that promote the use, health & beauty of our natural environment; & by representing, counseling and promoting our member organizations in pursuit of these goals; by keeping our members informed; and by encouraging broad community involvement in the protection & stewardship of our open space.

Staff: Director

## **CLF Ventures** www.clfventures.org

**Boston** 

CLF Ventures, the nonprofit consulting arm of the Conservation Law Foundation, works with private and public sector clients to achieve environmental and financial success.

### **Current Ventures:**

# a. Brownfields Redevelopment

CLF Ventures catalyzes sustainable redevelopments by forging effective partnerships among all stakeholders, thereby decreasing redevelopment risk and promoting sustainable reuse.

# b. Development and Transportation Strategy

CLF Ventures works with developers, institutions and communities to make good development happen while easing development impact on existing neighborhoods and infrastructure.

### c. Environmental Insurance Agency

The Environmental Insurance Agency's goal is to create a significant discount on auto insurance for people who reduce driving & opt to walk, bicycle, telecommute, or take mass transit instead.

### d. Facility Siting Solutions

CLF Ventures, with its environmental expertise, knowledge of regulations, and commitment to health, can help find appropriate sites for facilities – providing they use environmentally responsible technology.

### e. Site Closure Risk Management

CLF Ventures helps clients maximize the value of distressed real estate holdings. Our Site Closure Risk Management Program is of particular interest to clients with complex or difficult sites.

Staff:

Project Analyst Chief Executive Officer Staff Attorneys\* Staff Assistant

CLF Vice President Senior Counsel\* Managing Director

Project Manager Community Involvement Specialist

# Center for Environmental Citizenship www.envirocitizen.org

**Boston** 

CEC works to build leadership, ignite youth power, and replenish the environmental movement with a diverse base of innovative emerging leaders dedicated to winning environmental and social justice victories.

Staff: Senior Field Organizer, Field Organizer, & Organizing Fellows

# **Charles River Conservancy** www.charlesriverconservancy.org Cambridge

The Charles River Conservancy (CRC) is a nonprofit advocacy group dedicated to renovation, maintenance and enrichment of the Charles River Basin and its surroundings, particularly its parks, parkways, and bridges. The Conservancy works to create better understanding of the best uses of the basin through education, public dialogue, and interpretive programs. Promotion of increased access, good planning, and management practices is designed to enhance the architecture, landscape, and amenities of the basin.

### Projects:

- a. Education
- 1. Service Learning Creating hands-on learning experiences for students in the Charles River Parklands. Funded by The Boston Foundation.
- 2. Lectures/Presentations Slide lectures on the history of the Charles River Parklands
- 3. Inventing the Charles River Illustrations & text covering history of the Charles River Parklands.

### b. Parklands Stewardship

1. Conservancy Volunteers - Volunteer opportunities for individuals and groups interested in pitching in to make a difference in the Charles River Parklands.

### c. Parklands Renewal

- 1. Dr. Paul Dudley White Pathway User surveys and other research will lead to a new vision for this much used, woefully inadequate seventeen-mile pathway.
- 2. Herter Park West reclaiming this long closed off section of Herter Park in Brighton.
- 3. Hell's Half Acre Wetland in West Cambridge that serves crucial habitat & educational resource

,

Job trending information available.

- d. Capital Projects
- 1. Charles River Skatepark
- 2. Weeks Bridge Lighting 2 one-night festivals foreshadow permanent lighting of Weeks Bridge.

### Staff:

President, Acting Executive Director Volunteer Coordinator

Development and Program Director Project and Administration Director

Skatepark Project Coordinator

## Clean Air Task Force www.catf.us/

**Boston** 

The Clean Air Task Force (CATF) is a nonprofit organization dedicated to restoring clean air and healthy environments through scientific research, public education, and legal advocacy. Made up of 20 senior scientists, lawyers, MBAs, economists, and public outreach professionals, CATF works with more than 40 state, local, regional, and national organizations to educate the public, media, industry, and government officials on the science and economics of clean air policies through fact-based and locally appropriate advocacy.

### Staff:

Senior Scientist Counsel\* Power Plant Advocacy Coordinator

Executive Director Research Assistant Senior Scientist

Grants Coordinator Advocacy Director Advocacy Coordinator

Research & Technical Director Toxics Scientist Toxics Expert Campaign Director Senior Counsel Consultant

Litigation Director Staff Attorney\*

# Coalition for Environmentally Responsible Economies www.ceres.org

Boston

CERES is a coalition of investment funds, environmental organizations, and public interest groups. Our mission is to move businesses, capital, and markets to advance lasting prosperity by valuing the health of the planet and its people.

### Staff:

Executive Director Associate Director
Director of Electric Power Programs Senior Fellow

Corporate Accountability Program Manager Operations Coordinator

Communications Director Director of Investor Programs

Conference & Events Coordinator Ceres Fellow

Director of Accountability Programs Senior Manager, Investor Outreach

Program Manager Special Assistant

Corporate Outreach Manager Development Associates

IT Specialist Senior Director of Development & Communications

Nonprofits – Conservation Law Foundation

<sup>\*</sup> Job trending information available.

# Conservation Law Foundation www.clf.org

**Boston** 

CLF's advocacy staff works to solve the most significant environmental problems that threaten New England. CLF's advocates use law, economics and science to create innovative strategies to conserve natural resources, protect public health and promote vital communities in our region.

#### Staff:

Vice President and Director of CLF's Massachusetts Advocacy Center Staff Economist and Director of CLF's Marine Conservation Program Senior Attorney and Director of CLF's Clean Energy & Climate Change Program Marine Scientist and Director of CLF's Science Program. Staff Attorney and serves as CLF's Community Organizer Skadden Legal Fellow and Staff Attorney

# Consortium For Energy Efficiency www.cee1.org/

**Boston** 

The Consortium for Energy Efficiency (CEE), a nonprofit public benefits corporation, develops national initiatives to promote the manufacture and purchase of energy-efficient products and services. Our goal is to induce lasting structural and behavioral changes in the marketplace, resulting in the increased adoption of energy-efficient technologies.

#### Staff:

Executive Director Deputy Director

Industrial Programs: Motors, Motor Systems, Motor Decisions Matter, Transformers,

Water/wastewater

Motor Decisions Matter (MDM) Communications Associate

Residential Programs: Appliances, Lighting, HVAC, Residential & Commercial Clothes Washers,

Residential HVAC

Residential/Multifamily Programs: Gas Programs, Multifamily Housing, Residential Water Heating

Commercial Buildings

Commercial Programs: HECAC, Lighting

Commercial Programs (Schools) & Government Programs (Traffic Signals & Gov't Purchasing)

Research/Evaluation Communications Director

Director of Administration Program Assistant

# Eagle Eye Institute www.eagleeyeinstitute.org

Somerville

What does Eagle Eye Institute do?

- · Hands-on environmental education for urban youth
- Disseminating successful programs & empowering other organizations
- Career-bridging to natural resource professions for urban youth

Staff: Executive Director, Stewardship Programs Coordinator, Champion Network Coordinator

Nonprofits – Earthwatch Institute

# Earthwatch Institute www.earthwatch.org

Maynard

Earthwatch Institute engages people worldwide in scientific field research and education to promote the understanding and action necessary for a sustainable environment.

We accomplish this through three primary objectives:

- Research Supporting the field work of research scientists worldwide collecting the base line data essential for sustainable management decisions
- Education Educating and inspiring the next generation of leaders in education, business and the general public both at home and overseas
- Conservation Solving problems by active and ground-breaking collaborations with conservation and preservation partners

Executive:

President & CEO Executive Vice President & Chief Operating Officer

Chief Science Officer Chief Financial Officer & VP of Finance VP of Development Executive Assistant to the President & COO

Chief Development Officer

Conservation:

Director of Conservation & Research & Conservation Program Assistant

Conservation Field Directors Assistant Field Director

Research:

Director of Research Program Director for Social Sciences

Education:

Director of Education Education Outreach & Network Manager

Student Initiative Manager Students Awards Coordinator
Educator Program Coordinator Community Fellowship Program

Education Assistant Education Intern

Education Evaluation Intern Film Project Mentor, Tutor, & Coordinator

Program:

Conservation Consultant Resource Center Coordinator

Field Management:

Director of Field Management
Program Manager for Social Sciences
Program Manager for Education
Program Manager for Earth & Marine Sciences
Program Manager for Terrestrial Life Sciences
Program Manager for Terrestrial Life Sciences

Expedition Briefings Editor Field Management Assistant

Program Assistant for Social Sciences Program Assistant for Life Sciences

Expedition Coordinators Field Operations Intern

Field Management Intern Marketing and Communications:

Web Manager & IT Manager Web & IT Coordinator

Managing Editor Creative Director

Senior Marketing Copywriter Director of Public Affairs

PR, Events & Outreach Interns Education Web Coordinator & Flash Designer

Volunteer Program:

Director of Supporter Services Expedition Advisors

Nonprofits-Earthworks

# **Earthworks** www.earthworksboston.org/Roxbury

Mission: EarthWorks Projects seeks to deepen ecological awareness and commitment by helping urban residents experience the nature that exists in Greater Boston. EarthWorks works to create a healthier and more sustainable urban environment through education, advocacy, and hands-on projects and strives to strengthen communities through service to the environment.

# Programs:

a. The Urban Orchards Program is a greening and food production program that works with local groups to plant, maintain, and harvest fruit- and nut-bearing trees, shrubs, and vines on urban land. The program brings people together to work towards more ecologically sustainable neighborhoods, to protect the environment, and to share the fruit – all of which build stronger communities.

b. The Outdoor Classrooms Program provides hands-on environmental education to elementary and middle school students by utilizing schoolyard orchards and gardens. The program connects children to the natural world while making science exciting and relevant.

c. The Urban Wilds Program partners with the Boston Parks Department as well as volunteer and neighborhood groups to ecologically restore the 39 city-owned natural areas after decades of abuse and neglect. The program connects people to the wilds through volunteer service projects, educational events, and neighborhood involvement.

# **EcoLogic Development Fund** www.ecologic.org Cambridge

EcoLogic is a non-profit organization dedicated to sustainable development and biodiversity conservation. EcoLogic's programs address the socio-economic causes of biodiversity loss-namely inequality and poverty in Latin America. Our challenge is to save the planet and improve the lives of its inhabitants.

Staff:

Executive Director Operations Manager
Senior Program Officer Development Associate

# Emerald Necklace Conservancy www.emeraldnecklace.org

Brookline

Emerald Necklace Conservancy protects, restores, maintains & promotes landscape, waterways & parkways of Emerald Necklace park system as special places for people to visit & enjoy. Our programs focus on:

- Parks restoration and maintenance
- Public education including presentations, exhibits and publications
- Constituency-building and park advocacy
- Volunteer and other activities which promote parks stewardship
- Improvement of public access to and through the park system, among other activities

Nonprofits – Environmental Careers Organizations

# Environmental Careers Organization www.eco.org

**Boston** 

ECO's mission is to protect and enhance the environment through the development of diverse leaders, the promotion of careers, and the inspiration of individual action. ECO accomplishes this through internships, career advice, publications and research.

Staff:

Executive Assistant to President & Founder
President and Founder
Diversity Manager

Alumni and Donor Services Coordinator
Acting Director of Nonprofit Programs
Internship Program Coordinators

Director of Government Programs Program Managers

Operations Manager Supervisor, Associate Service Center Contracts Manager Coordinator-Travel Administrator

Project Manager, Conservation Careers Diversity Mapping Project

Director of Marketing, Development & Corporate Relations

# Environmental Defense www.environmentaldefense.org

**Boston** 

Environmental Defense's Boston office tackles issues as diverse as waste reduction and recycling, cleaner vehicles, fisheries protection, nutrient run-off and global climate change.

Our Alliance for Environmental Innovation partners with large corporations across the country to make their products and services greener. Over the past year, we have also strengthened our efforts to protect New England's ocean resources. The Boston office also works with scientists from academic institutions, government agencies and other non-governmental organizations to study the potential impacts of climate change on the United States.

Staff:

Project Manager, Scientist Director, Program Manager Project Manager

Marine Conservation Advocate Environmental Engineer

# Environmental League of Massachusetts www.environmentalleague.org

Boston

The Environmental League of Massachusetts is dedicated to protecting the air, water, and land for the people of the commonwealth. ELM voices citizens' concerns, advocates for strong environmental laws, ensures that these laws are enforced and implemented, and educates the public about our environment.

Staff:

President Policy Analyst Senior Policy Advocate

Environmental Advocate Business Manager

Nonprofits – Fund for Public Interest Research

\* Job trending information available.

# Fund for Public Interest Research www.ffpir.org/

**Boston** 

We help progressive groups wage the campaigns that help preserve our environment, protect human rights, clean up politics, and challenge corporate power.

### Jobs with the Fund:

Canvass Director

As a canvass director for the Fund, you run a campaign office in one of dozens of cities throughout the country. The staff you supervise educate citizens about the issues and get them involved in campaigns to win progressive change.

# *Telephone Outreach Project (T.O.P.) Director*

Directors of the Fund's Telephone Outreach Projects recruit and manage a staff of 20 to 30 articulate, committed people in order to raise funds and activate citizens over the phone.

### Donor Staff

You call current members, ask them to meet with you one-on-one, and then engage them in conversations that often last an hour or more, helping to solidify support that may last a lifetime.

#### Summer Jobs

If you're looking for a summer job, working on a professional campaign with the Fund's Campaign to Save the Environment project is a great way for students and others to get directly involved with our work. To get more information, go to www.jobsfortheenvironment.org.

## Jane Goodall Institute www.janegoodall.org

Mission: The Jane Goodall Institute advances the power of individuals to take informed and compassionate action to improve the environment of all living things.

The objectives of the Institute are to:

- Increase primate habitat conservation
- Increase awareness of, support for and training in issues related to our relationship with each other, the environment and other animals (leading to behavior change)
- Expand non-invasive research programs on chimpanzees and other primates
- Promote activities that ensure the well being of chimpanzees, other primates and animal welfare activities in general

# a. Roots & Shoots www.rootsandshoots.org/ Boston

Roots & Shoots engages & inspires youth through community service & service learning. All R&S groups show care & concern in 3 areas: human community, animals, & the environment.

### Mission of Roots & Shoots:

To foster respect and compassion for all living things, to promote understanding of all cultures and beliefs, and to inspire each individual to take action to make the world a better place for people, animals, and the environment.

#### Goals:

- Implement positive change through active learning about, caring for, & interacting with the environment
- Demonstrate care and concern for all animals
- Enhance understanding among individuals of different cultures, ethnic groups, religions, socioeconomic levels, and nations through our global communications network
- Help young people develop self-respect, confidence in themselves, and hope for the future

Staff: Regional Coordinator

# Living on Earth www.loe.org

Cambridge

Living on Earth with Steve Curwood is the weekly environmental news and information program distributed by National Public Radio. Every week over 302 NPR stations broadcast Living on Earth's news, features, interviews and commentary on a broad range of ecological issues.

Cast and Crew:

Senior Producer Senior Editor Membership Coordinator
Associate Producer Business Manager Host/Executive Producer
Director, Special Projects Producer Technical Director

# ${\bf Massachusetts} \ {\bf Audubon} \ {\bf Society} \ {\bf www.massaudubon.org}$

Lincoln

The Massachusetts Audubon Society is the largest conservation organization in New England, concentrating its efforts on protecting the nature of Massachusetts for people and wildlife. Mass Audubon protects more than 30,000 acres of conservation land, conducts educational programs for 250,000 children and adults annually, and advocates for sound environmental policies at the local, state, and federal levels. Mass Audubon maintains 43 wildlife sanctuaries that are open to the public & serve as the base for its conservation, education, & advocacy work across the state.

Mass Audubon Advocacy

Mission: To Protect The Nature of Massachusetts.

Role: To serve both as a leader and a catalyst for conservation, by acting directly to Protect The Nature of Massachusetts and by stimulating individual and institutional action through education, advocacy, and habitat protection.

Strategy: To educate & motivate Society members, citizens of Commonwealth, local, state, & federal elected and appointed officials to make decisions that Protect The Nature of Massachusetts. The Advocacy Department seeks to strengthen important partnerships with other organizations and institutions, as well as to enhance coordination and information-sharing among Society staff.

Goals: To abate the principal threats to The Nature of Massachusetts. Broadly defined, these threats are: habitat fragmentation, habitat loss, disruption of ecological processes, invasive species, incompatible human uses of the land.

Through the Lincoln Headquarters, Advocacy staff develop policies and publications relating to the Society's conservation priorities, comment on major proposed development projects, and serve on state advisory committees working to develop state regulations and policies. On Beacon Hill, staff coordinate the lobbying of state and federal leaders toward passage of conservation legislation and funding conservation programs.

# Massachusetts Horticultural Society www.masshort.org

Boston, Wellesley

The Massachusetts Horticultural Society is dedicated to encouraging the science and practice of horticulture and developing the public's enjoyment, appreciation, and understanding of plants and the environment.

### Staff:

Executive Director

Horticulturist

Director of Horticulture & Education

Director of Flower Show & Special Events

Flower Show Retail Coordinator

Membership & Development Coordinator

Director of Marketing & Communications

Volunteer & Guest Services Coordinator

Horticulture & Education Coordinator

Flower Show and Special Events Coordinator

Rental and Functions Coordinator

Director of Operations

Director of Finance

Development Coordinator Librarian

# Massachusetts Public Interest Research Group www.masspirg.org/

**Boston** 

The state Public Interest Research Groups are an alliance of state-based, citizen-funded organizations that advocate for the public interest. The state PIRGs' mission is to deliver persistent, result-oriented activism that protects the environment, encourages a fair marketplace for consumers and fosters responsive, democratic government.

### Programs:

### a. MASSEnvironment

Convincing decision-makers to move toward a greener Commonwealth requires independent research, persuasive advocacy and an engaged citizenry—especially when vested interests resist change.

- b. New Energy Solutions
- 1. Three Steps To A Cleaner Energy Future -Massachusetts has the power to be a clean energy leader—if we can convince our elected officials to take three steps for a clean energy future.
- 2. Global Warming -- The Massachusetts Climate Action Project is a coalition of over 40 local, state and regional organizations that are calling on Governor Romney to make sure Massachusetts leads the region in reducing greenhouse gas emissions.
- 3. Clean Air Enforcement
- 4. Micropower -- Micropower, also known as distributed generation (DG), is a growing sector of the energy market that holds great promise for locally controlled power generation.
- 5. Energy Efficiency Project
- 6. Renewable Power
- c. Consumer Action

MASSPIRG helps consumers navigate today's marketplace

# d. Food Safety

MASSPIRG watchdogs government regulatory agencies, agriculture and food industries, food marketing industry, and retailers.

- g. Transportation Agenda
- 1. Eye on the T
- 2. Clean Cars

Staff:

Executive Director Consumer Program Director

Energy Advocate Consumer Associate

# Museum of Science www.mos.org

**Boston** 

The mission of the Museum of Science, Boston is to stimulate interest in and further understanding of science and technology and their importance for individuals and for society.

### **Nature Conservancy** http://nature.org

Boston, MA Chapter: http://nature.org/wherewework/northamerica/states/massachusetts/

The Nature Conservancy's mission is to preserve the plants, animals and natural communities that represent the diversity of life on Earth by protecting the lands and waters they need to survive. The Massachusetts Chapter Office currently owns and manages more than twenty nature preserves across the state.

33 Staff

### NatureServe www.natureserve.org

Boston

NatureServe is a non-profit conservation organization that provides scientific information & tools needed to help guide effective conservation action. NatureServe & its natural heritage programs are a leading source for information about rare & endangered species & threatened ecosystems. NatureServe represents an international network of biological inventories—known as natural heritage programs or conservation data centers. Together we collect & manage detailed local information on plants, animals, & ecosystems, & develop information products, data management tools, and conservation services to help meet local, national, and global conservation needs. Key Activities:

- Establish scientific standards for biological inventory and biodiversity data management
- Develop comprehensive & current databases on at-risk species & ecological communities
- Design advanced biodiversity data management systems in partnership with IT leaders
- Make biodiversity information available to public through our websites, publications, & custom services to clients & partners
- Provide information products and & services to guide natural resource decision-making

Staff:

Zoology: Chief Zoologist Zoology: Research Zoologist

Zoology/Science Information Resources: Associate Zoologist/Information Scientist Zoology/Science Information Resources: Director, Science Information Resources

## **Neponset River Watershed Association** www.neponset.org/ Canton

NepRWA works to improve water quality, protect streamflow & water supplies, advocate for fisheries restoration, and help create increased open space and better land use practices

- a. Water Quality NepRWA's Citizen Water Monitoring Network collects water samples from around the watershed. The data collected helps NepRWA to identify trouble areas and to work with local communities on cleanup measures.
- b. Streamflow & Water Supplies NepRWA has taken a leadership role in studying how increasing water losses impact local fisheries, wildlife habitat and drinking water supplies.
- c. Fisheries Restoration NepRWA is examining a variety of options for restoring fish habitat in the Neponset, like removing dams that have outlived their utility.

d. Land Use & Open Space

Staff:

Executive Director Membership Coordinator Environmental Scientist\*
Water Resource Analyst Development Director Outreach Coordinator

CWMN Assistant, Willet Pond Manager

<sup>\*</sup> Job trending information available.

# New England Aquarium www.neaq.org

**Boston** 

The mission of the New England Aquarium is to increase understanding of aquatic life and environments, to enable people to act to conserve the world of water, and to provide leadership for the preservation and sustainable use of aquatic resources. This mission is fulfilled through exhibits, and through education, conservation and research programs.

Administration/Senior Staff:

Vice Presidents Treasurer, Chief Financial Officer Marketing & Sales

Expansion & Construction Programs & Exhibits Global Marine Programs

Associate Vice President, Development

Directors:

Sponsored Programs General Curator Facilities

Director of Corporate Relations Visitor Services Exhibits & Design Research Communications Human Resources

Membership & Annual Fund Conservation Education
Controller Information Systems & Technology Board Relations

# New England Wild Flower Society www.newfs.org

Framingham

Mission: Promoting conservation of North American native plants through education, research, horticulture, habitat preservation, and advocacy.

# Northeast Waste Management Officials' Association (NEWMOA) www.newmoa.org Boston

NEWMOA is a nonprofit, nonpartisan interstate association that has a membership composed of the hazardous waste, solid waste, waste site cleanup and pollution prevention program directors for the environmental agencies in Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island, and Vermont. NEWMOA's mission is to develop and sustain an effective partnership of states to explore, develop, promote, and implement environmentally sound solutions for the reduction and management of materials and waste, and for the remediation of contaminated sites, in order to achieve a clean and healthy environment.

Staff:

Executive Director Project Managers

Deputy Director Environmental Specialist

**Project Staff** 

# Ocean Alliance www.oceanalliance.org

Lincoln

The Ocean Alliance is dedicated to the conservation of whales and their ocean environment through research and education.

The Voyage of the Odyssey is a three-year research initiative, involving worldwide sampling of different whale species, birds, and other marine creatures to help define the state of health of marine habitats & raise awareness about the threats of pollution

Ocean Alliance Education Programs are geared towards students of all ages. Programs integrate scientific data and interactive programs.

Staff:

President Vice President/Captain, R/V Odyssey

Biologist\* / Senior Director Senior Scientist

Chief Scientist/Voyage of the Odyssey Director of Development Voyage of the Odyssey Coordinator Administrative Manager Administrative & Financial Consultant **Grant Writer** 

Executive Assistant to President Education and Internship Manager/ Head Naturalist

Marine Consultant/Captain R/V Odyssey Captain First Mate Multimedia Producer

Field Education Coordinator Science Manager - WHOI office

**Education Consultants** Photographer/Researcher

Right Whale Researcher

# Outdoor Explorations www.outdoorexp.org

Medford

Outdoor Explorations (OE) works to challenge perceptions and change lives of people with and without disabilities through shared activities in the outdoors. Each year, we serve over 700 people with one-day clinics and multi-day overnight trips with activities such as kayaking, backpacking, sailing, rock climbing, whitewater rafting, snowshoeing, and community service.

Mission: To use the outdoors as a catalyst for advancing community-wide inclusion of people with disabilities.

Vision: To cultivate a society based on mutual respect in which individuals with and without disabilities collectively participate in all aspects of community life.

Staff:

**Executive Director Program Coordinator** Volunteer Coordinator Director of Programs

Job trending information available.

# Research Triangle Institute www.rti.org

Waltham

RTI's mission: To improve the human condition through objective, multidisciplinary research, development, & technical services, setting the standard for scientific & professional excellence.

# Environmental job postings:

Environmental Scientist for Aerosol and Environmental Research\*

- BS or MS Engineering or Physical Sci; 1-3 yrs experience testing, data handling, & reporting
- Course work &/or experience preferred in aerosol generation & measurement, envi sci. or chem.
- Skilled at data calculation & presentation, report writing, information searching & compilation
- Strong verbal and written communication skills
- Responsibilities: Prepare proposals; Perform literature searches; Collect, analyze & summarize data; develop preliminary findings for review; prepare test plans & written reports of work

Research Environmental Engineer in Environment, Health, and Safety Division\*

- Masters of Science in Environmental or Civil Engineering or equivalent
- 7+ years technical experience in soil & groundwater assessments, remedial design & implementation, & waste treatment technologies; Strong project management experience
- Broad multi-media environmental regulatory program knowledge
- Strong analytical, computer, and communication skills
- Professional Engineer in environmental engineering or related discipline required
- Responsibilities: soil & groundwater remedial evaluation, design, & implementation; technical research; data analysis; report preparation; project planning & management; business development & proposal preparation.

Mid to Senior-Level Risk Assessor / Research Environmental Scientist\*

- Masters in environmental science, environmental engineering, public health; 5-7 yrs experience
- Demonstrated quantitative skills relevant to environmental modeling & statistical approaches used to characterize uncertainty; ability to define problems conceptually & develop analytical approaches tailored to answer specific risk-related questions; expertise in describing/modeling environmental processes relevant to the movement of chemical &/or microbial agents released into the environment
- General knowledge of programming & environmental modeling applications ranging from risk assessment to life cycle impact assessment & familiarity with modeling statistics a plus
- Strong experience in managing risk assessment projects, developing strong client relationships, & meeting all contractual requirements on time & within budget; Experience in managing & mentoring junior staff; Experience working for a variety of clients under different types of contract vehicles is a plus
- Responsibilities: Provide project management leadership & serve as technical lead on risk
  assessment modeling projects; develop new models & enhance existing modeling capabilities to
  meet client needs; mentor & develop junior staff involved in running environmental models &
  creating supporting databases; work closely with RTI project leaders as well as internal RTI
  experts in GIS, software development, & toxicology; support business development and

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<sup>\*</sup> Job trending information available.

# proposal writing for new work opportunities Nonprofits – ReSource Institute for Low Entropy Systems

# **ReSource Institute for Low Entropy Systems** www.riles.org/Boston

The ReSource Institute for Low Entropy Systems (RILES) is an independent, nonprofit organization that works in partnership with communities in English and Spanish speaking countries to protect public health and the environment. We support non-depleting, non-wasting, non-polluting methods and technologies for sustainable development. ReSource programs are targeted at three specific project areas: ecological waste management, low entropy technology transfer, and education about public health and environmental issues.

# **Save the Harbor/Save the Bay** www.savetheharbor.org/Boston

We are led by a broad group of civic, corporate, cultural & community leaders as well as citizens and scientists whose shared mission is:

- ~ To restore and protect Boston Harbor and Massachusetts Bay (we raise awareness of the health of the Harbor and the Bay, focusing on human health risk and on the health of important species including finfish, marine mammals, and sea and shore birds)
- ~ To reconnect our citizens and our communities to the sea
- ~ To build the next generation of youth Stewards
- ~ To ensure the development of a world-class waterfront for everyone to enjoy

Staff:

President Staff Assistant Communications & BayWatch Director

Senior Vice President Vice President Environmental Science Analyst

# School for Field Studies www.fieldstudies.org

Beverly

The School for Field Studies (SFS), an international non-profit academic institution, provides environmental education and conducts research through its field-based programs. SFS is committed to providing hands-on, interdisciplinary education, & environmental research in partnership with natural resource dependent communities.

Staff:

President Human Resources Generalist

Admissions Counselor Development Director

Safety Director Director of Admissions and Institutional Relations

Admissions Counselor Marketing Manager

Director of Technology Director of Finance and Administration

Director of Marketing

Sierra Club www.sierraclub.org/

**Boston** 

Massachusetts Chapter: www.sierraclubmass.org/

### Mission:

1.Explore, enjoy and protect the wild places of the earth.

2. Practice and promote the responsible use of the earth's ecosystems and resources.

3.Educate & enlist humanity to protect & restore quality of the natural & human environment.

MA Chapter Issues:

Sprawl & Transportation

North–South Rail Link Airport Expansion

Silver Line

Public Lands & Open Space

Mt Wachusett State Reservation Mt Greylock State Reservation

Schools & Parklands Takings

Marine & Coastal Habitat

Northern Right Whale Sustainable Fisheries

Energy

Wind Farms and Siting Policies Greencars Campaign

Conservation Staff:

Associate Regional Representative Chapter Director Office Administrator

# **Silent Spring Institute** www.silentspring.org/

Newton

Silent Spring Institute is a partnership of scientists, physicians, public health advocates, & community activists united around common goal of identifying & changing links between the environment & women's health, especially breast cancer. Our research projects investigate a number of issues key to determining how women are exposed to pollutants with potentially long-term health risks. Our Geographic Information System (GIS) mapping database integrates health outcomes with historical environmental data.

Integrated Scientific Capabilities - Multidisciplinary staff brings together expertise in many fields:

Biology
 Chemistry
 Epidemiology
 Geographic databases
 Geology
 Health communications
 Toxicology

Staff:

Executive Director Director of Development and Community Affairs

Research Assistant Administrative Manager

Research Assistant/IT & Web Manager Senior Scientist, Environmental Toxicologist

Cape Coordinator
Nonprofits – Sudbury Valley Trustees

# **Sudbury Valley Trustees** www.sudburyvalleytrustees.org Sudbury

SVT carries out its mission, to protect wildlife habitat and the ecological integrity of the Sudbury, Assabet, and Concord Rivers Valley for the benefit of present and future generations through land acquisition and stewardship, advocacy and education, in partnership with towns, watershed associations, and other environmental organizations within the greater Concord River Basin, as well as with individuals and businesses.

Staff:

Executive Director Land Protection Specialist Senior Land Protection Specialist Office Manager Stewardship Director Assistant Director of Development

Land Steward Director of Operations Stewardship Assistant

Director of Membership & Development

# Sweet Water Trust www.sweetwatertrust.org

Boston

We are a grant-making foundation, funding conservation projects that safeguard wild lands, wild waters, native wildlife, and living soils in the Northern Appalachian region.

Staff:

Trustee Executive Director Program Director

Stewardship Ecologist Stoddard Preserve Manager Central Maine Preserve Manager

# Tellus Institute www.tellus.org/

**Boston** 

Environmental stewardship & equitable development lie at the core of the vision of sustainability and at the heart of the mission of Tellus Institute. The Institute conducts a diverse program of research, consulting, and communication. Tellus projects address policy and planning issues in such areas as energy, water, waste, and land use.

# a. Energy Group

The Energy Group at Tellus Institute develops energy and utility policies and strategies to achieve environmental protection, economic effectiveness, and distributional equity.

## b. Business and Sustainability Group

Through collaboratives and partnerships, Tellus works with business and its stakeholders – policymakers and regulators, NGOs, labor – to design and test new strategies and tools that strengthen business' contribution to sustainable development.

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Job trending information available.

- c. Sustainable Communities Group
- 1. Activities designed to promote integrated and rigorous regional-level sustainability analysis and planning are centered in Place-Based Initiatives.
- 2. Through the Solid Waste Management Program, we assist local governments and solid waste authorities in technical and economic analyses of integrated waste management options, including source reduction, recycling, composting, and other alternatives to material disposal.
- 3. The Environmental Health Program provides research and analysis, convening and facilitation, training, evaluation and technical assistance to support organizations concerned about links between human health and environmental factors.

#### d. Stockholm Environment Institute

Tellus Institute is the home of the Boston Center of the Stockholm Environment Institute, an international research organization focusing on the issue of sustainable development.

Staff:

Energy Group:

Senior Research Directors Senior Scientist

Stockholm Environment Institute-Boston Center:

Director Senior Scientists Senior Research Directors

Associate Scientists Research Associate

**Business and Sustainability Group** 

Director

Sustainable Communities Group

Director Research Analyst

## Toxics Action Center www.toxicsaction.org

Boston

Since 1987, Toxics Action Center has helped more than 400 neighborhood groups across New England fight toxic pollution in their communities. We work on a variety of issues including cleaning up hazardous waste sites, stopping proposed landfills and incinerators, stopping the spraying of pesticides, pressuring companies to reduce their toxic chemical use, and other issues that threaten the health and safety of residents, neighborhoods and the environment.

# Programs in Massachusetts:

a. Pesticides

b. Safe Schools

Toxics Action Center is working to ensure that schools are built on safe location to protect the health and safety of our children.

### Staff in Boston Office:

Director

### Field Organizers

Nonprofits – Trust for Public Land

# Trust for Public Land www.tpl.org

**Boston** 

The Trust for Public Land (TPL) is a national, nonprofit, land conservation organization that conserves land for people to enjoy as parks, community gardens, historic sites, rural lands, and other natural places, ensuring livable communities for generations to come.

TPL's legal & real estate specialists work with landowners, gov't agencies, & community groups to:

- Create urban parks, gardens, greenways, and riverways
- Build livable communities by setting aside open space in the path of growth
- Conserve land for watershed protection, scenic beauty, and close-to-home recreation
- Safeguard the character of communities by preserving historic landmarks and landscapes.

### Massachusetts Programs:

1. Connecticut River Program 5. Nashua River Watershed Program (MA & NH)

2. Campaign to Protect East Boston Camps 6. Community Preservation Act (MA)

3. Campaign to Preserve Bolton's Orchards 7. Parks for People -- New England

4. Worcester Watershed Land Protection Partnership (MA)

## Trustees of Reservations www.thetrustees.org

Beverly

Mission: To preserve, for public use and enjoyment, properties of exceptional scenic, historic, and ecological value in Massachusetts.

The skills of our staff include many professions:

Agriculture & farming Graphic design

Architecture & landscape architecture Historic preservation

Carpentry Horticulture
Communications & marketing Hospitality

Information management Human resources
Ecology Land management
Environmental education Land use planning

Event planning Law enforcement
Finance & accounting Museum curation
Forestry Office administration
Fund raising Wildlife management

Geographic information systems

Staff:

Executive Office: Executive Director Executive Assistant

Development Department:

Department Director Director of Annual Leadership Giving

Development Assistant

**Development Coordinator** 

Associate Director Annual Leadership Giving Director of Northeast Campaigns

Planned Giving Department: Department Director

Nonprofits – Union of Concerned Scientists

# Union of Concerned Scientists www.ucsusa.org

Cambridge

The Union of Concerned Scientists is a nonprofit partnership of scientists and citizens combining rigorous scientific analysis, innovative policy development and effective citizen advocacy to achieve practical environmental solutions.

### Programs:

- a. Food and Environment Our goal is to create a food system that encourages innovative and environmentally sustainable ways to produce high-quality, safe & affordable food, while ensuring that citizens have a voice in how their food is grown. Program focuses on reducing unnecessary uses of antibiotics & strengthening civil society's control of biotechnology.
- b. Clean Vehicles develop & promote strategies to reduce adverse impacts of transportation system
- c. Global Environment We promote scientifically sound solutions to major problems of global environmental change.
- d. Clean Energy analyze/advocate environmentally & economically sustainable energy solutions
- e. Global Security use analysis, policy initiatives, & public education to help bring about a world free of nuclear arms

### Staff:

Executive:

President Executive Director Director of Strategy and Policy

Executive Assistant Operations Coordinator Climate Change Outreach Coordinator

Outreach Coordinator: Restoring Scientific Integrity Campaign

Programs:

Food and environment:

Program Director Senior Scientist Deputy Director/Senior Scientist

Program Assistant Outreach Organizer

Clean vehicles:

Program Director Clean Vehicles Engineer Senior Vehicles Analyst

Research Director Vehicles Engineer Clean Vehicles Program Assistant

National Field Organizer

Global environment:

Program Director Senior Analyst Deputy Senior Scientist & Program Director

Outreach Assistant Administrative Coordinator Climate Impacts Scientist

Outreach Coordinator Senior Staff Scientist, Invasive Species

Clean energy:

Program Director Research Director Nuclear Safety Engineer
Analyst Energy Field Coordinator/ UCS Outreach Facilitator
Program Assistant Senior Energy Analyst/ New England Project Manager

Global security:

Staff Scientist Senior Staff Scientist Program Co-director/Senior Scientist Adviser on Global Security Issues

Nonprofits – Urban Ecology Institute

# **Urban Ecology Institute** www.bc.edu/bc\_org/research/urbaneco/default.html Chestnut Hill

The Urban Ecology Institute studies the emerging field of urban ecology to help residents understand the natural resources in their communities and take action to protect them. We are scientists, educators and attorneys who research urban ecosystems, provide information to urban residents and policymakers, and work with the public schools to protect and restore urban natural resources before they are lost forever.

Mission: To promote the stewardship of healthy urban ecosystems by improving science and civic education for middle and high school youth and by working with urban communities to protect and transform natural resources.

# Programs:

### a. Urban Ecology Field Studies

UEI studies engage students from urban public schools in the scientific process by combining the immediate relevancy of urban backyards with basic scientific research.

### b. Natural Cities

The Natural Cities Program is conducting the first inventory of the urban ecosystem surrounding Boston – its trees, rivers, wildlife and open spaces – to help urban residents and policymakers better understand and protect the area's threatened natural resources.

## c. Community Forest Partnership

The Community Forest Partnership provides opportunities for residents and community organizations in and around Boston to serve as stewards of their urban forest.

### Staff:

Executive Director
Director of Science
Associate Director for Development
Education Program Director
Natural Cities Program Director
Education Program Associate & Partnership Coordinator
Director of After School Programs
Director Community Forest Partnership
Attorney, Natural Cities Program

### Walden Woods Project www.walden.org/

Lincoln

**Program Coordinator** 

The Walden Woods Project preserves the land, literature and legacy of Henry David Thoreau to foster an ethic of environmental stewardship and social responsibility. The Project achieves this mission through the integration of conservation, education and research.

 $Nonprofits-Waste Cap\ of\ Massachusetts$ 

# WasteCap of Massachusetts www.wastecap.org/ Boston

WasteCap of Massachusetts is the statewide, non-profit, public/private partnership working with the business community to develop and implement cost-effective programs for recycling, buying recycled, reuse, and waste reduction.

Staff: Program Manager & Program Intern

# Wilderness Society www.wilderness.org

**Boston** 

Mission: Deliver to future generations an unspoiled legacy of wild places, with all the precious values they hold: Biological diversity; clean air and water; towering forests, rushing rivers, and sage-sweet, silent deserts.

We bring to bear our scientific expertise, analysis and bold advocacy at the highest levels to save, protect and restore America's wilderness areas.

# Our Programs Include:

- Protecting the Arctic Wildlife Refuge from oil & gas drilling
- Staving off logging and road building on 58 million acres of roadless lands
- Curbing the abuse of our lands by off-road vehicle users
- Protecting wild places within the lower 48 states from rampant oil development

# Zoo New England www.zoonewengland.com

**Boston** 

Zoo New England is dedicated to teaching wildlife and wildland preservation through responsible management and exhibition of wildlife. Our mission is to inspire humankind to respect our natural world. We are dedicated to caring for and sharing animals and their habitats, participating in local and global conservation programs, and providing an experience that fosters an ethic of care and wonder towards the environment.

# **Chapter 9: General Job Trends by Sector**\*

### Government Sector

### Federal

- Federal government largest single employer in U.S. of environmental careers
- Since early 1990s, environmental concerns no longer one of Washington's priorities
- People who track federal environmental jobs have had difficulty predicting trends over the last several years
- Permanent employment at 10 key federal eco-agencies declined by 4% between 1997-2003
- While government hiring may be somewhat flat, many jobs have been transferred or "outsourced" to private contractors
- Federal environmental workforce will soon begin retiring in large numbers. Over 40% of total federal workforce already over age of 50. Surging retirements mean that jobs are on the way for a new generation of federal government eco-workers. There is debate about how many and how soon.

#### State

- All 50 states combined employ more environmental & conservation workers than federal government. Landing a job in state government begins to emerge as a great career choice
- Massachusetts redesigning agency structures that allow professionals to treat ecological, economic, & social concerns as mutually enforcing goals, not competing interests

#### Local

- Roughly 8% of all local government employees directly involved in environmental & conservation work
- Local government environmental employment is less lively in much of the Northeast
- Many local environmental jobs do not require advanced degrees, but local governments are increasingly looking for candidates with higher education
- New positions can sometimes be difficult to find and more difficult to obtain
- Many jobs that were government positions in the past have migrated to the private sector
- Local governments are at the forefront of sustainable communities movement

## Nonprofit

- Boston is a popular center for large environmental nonprofits
- Large growth in small, local, grassroots groups in past 10 years, but many of these groups have no staff
- Management standards have increased and revenue-generating ability is crucial

### **Education**

• Employment trends for teachers quite encouraging. Number of teachers needed is growing and those with expertise in science are particularly needed

<sup>\*</sup> All information from: <u>The ECO Guide to Careers that Make a Difference: Environmental Work for a Sustainable Future</u>. Washington: Island Press, 2004.

#### Private Sector

• Business employers found in 3 broad categories: Traditional environmental industry companies; Environmental, health, & safety departments inside regulated corporations; Sustainable businesses

General Job Trends by Sector

## **Environmental Industry**

- 5 largest environmental industry companies in descending order: Water & wastewater treatment; Solid waste management; Air quality, Site remediation; Hazardous waste
- Water industry employs large numbers of civil engineers, water & wastewater technicians, hydrologists, surveyors, planners, financing specialists, project managers, & community involvement professionals
- Environmental design, engineering & consulting firms hiring now because they have large revenues & work is labor-intensive
- Least optimistic environmental industry market areas: remediation, hazardous waste, & air quality
- Salary levels higher than local & state government work & usually higher than comparable federal government positions
- Competition intense for talented people among top firms

## Corporate Environmental, Health, and Safety

- All larger regulated companies have well-developed EHS offices that either manage environmental compliance & remediation directly or develop contractual relationships with environmental industry firms. EHS offices usually small & made up of people with backgrounds in environmental engineering, industrial hygiene, chemistry, & environmental science
- EHS departments may have outlived usefulness & probably doubtful place from which to launch an environmental career

#### Sustainable Businesses

- Environmentally focused goods & services have had nowhere to go but up for last several years.
- Six business areas lead "green business" world: wind energy; solar power; fuel cells; organic food; certified forest products; ecotourism
- Solar & wind industries: dominated by small group of multinational corporations, most of them from outside U.S.
- Huge demand for scientists & engineers with specialized expertise in wind, solar, hydrogen, & fuel cell basics & technology
- Installations on the ground will mean jobs for technicians & maintenance people

## **Environmental Careers Most in Demand as of September 2000**<sup>1</sup>

Pollution Prevention Specialists Environmental Educators & Communicators

Engineering Specialties Dual Track Environmental Managers

Environmental Chemists Fundraising Professionals

Environmental Technicians Entrepreneurs and Business Managers

Conservation Biologists Teachers

<sup>1</sup> Doyle, Kevin. "Disciplines in Demand: The Most Popular Environmental Careers." <u>EnviroEducation.com</u>. 19 Sept. 2000. 23 April 2005 < www.enviroeducation.com/articles/eco-careers/>.

Geographic Information Specialists & other computer specialists Planners

## **Chapter 10: U.S. Environmental Job Trends by Occupation**\*

## **Agricultural and Food Scientists**

Training, Other Qualifications, and Advancement

- Bachelor's degree in agricultural science sufficient for some jobs in applied research or for assisting in basic research
- Master's or doctoral degree required for basic research
- Ph.D. in agricultural science usually needed for college teaching & for advancement to administrative research positions
- Degrees in related sciences (biology, chemistry, or physics) or engineering specialties may qualify persons for some agricultural science jobs
- Able to work independently or as part of team
- Able to communicate clearly & concisely, both orally and in writing
- Understanding of basic business principles & ability to apply basic statistical techniques
- Able to apply computer skills to determine solutions to problems, collect & analyze data, & control various processes
- American Society of Agronomy offers certification programs in crop science, agronomy, crop advising, soil science, plant pathology, & weed science. To become certified, applicants must pass designated examinations & have 2+ years experience with at least a bachelor's degree in agriculture or 4 years experience with no degree. To become a certified crop advisor, however, candidates do not need a degree.

## Job Outlook

- Employment of agricultural and food scientists expected to grow more slowly than the average (increase 3-9% between 2002-2012) for all occupations
- Limited growth in Federal Government
- Modest growth in State & local governments
- Need to replace agricultural & food scientists who retire or otherwise leave occupation permanently will account for many more job openings than will projected growth
- Research is still necessary, particularly as insects & diseases continue to adapt to pesticides & as soil fertility & water quality continue to need improvement, resulting in job opportunities in biotechnology
- Those with doctorates in agricultural & food science may face competition for jobs, due to an increase in number of graduates & limited numbers of research & teaching positions
- Opportunities may be more numerous for those with a master's degree, particularly for graduates seeking basic research positions in a laboratory
- Bachelor's degree in agricultural science is useful for: managerial jobs in businesses that deal
  with ranchers & farmers; consulting services; applied research & product development
  positions, but usually only in certain subfields, such as food science & technology; Federal
  Government hires bachelor's degree holders to work as soil scientists
- Employment of agricultural & food scientists relatively stable during periods of economic recession. Layoffs less likely among agricultural \* food scientists than in some other occupations because food is a staple item & its demand fluctuates very little with economic

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<sup>\*</sup> Information compiled by U.S. Department of Labor in Occupational Outlook Handbook, 2004-05 Edition. For full report, please visit www.bls.gov/oco/

## **Earnings**

- Median annual earnings were \$48,670 in 2002; Middle 50% earned between \$35,770 & \$65,990; Lowest 10% earned less than \$28,750; Highest 10% earned more than \$85,460
- Average Federal salary for employees in non-supervisory, supervisory, & managerial positions in 2003 was \$82,729 in animal science & \$68,846 in agronomy
- Beginning salary offers in 2003 for graduates with bachelor's degree in animal sciences averaged \$30,026 a year; plant sciences, \$28,203 a year; & in other agricultural sciences, \$29,971 a year

#### **Animal Care and Service Workers**

Training, Other Qualifications, and Advancement

- Most animal care and service workers are trained on the job
- Employers generally prefer to hire people with some experience with animals
- Formal training is usually not necessary for entry-level positions
- Some zoological parks require their caretakers to have bachelor's degree in biology, animal science, or related field. Most require experience with animals, preferably as a volunteer or paid keeper in a zoo. Zookeepers may advance to senior keeper, assistant head keeper, head keeper, and assistant curator, but very few openings occur, especially for the higher level positions

#### Job Outlook

- Good job opportunities expected for most positions because many workers leave this occupation
  each year. The need to replace workers leaving the field will create the overwhelming majority
  of job openings.
- Many animal caretaker jobs require little or no training & have flexible work schedules, attracting people seeking their first job, students, & others looking for temporary or part-time work
- Outlook for caretakers in zoos not favorable due to slow growth in zoo capacity & keen competition for few positions
- Job opportunities for animal care & service workers vary from year to year because strength of economy affects demand for these workers. Pet owners tend to spend more on animal services when the economy is strong.
- Employment of animal care and service workers is expected to grow faster than the average (increase 21-35% between 2002-2012) for all occupations

#### **Earnings**

Median hourly earnings of nonfarm animal caretakers were \$8.21 in 2002; Middle 50% earned between \$6.95 & \$10.26; Bottom 10% earned less than \$6.13; Top 10% earned more than \$13.39

#### **Armed Forces**

Training, Other Qualifications, and Advancement

- To join the services, enlisted personnel must sign a legal agreement called an enlistment contract, which usually involves a commitment to 8 years of service. Depending on the terms of the contract, 2 to 6 years are spent on active duty, and the balance is spent in the reserves
- In order to enlist, one must be between 17 & 35 years old, be U.S. citizen or alien holding permanent resident status, not have felony record, & possess birth certificate
- Applicants must pass written examination & meet certain minimum physical standards, such as height, vision, & overall health
- High school graduate or equivalent

#### Job Outlook

- Opportunities should be good for qualified individuals in all branches of Forces thru 2012
- When the economy is good & civilian employment opportunities generally are more favorable, it is more difficult for all the services to meet their recruitment quotas. By contrast, it is much easier to do so during a recession.
- Educational requirements will continue to rise as military jobs become more technical & complex. High school graduates and applicants with a college background will be sought to fill the ranks of enlisted personnel, while virtually all officers will need at least a bachelor's degree &, in some cases, an advanced degree.

#### **Atmospheric Scientists**

Training, Other Qualifications, and Advancement

- Bachelor's degree in meteorology, atmospheric science, or closely related field with courses in meteorology usually is minimum educational requirement for entry-level position as atmospheric scientist
- Preferred educational requirement for entry-level meteorologists in Federal Government is bachelor's degree (not necessarily in meteorology) with 24+ semester hours of meteorology courses, including 6 hours in analysis & prediction of weather systems, 6 hours of atmospheric dynamics & thermodynamics, 3 hours of physical meteorology, & 2 hours of remote sensing of atmosphere or instrumentation
- Combination of education & appropriate experience may be substituted for a degree
- Positions in operational meteorology are available for those with only a bachelor's degree, obtaining a second bachelor's degree or a master's degree enhances employment opportunities & advancement potential
- Master's degree usually necessary for conducting applied research & development
  - Ph.D. required for most basic research positions
- Bachelor's degree in mathematics, physics, or engineering provides excellent preparation for graduate study in atmospheric science.
- Computer science courses, additional meteorology courses, strong background in mathematics & physics, & good communication skills important to prospective employers
- American Meteorological Society offers professional certification of consulting meteorologists, administered by a Board of Certified Consulting Meteorologists. Applicants must meet formal

education requirements (though not necessarily have college degree), pass examination to demonstrate thorough meteorological knowledge, have 5+ years experience or combination of experience & advanced degree, & provide character references from fellow professionals.

\*\*Job Trends - Atmospheric Scientists continued\*\*

#### Job Outlook

- Employment of atmospheric scientists is projected to increase about as fast as the average (increase 10-20% between 2002-2012) for all occupations
- Employment of meteorologists in Federal agencies expected to remain stable
- Job opportunities for atmospheric scientists in private industry expected to be better than for those in the Federal Government over the 2002-12 period
- Sales and growth of private weather services depend on the health of the economy
- There will continue to be demand for atmospheric scientists to analyze & monitor dispersion of pollutants into air to ensure compliance with Federal environmental regulations outlined in Clean Air Act of 1990, but related employment increases expected to be small

## **Earnings**

- Median annual earnings of atmospheric scientists in 2002 were \$60,200; Middle 50% earned between \$39,970 & \$76,880; Lowest 10% earned less than \$30,220; Highest 10% earned more than \$92,430
- Average salary for meteorologists in non-supervisory, supervisory, & managerial positions employed by Federal Government was about \$74,528 in 2003

## **Biological Scientists**

Training, Other Qualifications, and Advancement

- Ph.D. degree usually necessary for independent research, industrial research, & college teaching, & for advancement to administrative positions
- Master's degree sufficient for some jobs in basic research, applied research or product development, management, or inspection; it may also qualify one to work as a research technician or teacher in an aquarium
- Bachelor's degree adequate for some nonresearch jobs
- Those interested in studying the environment also should take courses in environmental studies & become familiar with current legislation & regulations
- Able to work independently or as part of team & be able to communicate clearly & concisely, both orally & in writing
- Those in private industry, especially those who aspire to management or administrative positions, should possess strong business & communication skills & be familiar with regulatory issues & marketing & management techniques

- Projected as fast as the average job growth (increase 10-20% between 2002-2012)
- Doctoral degree holders can expect to face competition for basic research positions
- Number of newly trained scientists has continued to increase at least as fast as available research funds, so both new & established scientists experience difficulty winning & renewing research grants
- Applied research positions in private industry may become more difficult to obtain if increasing

numbers of scientists seek jobs in private industry because of competitive job market for independent research positions in universities & for college & university faculty

Job Trends – Biological Scientists continued

#### Biological Scientists Job Outlook continued:

- Opportunities for those with a bachelor's or master's degree in biological science expected to be
  better. Number of science-related jobs in sales, marketing, & research management, for which
  non-Ph.D.s usually qualify, expected to exceed the number of independent research positions.
  Non-Ph.D.s also may fill positions as science or engineering technicians or health technologists
  and technicians. Some may become high school biology teachers.
- More biological scientists, including some botanists, will be needed to determine environmental impact of industry & government actions & to prevent or correct environmental problems, while some will find opportunities in environmental regulatory agencies. Botanists also will use their expertise to advise lawmakers on legislation for environmental protection & for ways to save environmentally sensitive areas. There will continue to be demand for biological scientists specializing in botany, zoology, & marine biology, but opportunities will be limited because of the small size of these fields
- Biological scientists less likely to lose jobs during recessions than are those in many other occupations because many are employed on long-term research projects. Economic downturn could influence amount of money allocated to new research & development efforts & limit the possibility of extension or renewal of existing projects.

## **Earnings**

- Median annual earnings of zoologists & wildlife biologists were \$47,740 in 2002; Middle 50% earned between \$37,100 & \$58,040; Lowest 10% earned less than \$29,260; Highest 10% earned more than \$71,270
- Beginning salary offers in 2003 averaged \$29,456 a year for bachelor's degree recipients in biological & life sciences; \$33,600 for master's degree recipients; \$42,244 for doctoral degree recipients
- In Federal Government in 2003, general biological scientists in non-supervisory, & managerial positions earned average salary of \$66,262; ecologists, \$65,207; zoologists, \$90,178; botanists, \$55,727

### **Chemists and Materials Scientists**

Training, Other Qualifications, and Advancement

- Bachelor's degree in chemistry or related discipline usually minimum educational requirement for entry-level chemist jobs; many research jobs require master's degree or more often Ph.D.
- Some materials scientists hold degree in materials science, but bachelor's degree in chemistry, physics, or electric engineering also accepted; Many R&D jobs require Ph.D. in materials science or related science
- Ability to concentrate on detail & work independently essential
- Those interested in environmental field also should take courses in environmental studies & become familiar with current legislation & regulations
- Computer courses essential because employers prefer job applicants able to apply computer

skills to modeling & simulation tasks & operate computerized laboratory equipment

Courses in statistics useful

Job Trends - Chemists and Materials Scientists continued

#### Job Outlook

- Employment expected to grow about as fast as the average (increase 10-20% between 2002-2012) for all occupations through 2012
- Employment in all segments of chemical industry except pharmaceutical & biotechnology firms expected to decline as companies downsize & turn to outside contractors to provide specialized services. As a result, scientific research & development services firms will experience healthy growth
- Chemists also will be needed to develop & improve technologies & processes used to produce chemicals for all purposes, & to monitor & measure air & water pollutants to ensure compliance with local, State, & Federal environmental regulations. Environmental research will offer many new opportunities for chemists & materials scientists. To satisfy public concerns and to comply with government regulations, the chemical industry will continue to invest billions of dollars each year in technology that reduces pollution & cleans up existing waste sites. Chemists also are needed to find ways to use less energy & to discover new sources of energy.
- During periods of economic recession, layoffs of chemists may occur

## **Earnings**

- Median annual earnings of chemists in 2002 were \$52,890; Middle 50% earned between \$39,410 & \$71,710; Lowest 10% earned less than \$30,980; Highest 10% earned more than \$92,170
- Median annual earnings of materials scientists in 2002 were \$64,590; Middle 50% earned between \$46,280 & \$86,240; Lowest 10% earned less than \$33,480; Highest 10% earned more than \$107,400
- Median salary of members of American Chemical Society (ACS) with bachelor's degree was \$32,800 a year in 2002; master's degree: \$50,000; Ph.D.: \$68,000

## **Civil Engineers**

#### Job Outlook

- Employment of civil engineers expected to increase more slowly than the average (increase 3-9% between 2002-2012) for all occupations
- Spurred by general population growth & increased emphasis on infrastructure & security, more civil engineers will be needed to design & construct safe & higher capacity transportation, water supply, & pollution control systems
- Openings will result from need to replace civil engineers who transfer to other occupations or leave the labor force & from job growth

#### **Earnings**

Median annual earnings of civil engineers were \$60,070 in 2002; Middle 50% earned between \$48,360 & \$74,700; Lowest 10% earned less than \$39,960; Highest 10% earned more than \$91,010

• Bachelor's degree candidates in civil engineering received starting offers averaging \$41,669 a year; master's degree: \$47,245; Ph.D. candidates: \$69,079

Job Trends – Conservation Scientists and Foresters

#### **Conservation Scientists and Foresters**

Training, Other Qualifications, and Advancement

- Bachelor's degree in forestry, range management, or related discipline minimum educational requirement for careers in forestry or conservation science
- In Federal Government, combination of experience & appropriate education occasionally may substitute for a 4-year forestry degree, but job competition makes this difficult
- Massachusetts has mandatory licensing that a forester must meet in order to acquire the title "professional forester" & practice forestry in state. Licensing requirements include: completion of a Bachelor's of Science in forestry from a Society of American Foresters (SAF) accredited professional forestry degree program & 3+ years forestry work experience; Master's degree in Forestry & 3+ years forestry work experience; or completion of Associates degree in SAF-recognized technical forestry education program & 5+ years forestry work experience
- Foresters who wish to perform specialized research or teach should have advanced degree, preferably a Ph.D.
- Prospective foresters should have strong grasp of Federal, State, & local policy issues & numerous & complex environmental regulations that affect many forestry-related activities
- Bachelor's degree in range management or range science usually minimum educational requirement for range managers; graduate degrees usually required for teaching & research positions. The Society for Range Management offers certification as a professional rangeland manager (CPRM). Candidates seeking certification must have at least bachelor's degree in range science or closely related field, 5+ years full-time work experience, & pass comprehensive written exam

- Employment expected to grow more slowly than the average (increase 3-9% between 2002-2012) for all occupations
- Growth should be strongest in private sector consulting firms & in scientific research & development services
- Demand will be spurred by a continuing emphasis on environmental protection, responsible land management, & water-related issues
- Job opportunities for conservation scientists will arise because government regulations have created demand for persons knowledgeable about runoff & erosion on farms & in cities & suburbs
- Soil & water quality experts will be needed as States design initiatives to improve water resources by preventing pollution by agricultural producers & industrial plants
- Fewer opportunities for conservation scientists and foresters expected in Federal & State Government, mostly due to budgetary constraints & trend among governments toward contracting functions out to private consulting firms
- Departures of foresters who retire or leave the Government for other reasons will result in some

- job openings between 2002 and 2012
- Scientific research & development services have increased their hiring of conservation scientists & foresters in recent years in response to demand for professionals to prepare environmental impact statements & erosion & sediment control plans, monitor water quality near logging sites, & advise on tree harvesting practices required by Federal, State, or local regulations. Hiring in these firms should continue during the 2002-12 period, although at a slower rate than over the last 10 years

Job Trends – Conservation Scientists and Foresters continued

#### **Earnings**

- Median annual earnings of conservation scientists in 2002 were \$50,340; Middle 50% earned between \$39,300 & \$61,440; Lowest 10% earned less than \$30,630; Highest 10% earned more than \$70,770
- Median annual earnings of foresters in 2002 were \$46,730; Middle 50% earned between \$36,330 & \$56,890; Lowest 10% earned less than \$29,690; Highest 10% earned more than \$69,600.

## **Engineering and Natural Sciences Managers**

Training, Other Qualifications, and Advancement

- Engineer managers usually require work experience & formal education similar to those of engineers, scientists, or mathematicians. Most begin careers as engineers, after completing a bachelor's degree in field. To fill management positions, employers seek engineers who possess administrative & communications skills in addition to technical knowledge in their specialty. Many engineers gain these skills by obtaining a master's degree in engineering management or a master's degree in business administration (MBA)
- Many science managers begin careers as scientists, such as chemists, biologists, geologists, or mathematicians. Most scientists or mathematicians engaged in basic research have a Ph.D.
   Science managers must be specialists in work they supervise. Employers prefer managers with good communication & administrative skills

#### Job Outlook

- Employment to grow about as fast as the average (between 10-20% between 2002-2012) in line with projected employment growth in engineering & most sciences
- Many additional jobs will result from need to replace managers who retire or move into other
  occupations. Opportunities for obtaining management position best for workers with advanced
  technical knowledge & strong communication skills
- Projected employment growth for engineering & natural sciences managers closely related to growth of occupations they supervise & industries in which they are found
- Many employers finding it more efficient to contract engineering & science management services to outside companies & consultants, creating good opportunities for managers in management services & management, scientific, & technical consulting firms

#### Earnings

• Median annual earnings of engineering managers \$90,930 in 2002. Middle 50% earned between \$72,480 & \$114,050. Lowest 10% earned less than \$57,840. Highest 10% earned more than \$141,380

• Median annual earnings of natural sciences managers \$82,250 in 2002. Middle 50% earned between \$60,000 & \$111,070. Lowest 10% earned less than \$45,640. Highest 10% earned more than \$144,590

Job Trends – Engineering Technicians

## **Engineering Technicians**

Environmental engineering technicians work closely with environmental engineers & scientists in developing methods & devices used in prevention, control, or correction of environmental hazards. They inspect & maintain equipment affecting air pollution & recycling. Some inspect water & wastewater treatment systems to ensure that pollution control requirements are met.

## Training, Other Qualifications, and Advancement

- Most employers prefer to hire someone with at least a 2-year associate degree in engineering technology. Persons with college courses in science, engineering, & mathematics may qualify for some positions but may need additional specialized training & experience.
- Although employers usually do not require engineering technicians to be certified, such certification may provide jobseekers a competitive advantage
- Those preparing to work in environmental engineering technology need courses in environmental regulations & safe handling of hazardous materials
- Creativity desirable; good communication skills & ability to work well with others
- National Institute for Certification in Engineering Technologies (NICET) established voluntary certification program for engineering technicians. Certification available at various levels, each level combining written examination in 1 of about 30 specialties with certain amount of jobrelated experience, supervisory evaluation, & recommendation.

#### Job Outlook

- Opportunities best for individuals with an associate degree or extensive job training in engineering technology
- Employment expected to increase about as fast as average (increase 10-20% between 2002-2012) for all occupations
- Employment influenced by local & national economic conditions
- Employment of environmental engineering technicians is expected to grow faster than average (increase 21-35% between 2002-2012) partly due to increased demand for environmental protection & partly due to recognition of environmental engineering technicians as a separate occupation

## **Earnings**

• Median annual earnings of environmental engineering technicians: \$36,850

## **Environmental Engineers**

#### Job Outlook

- Employment to increase much faster than the average (increase 36% or more between 2002-2012) for all occupations
- Much of expected growth due to emergence of this occupation as widely recognized engineering specialty rather than as area that other engineering specialties, such as civil engineers, specialize in
- More environmental engineers will be needed to comply with environmental regulations & to develop methods of cleaning up existing hazards
- Shift in emphasis toward preventing problems rather than controlling those that already exist, as well as increasing public health concerns, will spur demand for environmental engineers

Job Trends – Environmental Engineers continued

## Environmental Engineers Job Outlook continued:

- Political factors determine the job outlook for environmental engineers more than that for other engineers. Looser environmental regulations would reduce job opportunities; stricter regulations would enhance opportunities
- Significant economic downturn could reduce emphasis on environmental protection, reducing employment opportunities. Environmental engineers need to keep abreast of a range of environmental issues to ensure their steady employment because their area of focus may change frequently

## **Earnings**

- Median annual earnings of environmental engineers \$61,410 in 2002; Middle 50% earned between \$47,650 & \$77,360; Lowest 10% earned less than \$38,640; Highest 10% earned more than \$91,510
- Bachelor's degree candidates in environmental/environmental health engineering received starting offers averaging \$44,702 a year

#### **Environmental Scientists and Geoscientists**

Training, Other Qualifications, and Advancement

- Bachelor's degree adequate for a few entry-level positions, but environmental scientists &
  geoscientists increasingly need master's degree in a natural science. Master's degree minimum
  educational requirement for most entry-level research positions in private industry, Federal
  agencies, & State geological surveys. Doctoral degree necessary for most high-level research
  positions
- Students interested in working in environmental or regulatory fields, either in environmental consulting firms or for Federal or State governments, should take courses in hydrology, hazardous waste management, environmental legislation, chemistry, fluid mechanics, & geologic logging
- Computer skills essential for prospective environmental scientists & geoscientists; students with some experience with computer modeling, data analysis & integration, digital mapping, remote sensing, & geographic information systems will be the most prepared entering the job market. Knowledge of Global Information System (GIS) & Global Positioning System (GPS) also very helpful
- Excellent interpersonal skills; Strong oral & written communication skills; knowledge of second language becoming important attribute to employers

#### Job Outlook

- Employment of environmental scientists & geoscientists expected to grow about as fast as the average (increase 10-20% between 2002-2012) for all occupations
- Driving job growth will be public policy, which will force companies & organizations to comply with environmental laws & regulations, particularly those regarding ground-water contamination, clean air, & flood control
- Employment of environmental scientists and hydrologists expected to grow faster than average (increase 21-35% between 2002-2012)
- Demand is growing for environmental scientists who understand science & engineering aspects of waste remediation
- Employment of geoscientists expected to grow about as fast as average (increase 10-20% between 2002-2012) for all occupations

Job Trends – Environmental Scientists and Geoscientists continued

## **Earnings**

- Median annual earnings of environmental scientists \$47,600 in 2002. Middle 50% earned between \$36,820 & \$62,400; Lowest 10% earned less than \$29,920; Highest 10% earned more than \$78,200
- Median annual earnings of geoscientists \$67,470 in 2002. Middle 50% earned between \$48,370 and \$102,120; Lowest 10% earned less than \$36,580; Highest 10% earned more than \$133,310
- Median annual earnings of hydrologists \$56,530 in 2002; Middle 50% earned between \$44,080 & \$70,160; Lowest 10% earned less than \$36,790; Highest 10% earned more than \$86,620
- Beginning salary offers in 2003 for graduates with bachelor's degrees in geology & related sciences averaged about \$32,828 a year; graduates with master's degree averaged \$47,981; graduates with doctoral degree averaged \$61,050

#### Forest, Conservation, and Logging Workers

Training, Other Qualifications, and Advancement

- Most develop skills through on-the-job training, with instruction coming primarily from experienced workers
- Little formal education required for most occupations. Many secondary schools offer courses or 2-year degree in general forestry, wildlife, conservation, & forest harvesting, which could be helpful in obtaining a job
- Must be: in good health & able to work outdoors every day; able to work as part of team

- Overall employment expected to decline slightly (decrease 1% or more between 2002-12)
- Most job openings will result from replacement needs
- Employment of forest & conservation workers expected to grow more slowly than average (increase 3-9% between 2002-2012) for all occupations. Setting aside more land to protect natural resources or wildlife habitats helps to create demand for more forest & conservation workers. Under latest farm bill, small, private farm owners offered incentives to convert all or part of land to forest for ecological purposes. This conversion may indirectly cause hiring of forest & conservation workers to work on property

#### **Earnings**

- Earnings vary with particular forestry or logging occupation & with experience
- Median hourly earnings in 2002 for forest & conservation workers: \$9.12

#### **Hazardous Materials Removal Workers**

Training, Other Qualifications, and Advancement

- No formal education beyond high school diploma required to become hazardous materials removal worker
- Federal regulations require individual to have a license to work in occupation
- Most employers provide technical training on the job, but formal 32- to 40-hour training
  program must be completed to be licensed as asbestos abatement & lead abatement worker or
  treatment, storage, & disposal worker. Some employers prefer to hire workers licensed in
  multiple disciplines
- Able to perform basic mathematical conversions & calculations; good physical strength & manual dexterity. Background in construction helpful.

Job Trends – Hazardous Materials Removal Workers

## Job Outlook

- Relatively high rate of turnover, resulting in number of job openings each year stemming from experienced workers leaving the occupation
- Employment expected to grow much faster than average (increase 36% or more between 2002-2012) for all occupations, reflecting increasing concern for safe & clean environment
- Special-trade contractors will have strong demand for largest segment of these workers, namely, asbestos abatement & lead abatement workers

### **Earnings**

- Median hourly earnings of hazardous materials removal workers \$15.61 in 2002. Middle 50% earned between \$12.37 & \$22.18 per hour. Lowest 10% earned less than \$10.29 per hour. Highest 10% earned more than \$26.60 per hour.
- Median hourly earnings in remediation & other waste management services, the largest industry employing hazardous materials removal workers in 2002, were \$14.92 in 2002.
- Treatment, storage, & disposal workers usually earn slightly more than asbestos abatement & lead abatement workers. Decontamination & decommissioning workers & radiation protection technicians, though constituting the smallest group, tend to earn highest wages.

## **Landscape Architects**

Training, Other Qualifications, and Advancement

- Bachelor's or master's degree in landscape architecture usually necessary for entry into profession
- Many landscape architecture programs are adding courses that address environmental issues, a growing concern of landscape architects
- Massachusetts requires landscape architects to be licensed or registered. Licensing is based on the Landscape Architect Registration Examination (L.A.R.E.), sponsored by the Council of Landscape Architectural Registration Boards. Admission to exam requires degree from accredited school plus 1 to 6 years work experience under supervision of registered landscape architect. MA also requires the passage of State examination in addition to the L.A.R.E. to satisfy registration requirements. It is completed at the end of the L.A.R.E. and focuses on plant

- identification and wetland regulations.
- Because State requirements for licensure are not uniform, landscape architects may not find it easy to transfer their registration from one State to another
- In the Federal Government, candidates for entry positions should have bachelor's or master's degree in landscape architecture. The Federal Government does not require its landscape architects to be licensed
- Possess strong analytical skills; Creative vision & artistic talent desirable; Good oral & written
  communication skills essential; knowledge of computer applications of all kinds, including
  word processing, desktop publishing, & spreadsheets; ability to draft & design using CAD
  software essential
- Those with landscape architecture training also qualify for jobs closely related to landscape architecture, and may, after gaining some experience, become land or environmental planners or landscape consultants

#### Job Trends – Landscape Architects continued

- Employment expected to grow faster than average (increase 21-35% between 2002-2012) for all occupations
- New construction increasingly contingent upon compliance with environmental regulations, land use zoning, & water restrictions, spurring demand for landscape architects to help plan sites & integrate man-made structures with natural environment in least disruptive way
- Will be increasingly involved in preserving & restoring wetlands & other environmentally sensitive sites
- Opportunities will vary from year to year, & by geographic region, depending on local economic conditions
- During a recession, may face layoffs & greater competition for jobs
- Need to replace landscape architects who retire or leave labor force will produce some additional job openings
- Continuation of Transportation Equity Act for the Twenty-First Century expected to spur employment for landscape architects, particularly within State & local governments. This Act (TEA-21) provides funds for surface transportation & transit programs, such as environment-friendly pedestrian & bicycle trails. Budget tightening in Federal Government might restrict hiring in U.S. Forest Service & National Park Service agencies that traditionally employ the most landscape architects in Federal Government. Instead, such agencies may increasingly contract out for landscape architecture services, providing additional employment opportunities in private landscape architecture firms.
- New graduates expect to face competition for jobs in largest & most prestigious landscape architecture firms, but should face good job opportunities overall as demand increases, while number of graduates of landscape architecture holds steady or goes up slightly.
- Opportunities best for landscape architects who develop strong technical skills (i.e. computer design) & communication skills & knowledge of environmental codes & regulations
- Many employers prefer to hire entry-level landscape architects with internship experience

#### Earnings

• In 2002, median annual earnings for landscape architects were \$47,400. Middle 50% earned between \$36,140 & \$62,470. Lowest 10% earned less than \$28,730. Highest 10% earned over \$79,620

#### Lawyers

Training, Other Qualifications, and Advancement

• Must be licensed, or admitted to state bar. All States require that applicants for admission to the bar pass a written bar examination; most jurisdictions also require applicants to pass a separate written ethics examination. Lawyers who have been admitted to the bar in one jurisdiction occasionally may be admitted to the bar in another without taking an examination if they meet the latter jurisdiction's standards of good moral character and have a specified period of legal experience. Federal courts and agencies set their own qualifications for those practicing before or in them.

Job Trends – Lawyers continued

- To qualify for the bar examination in most States, an applicant usually must earn a college degree and graduate from a law school accredited by the American Bar Association (ABA) or the proper State authorities. ABA accreditation signifies that the law school—particularly its library and faculty—meets certain standards developed to promote quality legal education. ABA currently accredits 188 law schools; others are approved by State authorities only. With certain exceptions, graduates of schools not approved by the ABA are restricted to taking the bar examination and practicing in the State or other jurisdiction in which the school is located; most of these schools are in California. In 2002, eight States accepted the study of law in a law office as qualification for taking the bar examination; three jurisdictions—California, the District of Columbia, and New Mexico—now accept the study of law by correspondence. Several States require registration and approval of students by the State Board of Law Examiners, either before the students enter law school or during their early years of legal study.
- Massachusetts requires Multistate Bar Examination (MBE) as part of overall bar examination.
  The MBE covers issues of broad interest, and sometimes a locally prepared State bar
  examination is given in addition to the MBE. The 3-hour Multistate Essay Examination (MEE)
  is used as part of the bar examination in several States. States vary in their use of MBE and
  MEE scores.
- Many States have begun to require Multistate Performance Testing (MPT) to test the practical skills of beginning lawyers. This program has been well received, and many more States are expected to require performance testing in the future. Requirements vary by State, although the test usually is taken at the same time as the bar exam and is a one-time requirement.

- Employment expected to grow about as fast as average (increase 10-20% between 2002-2012). Employment growth of lawyers will result from growth in demand for legal services in environmental law
- Competition for job openings should continue to be keen because of large number of students

- graduating from law school each year
- Lawyers increasingly finding work in nontraditional areas for which legal training is an asset, but not normally a requirement. Employment opportunities are expected to continue to arise in these organizations at a growing rate.
- Some lawyers are adversely affected by cyclical swings in economy. During recessions, corporations less likely to litigate cases when declining sales & profits result in budgetary restrictions

#### Earnings

• In 2002, the median annual earnings of all lawyers were \$90,290. Middle 50% earned between \$61,060 & \$136,810. Lowest 10% earned less than \$44,490; Highest 10% earned more than \$145,600

Job Trends – Occupational Health and Safety Specialists and Technicians

## Occupational Health and Safety Specialists and Technicians

Training, Other Qualifications, and Advancement

- Many employers, including Federal Government, require 4-year college degree in safety or related field for some specialist positions
- Experience as occupational health & safety professional prerequisite for many positions
- Should be responsible, like detailed work, & able to communicate well
- Certification available through Board of Certified Safety Professionals (BCSP) & American Board of Industrial Hygiene (ABIH). The BCSP offers Certified Safety Professional (CSP) credential, while ABIH offers Certified Industrial Hygienist (CIH) & Certified Associate Industrial Hygienist (CAIH) credentials. Council on Certification of Health, Environmental, & Safety Technologists, a joint effort between BCSP & ABIH, awards Occupational Health & Safety Technologist (OHST) credential. Requirements for OHST credential less stringent than those for CSP, CIH, or CAIH credentials. Once education and experience requirements have been met, certification may be obtained through an examination. Continuing education is required for recertification. Although voluntary, many employers encourage certification.
- With additional experience or education, promotion to managerial position possible
- Research or related teaching positions at college level require advanced education

- Employment expected to grow about as fast as average (increase 10-20% between 2002-2012) for all occupations
- Additional job openings will arise from need to replace those who transfer to other occupations, retire, or leave the labor force for other reasons
- In private industry, employment growth will reflect industry growth & continuing self-enforcement of government & company regulations & policies
- Employment of occupational health & safety specialists & technicians affected less by general

economic fluctuations than employment in other occupations. Federal, State, & local governments, which employ about 2 out of 5 of all specialists & technicians, provide considerable job security

## **Earnings**

• Median annual earnings were \$46,010 in 2002. Middle 50% earned between \$34,280 & \$58,230. Lowest 10% earned less than \$25,080. Highest 10% earned more than \$71,450

## **Paralegals and Legal Assistants**

Training, Other Qualifications, and Advancement

- Most common way to become paralegal through community college paralegal program that leads to associate's degree. Other common method of entry, mainly for those with college degree, through certification program in paralegal studies
- Graduation from American Bar Association (ABA)-approved paralegal training program offered by colleges & universities can enhance one's employment opportunities

Job Trends – Paralegals and Legal Assistants continued

• Most employers do not require certification, but earning voluntary certificate from professional society may offer advantages in labor market. The National Association of Legal Assistants established standards for certification requiring various combinations of education & experience. Paralegals who meet these standards are eligible to take 2-day examination. Those who pass this examination may use designation Certified Legal Assistant (CLA). The Paralegal Advanced Competency Exam offers professional recognition to paralegals with bachelor's degree & 2+ years experience. Those who pass this examination may use designation Registered Paralegal (RP).

#### Job Outlook

- Employment projected to grow faster than average (increase 21-35% between 2002-2012) for all occupations. Some employment growth stems from law firms & other employers with legal staffs increasingly hiring paralegals to lower cost & increase availability & efficiency of legal services. The majority of job openings for paralegals in the future will be new jobs created by employment growth, but additional job openings will arise as people leave the occupation.
- Despite projections of fast employment growth, competition for jobs should continue as many people seek to go into this profession; however, highly skilled, formally trained paralegals have excellent employment potential.
- Private law firms will continue to be largest employers of paralegals
- Demand for paralegals expected to grow as increasing population requires environmental law
- To a limited extent, paralegal jobs are affected by the business cycle

#### **Earnings**

• Earnings of paralegals & legal assistants vary greatly. Salaries depend on education, training, experience, type & size of employer, geographic location of job

• In 2002, full-time, wage & salary paralegals & legal assistants had median annual earnings, including bonuses of \$37,950. Middle 50% earned between \$30,020 & \$48,760. Top 10% earned more than \$61,150; Bottom 10% earned less than \$24,470

#### **Science Technicians**

Training, Other Qualifications, and Advancement

- Many employers prefer applicants with 2+ years specialized training or associate degree in applied science or science-related technology. Some science technicians have bachelor's degree in chemistry, biology, or forensic science, or have taken several science & math courses at 4-year colleges.
- Strong computer and communication skills; able to work well with others; Organizational ability, skill in interpreting scientific results, high mechanical aptitude, attention to detail

Job Trends – Science Technicians continued

- Employment of science technicians expected to increase about as fast as average (increase 10-20% between 2002-2012) for all occupations
- Job growth for chemical technicians is projected to grow more slowly than average (increase 3-9% between 2002-2012)
- Employment of environmental science & protection technicians should grow much faster than average (increase 36% or more between 2002-2012) to help regulate waste products; to collect air, water, and soil samples for measuring levels of pollutants; to monitor compliance with environmental regulations; and to clean up contaminated sites.
- Limited demand for forest & conservation technicians at Federal & State government levels, leading to slower-than-average growth (increase 3-9% between 2002-2012), due to general downsizing % reductions in timber harvesting on Federal lands. However, increased emphasis on specific conservation issues, such as environmental protection, water resources preservation, & control of exotic & invasive pests, may provide some employment opportunities.
- Little or no growth in employment (increase 0-2% between 2002-2012) of geological & petroleum technicians expected because employment in oil & gas extraction & mining industries, among the largest employers of geological & petroleum technicians, expected to decline. Job opportunities will be more favorable in professional, scientific, & technical services firms, as geological & petroleum technicians will be needed to consult companies regarding environmental policy & Federal Government mandates
- Job opportunities expected to be best for graduates of applied science technology & who are well trained on equipment used in industrial & government laboratories and production facilities.
- Along with opportunities created by growth, many job openings should arise from need to

replace technicians who retire or leave labor force for other reasons

• During periods of economic recession, layoffs of science technicians may occur

#### **Earnings**

- Median hourly earnings of science technicians in 2002 were as follows:
  - o Geological and petroleum technicians: \$18.96
  - o Chemical technicians: \$18.00
  - o Environmental science and protection technicians, including health: \$16.98
  - o Biological technicians: \$15.73
  - o Forest and conservation technicians: \$14.90

## **Social Scientists, Other (including Geographers)**

Training, Other Qualifications, and Advancement

- Ph.D. or equivalent degree is a minimum requirement for most positions in colleges & universities & is important for advancement to many top-level nonacademic research & administrative posts.
- Graduates with master's degrees in applied specialties usually have better opportunities outside of colleges & universities, although the situation varies by field
- Bachelor's degree holders have limited opportunities &, in most social science occupations, do
  not qualify for "professional" positions. The bachelor's degree does provide suitable
  background for many different kinds of entry-level jobs, such as research assistant,
  administrative aide, or management or sales trainee

Job Trends – Social Scientists, Other continued

Social Scientists, Other Training, Other Qualifications, and Advancement continued:

- Training in statistics & mathematics essential for many social scientists. Mathematical & quantitative research methods increasingly are being used in geography
- Ability to utilize computers for research purposes mandatory in most disciplines
- Most geographers also will need to be familiar with GIS technology
- Excellent written and oral communication skills necessary

- Employment of social scientists expected to grow about as fast as average (increase 10-20% between 2002-2012) for all occupations. However, growth rates vary by specialty. Anthropologists and archaeologists, geographers, and sociologists will experience average employment growth.
- Despite projected job growth, competition will remain keen for social science positions. Many jobs in policy, research, or marketing, for which social scientists qualify, are not advertised exclusively as social scientist positions.
- A few social scientists will find opportunities as university faculty, although competition for these jobs also will remain keen. Usually, there are more graduates than available faculty positions, although retirements among faculty are expected to rise in next few years. The growing importance and popularity of social science subjects in secondary schools is strengthening the demand for social science teachers at that level
- Geographers will advise on environmental matters, such as where to build a landfill or preserve wetland habitats. As the use of GIS technology expands, geographers will find numerous job opportunities applying GIS technology in non-traditional areas.

## **Earnings**

- Median annual earnings of social scientists (excluding Economists, market and survey researchers, psychologists, and urban and regional planners) were \$52,280 in 2002
- Geographers had median annual earnings of \$53,420

## Supervisors, farming, fishing, and forestry workers

- Most significant source of training: work experience in related occupation
- Projected employment change: about as fast as average (increase 10-20% between 2002-2012)

Job Trends – Surveyors, Cartographers, and Photogrammetrists and Surveying Technicians

# Surveyors, Cartographers, and Photogrammetrists and Surveying Technicians Training, Other Qualifications, and Advancement

- As technology advances, a 4-year college degree increasingly becoming prerequisite
- Massachusetts licenses land surveyors. Individuals must pass written examination given by National Council of Examiners for Engineering and Surveying & written examination prepared by State licensing board. Candidates must meet standards of formal education & work experience in field.
- National Society of Professional Surveyors, a member organization of American Congress on Surveying & Mapping, has voluntary certification program for surveying technicians.
   Technicians are certified at 4 levels requiring progressive amounts of experience, in addition passing written examinations. Although not required for State licensure, many employers require certification for promotion to positions with greater responsibilities.
- Surveyors: Ability to visualize objects, distances, sizes, & abstract forms. Work with precision & accuracy. Be in good physical condition. Good eyesight, coordination, & hearing to communicate verbally & manually (using hand signals). Good office skills.
- Cartographers & photogrammetrists: usually have bachelor's degrees in field such as engineering, forestry, geography, or physical science. With development of GIS, cartographers & photogrammetrists need additional education & stronger technical skills
- American Society for Photogrammetry & Remote Sensing has voluntary certification program
  for photogrammetrists. To qualify, individuals must meet work experience standards & pass oral
  or written examination

#### Job Outlook

- Employment expected to grow about as fast as average (increase 10-20% between 2002-2012) for all occupations
- Job openings will continue to result from need to replace workers who transfer to other occupations or who leave the labor force altogether
- Employment of surveying & mapping technicians expected to grow faster than average (increase 21-35% between 2002-2012) for all occupations. Short training period to learn to operate equipment, current lack of any formal testing or licensing, growing demand for people to do basic GIS-related data-entry work, & relatively lower wages all encourage demand for these technicians. However, many persons possess basic skills needed to qualify for the jobs that are available, so competition for job openings may result.
- As technologies become more complex, opportunities will be best for surveyors, cartographers, & photogrammetrists who have at least a bachelor's degree & strong technical skills. Upgraded licensing requirements will continue to limit opportunities for professional advancement for those without bachelor's degrees.
- Opportunities for surveyors, cartographers, & photogrammetrists should remain concentrated in architectural, engineering, & related services firms. However, nontraditional areas, such as urban planning, emergency preparedness, & natural resource exploration & mapping, also should provide employment growth. Employment may fluctuate from year to year along with mapping needs for land & resource management.

Job Trends – Surveyors, Cartographers, and Photogrammetrists and Surveying Technicians continued

## Earnings

- Median annual earnings of cartographers & photogrammetrists were \$42,870 in 2002. Middle 50% earned between \$32,580 & \$55,610. Lowest 10% earned less than \$25,810. Highest 10% earned more than \$69,320.
- Median annual earnings of surveyors were \$39,970 in 2002. Middle 50% earned between \$29,320 & \$53,440. Lowest 10% earned less than \$22,260. Highest 10% earned more than \$67,700.
- Median annual earnings of surveying & mapping technicians were \$29,230 in 2002. Middle 50% earned between \$22,640 & \$39,070 in 2002. Lowest 10% earned less than \$18,490. Highest 10% earned more than \$48,970.

#### **Teachers—Postsecondary**

Training, Other Qualifications, and Advancement

- Education & training required of postsecondary teachers varies widely, depending on subject taught & educational institution employing them. Educational requirements for teachers are generally highest at 4-year research universities but, at career & technical institutes, experience & expertise in related occupation most valuable qualification
- Communicate & relate well with, enjoy working with, & be able to motivate students. Inquiring & analytical minds. Strong desire to pursue & disseminate knowledge. Self-motivated & able to work in an environment with little direct supervision.
- Teachers need bachelor's or higher degree, plus work or other experience in their field. In some fields, a license or certificate that demonstrates one's qualifications may be all that is required

• With greater competition for jobs, master's degree holders may find it increasingly difficult to obtain employment as they are passed over in favor of candidates holding a Ph.D.

#### Job Outlook

- Employment of postsecondary teachers expected to grow much faster than average (increase 36% or more between 2002-2012) for all occupations. Significant proportion of these new jobs will be part-time positions. Good job opportunities expected as retirements of current postsecondary teachers & continued increases in student enrollments create numerous openings for teachers
- Postsecondary institutions are major employer of workers holding doctoral degrees, & opportunities for Ph.D. recipients seeking jobs as postsecondary teachers expected to be somewhat better than in previous decades.
- Opportunities for graduate teaching assistants expected to be very good
- Best job prospects for postsecondary teachers likely to be in fields where job growth expected to be strong over next decade. These will include biological sciences

#### **Earnings**

• Median annual earnings of all postsecondary teachers in 2002 were \$49,040. Middle 50% earned between \$34,310 % \$69,580. Lowest10% earned less than \$23,080. Highest 10% earned more than \$92,430.

Job Trends – Teachers – Preschool, Kindergarten, Elementary, Middle, and Secondary

## Teachers—Preschool, Kindergarten, Elementary, Middle, and Secondary

Training, Other Qualifications, and Advancement

- All 50 States & District of Columbia require public school teachers to be licensed. Licensure is not required for teachers in private schools. Usually licensure is granted by State Board of Education or licensure advisory committee. Teachers may be licensed to teach early childhood grades (usually preschool through grade 3); elementary grades (grades 1 through 6 or 8); middle grades (grades 5 through 8); secondary-education subject area (usually grades 7 through 12); or special subject, such as reading or music (usually grades kindergarten through 12).
- All States require general education teachers to have bachelor's degree & completed approved teacher training program with a prescribed number of subject and education credits. Tested for competency in basic skills, such as reading & writing, & in teaching
- Knowledgeable in their subject, ability to communicate, inspire trust & confidence, motivate students, understand students' educational & emotional needs

- Job opportunities over next 10 years will vary from good to excellent, depending on locality, grade level, & subject taught. Most job openings will be attributable to expected retirement of a large number of teachers. Relatively high rates of turnover, especially among beginning teachers employed in poor, urban schools, will lead to numerous job openings. Competition for qualified teachers among some localities will likely continue
- Through 2012, overall student enrollments, key factor in demand for teachers, expected to rise more slowly than in past. Enrollments in Northeast expected to hold relatively steady or

decline. Many inner cities have difficulty attracting & retaining enough teachers, so job prospects should be better in these areas than in suburban districts. Many schools have difficulty hiring qualified teachers in some subject areas including science (chemistry & physics)

## **Earnings**

• Median annual earnings of kindergarten, elementary, middle, & secondary school teachers ranged from \$39,810 to \$44,340 in 2002; Lowest 10% earned \$24,960 to \$29,850; Top 10% earned \$62,890 to \$68,530. Median earnings for preschool teachers were \$19,270.

#### **Urban and Regional Planners**

Training, Other Qualifications, and Advancement

- Employers prefer workers who have advanced training. Most entry-level jobs in Federal, State, & local government agencies require master's degree from accredited program in urban or regional planning or master's degree in related field (urban design or geography)
- Bachelor's degree from accredited planning program, coupled with master's degree in architecture, landscape architecture, or civil engineering, good preparation for entry-level planning jobs in various areas, including urban design, transportation, & the environment.
- Master's from accredited planning program provides best training for range of planning fields
- Although graduates from accredited bachelor's degree programs qualify for some entry-level positions, their advancement opportunities limited, unless acquire advanced degree.
- American Institute of Certified Planners, a professional institute within American Planning Association, grants certification to individuals who have appropriate combination of education & professional experience & who pass an examination. Certification helpful for promotion.
- Ability to communicate effectively, both orally & in writing, necessary

Job Trends – Urban and Regional Planners continued

#### Job Outlook

- Employment expected to grow about as fast as average (increase 10-20% between 2002-2012) for all occupations. Employment growth will be driven by need for State & local governments to provide public services such as regulation of commercial development, the environment, transportation, & land use & development for expanding population.
- Most planners work for local governments with limited resources & many demands for services.
  When communities need to cut expenditures, planning services may be cut before basic
  services. Budget constraints could limit job growth in government; as a result, number of
  openings for consulting positions in private industry expected to grow more rapidly than number
  of openings in government.

#### **Earnings**

Median annual earnings were \$49,880 in 2002. Middle 50% earned between \$39,210 & \$62,710. Lowest 10% earned less than \$31,830. Highest 10% earned more than \$76,700

## Veterinary assistants and laboratory animal caretakers

- Most significant source of training: Short-term on-the-job training
- Projected employment change: Faster than average (increase 21-35% between 2002-12)

## Water and Liquid Waste Treatment Plant and System Operators

Training, Other Qualifications, and Advancement

• High school diploma usually required

- Need mechanical aptitude & should be competent in basic mathematics, chemistry, & biology.
  Some basic familiarity with computers necessary. Certain positions, particularly in larger cities & towns, are covered by civil service regulations. Applicants for these positions may be required to pass written examination testing their mathematics skills, mechanical aptitude, & general intelligence.
- Completion of associate degree or a 1-year certificate program in water quality & liquid waste treatment technology increases applicant's chances for employment & promotion
- Must pass examination to certify they are capable of overseeing liquid waste treatment plant operations. Different levels of certification, depending on operator's experience & training. Higher certification levels qualify operator for wider variety of treatment processes

#### Job Outlook

- Employment expected to grow about as fast as average (increase 10-20% between 2002-2012)
- Job prospects will be good for qualified individuals because number of applicants in this field is normally low, due primarily to unclean & physically demanding nature of work
- Increasing population & growth of economy expected to boost demand for essential water & liquid waste treatment services
- Local gov't largest employers of water/liquid waste treatment plant & system operators. Federal certification requirements have increased utilities' reliance on private firms specializing in the operation & management of water & liquid waste treatment facilities therefore employment in privately owned facilities will grow faster than average (increase 21-35% between 2002-2012)

### **Earnings**

• Median annual earnings were \$33,390 in 2002. Middle 50% earned between \$25,790 & \$42,490. Lowest 10% earned less than \$20,220. Highest 10% earned more than \$52,110.

**Chapter 11: Table 1: Commonwealth of Massachusetts: Employment Projections 2000-2010**<sup>2</sup>

Occupational Title <sup>3</sup>	Employi	•				Replacement Openings <sup>5</sup>	Total Job Opening <sup>6</sup>	Educational/ Training Level <sup>7</sup>	
	2000	2010	2000	2010	( 27 23	<u> </u>	Openings	Opening	Training Level
Animal Care & Service Workers	2,200	2,630	0.1%	0.1%	430	20%	470	890	
Animal Trainers	220	260	0.0%	0.0%	40	18%	40	80	10
Nonfarm Animal Caretakers	1,980	2,370	0.1%	0.1%	390	20%	430	810	11
Architecture & Engineering Occupations	83,200	85,020	2.4%	2.2%	1,820	2%	16,480	18,300	
Architects, Surveyors, & Cartographers	8,340	9,230	0.2%	0.2%	890	11%	740	1,630	
Landscape Architects	1,310	1,710	0.0%	0.0%	400	31%	80	480	5
Engineers	48,650	48,660	1.4%	1.3%	10	0%	9,650	9,660	
Civil Engineers	5,640	5,540	0.2%	0.1%	-100	-2%	880	880	5
Environmental Engineers	2,810	3,150	0.1%	0.1%	340	12%	560	900	5
Drafters, Engineering, & Mapping Technicians	26,210	27,130	0.7%	0.7%	920	4%	6,090	7,020	
Environmental Engineering Technicians	270	310	0.0%	0.0%	40	15%	60	90	6
Building & Grounds Cleaning & Maintenance Occupations	119,290	128,130	3.4%	3.3%	8,840	7%	23,990	32,830	
Landscaping & Groundskeeping Workers	19,080	23,380	0.5%	0.6%	4,300	23%	4,820	9,120	11
Farming, Fishing, & Forestry Occupations	2,160	2,190	0.1%	0.1%	30	1%	560	590	
Supervisors/Managers of Farming, Fishing, & Forestry Workers	110	120	0.0%	0.0%	10	9%	10	20	10
Forest & Conservation Workers	210	210	0.0%	0.0%	0	0%	50	50	10
Farming, Fishing, & Forestry Workers, All Other	110	110	0.0%	0.0%	0	0%	30	40	11
Healthcare Practitioners & Technical Occupations	188,650	224,860	5.4%	5.9%	36,210	19%	40,060	76,270	
Health Diagnosing & Treating Practitioners	122,620	146,100	3.5%	3.8%	23,480	19%	25,510	49,000	
Veterinarians	920	1,170	0.0%	0.0%	250	27%	170	420	1
Health Technologists & Technicians	60,370	72,320	1.7%	1.9%	11,950	20%	14,130	26,090	
Veterinary Technologists & Technicians	1,030	1,330	0.0%	0.0%	300	29%	270	570	6
Other Healthcare Support Occupations	23,290	30,020	0.7%	0.8%	6,730	29%	5,620	12,350	

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<sup>&</sup>lt;sup>2</sup> Information compiled by Massachusetts Division of Unemployment Assistance. For full report, please visit www.detma.org/FPlmiforms1.htm

Listed for only those occupations providing 100 or more jobs

<sup>&</sup>lt;sup>4</sup> Includes self-employed

<sup>&</sup>lt;sup>5</sup> Represents number of job openings expected to arise from the need to replace workers who retire or move up the career ladder.

<sup>&</sup>lt;sup>6</sup> Represents sum of new jobs and replacements. If employment change is negative, job openings due to growth are zero and total job openings equal replacements.

<sup>&</sup>lt;sup>7</sup> Defined on page 262.

Veterinary Assistants & Laboratory Animal Caretakers	2,050	2,590	0.1%	0.1%	540	26%	550	1,080	11
Occupational Title	Employment		Percent New Jobs			Replacement	Total Job	Educational/	
		1	Distrib		(# & Grow	th rate)	Openings	Openings	Training Level
	2000	2010	2000	2010					
Construction & Extraction Occupations	130,780	142,130	3.7%	3.7%	11,350	9%	25,410	36,760	
Hazardous Materials Removal Workers	1,030	1,250	0.0%	0.0%	220	21%	310	530	10
Legal Occupations	33,160	36,450	0.9%	1.0%	3,290	10%	2,630	5,920	
Lawyers	21,060	23,020	0.6%	0.6%	1,960	9%	1,440	3,410	1
Paralegals & Legal Assistants	5,730	6,820	0.2%	0.2%	1,090	19%	350	1,440	6
Life, Physical, & Social Science Occupations	44,180	50,470	1.3%	1.3%	6,290	14%	12,530	18,810	
Life Scientists	8,820	10,210	0.3%	0.3%	1,390	16%	2,560	3,950	
Conservation Scientists	220	220	0.0%	0.0%	0	0%	70	70	5
Zoologists & Wildlife Biologists	300	350	0.0%	0.0%	50	17%	110	160	2
Physical Scientists	7,970	8,890	0.2%	0.2%	920	12%	2,640	3,560	
Atmospheric & Space Scientists	240	260	0.0%	0.0%	20	8%	80	90	5
Chemists	3,730	4,280	0.1%	0.1%	550	15%	1,170	1,720	5
Environmental Scientists & Specialists, including Health	1,700	1,900	0.0%	0.0%	200	12%	550	760	5
Geoscientists, except Hydrologists & Geographers	440	530	0.0%	0.0%	90	20%	140	240	5
Hydrologists	110	120	0.0%	0.0%	10	9%	40	50	5
Materials Scientists	340	350	0.0%	0.0%	10	3%	110	120	5
Social Scientists & Related Workers	15,140	17,690	0.4%	0.5%	2,550	17%	3,520	6,080	
Urban & Regional Planners	930	1,020	0.0%	0.0%	90	10%	230	330	3
Life, Physical, & Social Science Technicians	12,260	13,670	0.3%	0.4%	1,410	12%	3,800	5,220	
Biological Technicians	1,950	2,400	0.1%	0.1%	450	23%	450	910	6
Chemical Technicians	2,150	2,470	0.1%	0.1%	320	15%	500	820	6
Environmental Sci. & Protection Technicians, includ. Health	570	670	0.0%	0.0%	100	18%	210	310	6
Management Occupations	278,000	307,760	7.9%	8.0%	29,760	11%	50,600	80,370	
Natural Sciences Managers	1,580	1,730	0.0%	0.0%	150	9%	280	430	4
Plant & System Operators	5,720	5,660	0.2%	0.1%	-60	-1%	1,720	1,720	
Water & Liquid Waste Treatment Plant & System Operators	1,400	1,550	0.0%	0.0%	150	11%	440	590	9
Postsecondary Teachers	40,930	48,510	1.2%	1.3%	7,580	19%	11,180	18,750	
Atmospheric, Earth, Marine & Space Sci. Postsec. Teachers	310	370	0.0%	0.0%	60	19%	80	150	2
Biological Science Teachers, Postsecondary	1,290	1,540	0.0%	0.0%	250	19%	350	600	2
Chemistry Teachers, Postsecondary	510	620	0.0%	0.0%	110	22%	140	240	2

Geography Teachers, Postsecondary	220	270	0.0%	0.0%	50	23%	60	100	2
Occupational Title	Employr	nent	Percen	t	New Job	S	Replacement	Total Job	Educational/
			Distrib	ution	(# & Grow	th rate)	Openings	Openings	Training Level
	2000	2010	2000	2010	#				
<b>Protective Service Occupations</b>	75,380	85,010	2.1%	2.2%	9,630	13%	20,720	30,350	
Animal Control Workers	160	170	0.0%	0.0%	10	6%	120	140	10
Fish & Game Wardens	140	150	0.0%	0.0%	10	7%	20	20	9

#### <sup>6</sup>Education and Training Level

- 1. First Professional Degree
- 2. Doctorate
- 3. Master's Degree
- 4. Work Experience, plus a Bachelor's Degree or Higher
- 5. Bachelor's Degree
- 6. Associate's Degree
- 7. Postsecondary Vocational Training
- 8. Work Experience in a Related Occupation
- 9. Long-Term On-the-Job Training (1 or more years)
- 10. Moderate-Term On-the-Job Training (1 to 12 months)
- 11. Short-Term On-the-Job Training (1 to 4 weeks)

Table 2: Fastest growing occupations & occupations projected to have largest numerical increases in employment between 2002-12, by level of education or training\*

**Education or Training Level Fastest growing occupations** Occupations having largest numerical growth Lawyers; Veterinarians First Professional Degree Veterinarians Doctoral Degree Postsecondary teachers; Computer & Information Postsecondary teachers; Computer & Information Scientists, research; Biochemists & biophysicists Scientists, research: Biochemists & biophysicists Master's Degree No Environmental Jobs No Environmental Jobs Bachelor's or higher degree, plus work experience No Environmental Jobs No Environmental Jobs Elementary school teachers, except special Bachelor's Degree No Environmental Jobs education; Secondary school teachers, except special & vocational education Associate Degree Veterinary technologists & technicians Paralegals & legal assistants Postsecondary vocational award No Environmental Jobs No Environmental Jobs Work Experience in related occupation No Environmental Jobs Construction trade & extraction workers managers Long-term on-the-job training No Environmental Jobs No Environmental Jobs Moderate-term on-the-job training No Environmental Jobs Hazardous materials removal workers Short-term on-the-job training No Environmental Jobs No Environmental Jobs

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Information compiled by the U.S. Department of Labor on June 2, 2004. For full report, please visit www.bls.gov/oco/oco2003.htm

## **Chapter 12: Job Search Websites**

If you are interested in conducting your own job search, here are some helpful websites:

#### **Federal Government Jobs:**

www.usajobs.gov/

## **Massachusetts State Government Jobs:**

http://ceo.hrd.state.ma.us/

#### **Local Government Jobs:**

Boston:

www.cityofboston.gov/jobs/postings.asp?dept=all

Brookline:

www.townofbrooklinemass.com/HumanResources/Jobs.asp

Cambridge:

www.cambridgema.gov/jobs.cfm

## **General Environmental Job Search Engines:**

Cyber-Sierra's Natural Resource Job Search: www.cyber-sierra.com/

EcoEmploy.com: www.ecoemploy.com/

Environmental Career.com: www.environmental-jobs.com/ Environmental Career Opportunities: www.ecojobs.com/

Environmental League of Massachusetts: www.environmentalleague.org/jobs/jobs.html

Green Dream Jobs: www.sustainablebusiness.com/jobs/index.cfm

Idealist.org: www.idealist.org/

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EPA	121	ENTRIX, Inc.	50
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Hydrologist		Public Sector:	110
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BSC Group	29	Vollmer Associates	98
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ATC Associates, Inc.	6	Exponent Environmental Group	
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Private Sector:	_	Horticulturist	
Abt Associates Inc.	1	Public Sector:	
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Clean Harbors	37	City of Boston	169
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ECS	47	Planning and Design:	
Envir. Systems Research Inst.	53	Landscape Architect	
Hatch Mott MacDonald Ltd.	69	Private Sector:	
HNTB	72		18
MACTEC	77	Bioengineering Group, Inc.	
Metcalf & Eddy	80	Bryant Associates, Inc.	28
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Onyx Environmental Services	82	Carter & Burgess Inc.	33
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City of Cambridge	172	Risk Science:	
Coastal Zone Management	128	Toxicologist	
Dept. Environmental Protection		Private Sector:	
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Hazardous Material Technician		Private Sector:	
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Site Investigator and Remediator		Public Sector:	-
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Risk Manager		Hancock Associates	67
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Technical:		Other:	
Field Technician		Armed Forces	
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