

Matthew J. Dowling
30 Columbia Heights Oval
Charlestown, Rhode Island 02813

(401) 309-3893

Dowlingenv@gmail.com

Watershed Management / Environmental Scientist

Environmental Science

Hydrogeology

Watershed Management

Profile:

Education B.S., Geosciences, University of Rhode Island, 2000
 Minor in Natural Resource Science and GIS

Pertinent Employment History:

Employer #1

Environmental Scientist / On-Site Wastewater Manager – Town of Charlestown, Rhode Island.
(January 2008 – Present) 40+ hrs per week
Town Hall
4540 South County Trail
Charlestown, Rhode Island
(401) 364-5030
<http://www.charlestownri.org/>

The Town of Charlestown, Rhode Island relies solely on groundwater for potable water supply and exclusively on on-site wastewater treatment systems (OWTS) for treatment of wastewater. The most densely developed areas of the Town lie within the critically impacted “South Shore Salt Ponds Watershed”, where bacteria and nutrient loading have significantly impaired groundwater and surface water resources.

Currently manage and implement all aspects of the Town’s On-Site Wastewater Management Program to protect human health, groundwater for potability purposes and surface water quality.

Develop programs to sample, quantify and delineate impacts to surface water and groundwater resources from nutrient and bacterial loading using statistical modeling and GIS. Monitor and sample surface water quality and review laboratory analytical results for the three coastal lagoons (Salt Ponds) and their fresh water tributaries, including maintaining TMDL compliance. Develop policy recommendations based on analytical trends of impacts to groundwater and surface water for the Wastewater Management Commission, Zoning Board, Town Council, State regulators and legislative committees. Coordinate local and regional policy issues with legislative delegations and testify at Rhode Island House hearings.

Coordinate ongoing ordinance required inspection and pumping schedules for over 7,000 OWTS. Review all state OWTS permits for compliance with Town specific criteria. Effectively

managed the required removal and replacement of 99.9% of all cesspools town-wide (approximately 900) under the cesspool phase-out program.

Successfully obtained and currently managing implementation of \$880,000 EPA Watershed Restoration Grant to mitigate nutrient loading in a critically impacted coastal watershed entitled “*Charlestown Coastal Watershed Protection and Restoration Program (2016)*”. Obtained and disseminated over \$1.6 million in RI State Revolving Fund low interest loan funding for septic system upgrades to protect public health, safety, welfare and the environment.

Town’s *Stormwater Discharges from Municipal Separate Storm Sewer Systems (MS4)* coordinator. Maintain compliance with the Town’s Rhode Island Pollutant Discharge Elimination System (RIPDES) permit. Established and manage Town’s Resident Canada Goose Population Management Program to manage water quality impacts from nuisance wildlife under US Fish and Wildlife Service Permit. Principal developer of the Charlestown Recommended Landscaper Program to mitigate watershed impacts from lawncare professionals.

Manage environmental and coastal permitting and compliance for municipal construction activities including two large capacity public beach pavilions and composting restrooms, public park composting restroom installations and stormwater infrastructure projects. Enforcement Officer for ordinance violations and manage municipal, district and superior court matters with Solicitors Office. Testify as expert witness at hearings and trials.

Recognized statewide as a leader in watershed management. Work closely with Town departments, public water supply boards, local and national private non-profit land preservation entities, residents and local business community leaders. Served on several town, regional and legislative working groups. Oversee administrative staff and entry level scientists and policy analysts. Prepare and publicly present annual operating budget and familiar with Capital Improvement Plans. Prepare requests for proposals, bid specs and oversee purchasing.

Employer #2

Senior Hydrogeologist / Project Manager – Corporate Environmental Advisors, (CEA), Inc.
(April 2003 – January 2008) 40+ hrs per week
127 Hartwell Street
West Boylston, Massachusetts
(508) 835-8822

Maintained regulatory compliance for state listed hazardous waste sites in Massachusetts, Connecticut, and Rhode Island. Coordinate and supervise subsurface investigation and assessment activities relating to underground storage tank (UST) hazardous material releases and surface spills including but not limited to petroleum hydrocarbons including gasoline, fuel oil, waste oil, hydraulic oil, PCBs and number 2 and number 6 heating oil. Implemented soil boring advancement and soil sampling using both direct push technology (Geoprobe) and hollow stem augers (truck mounted drill rigs), soil and groundwater sampling, installation of overburden and bedrock groundwater monitoring wells, aquifer testing, soil gas surveys and air sampling, UST removal, contaminated soil excavation, remediation system pilot testing. Designed and oversaw the installation of groundwater/soil remediation systems (high vacuum extraction, recovery wells, sparge and vent systems, potable well point of entry treatment systems, etc.) and optimized and maintained system operation.

Conducted sampling of groundwater monitoring wells, surface water bodies and potable water sources. Submitted samples for applicable EPA and/or state analysis under chain of custody protocol. Review, tabulate and analyze laboratory analytical data for comparison to applicable groundwater or surface water standards (Federal and/or State). Observe data trends and determine appropriate mitigation methods.

Familiar with the State of Rhode Island, Connecticut and Massachusetts, the United States Environmental Protection (EPA), and the American Society for Testing and Materials (ASTM) laboratory analytical methods and analytes. Coordinate approval, transport and disposal of impacted media and hazardous materials at state approved recycling facilities.

Responsible for the preparation and submittal of regulatory reports to state agencies. Obtain property access agreements for off-site assessment/remediation activities. Maintain client and state regulator relationships. Supervise staff of environmental technicians for site sampling and remediation system operation and maintenance.

Certifications and Licenses

State of Rhode Island Licensed Class 1 Septic System Designer
State of Rhode Island Licensed Class IV Soil Evaluator
State of Rhode Island Licensed Septic System Installer
Rhode Island Department of Health Licensed Private Well Sampler
Rhode Island Department of Health Licensed Interpreter
University of Rhode Island - New England On-site Wastewater Training Center (NEOWTC) - Registered Conventional Septic System Inspector, May 2008
NEOWTC - Registered Innovative and Alternative Operations and Maintenance Service Provider,

Publications

Boothroyd, J. C., Dowling, M. J., and McCandless, S. J., 2001, Quaternary geologic mapping in Rhode Island: Understanding glaciated terrain at the margin of Laurentide Ice, GSA paper # 25336

Boothroyd, J.C., McCandless, S.J., and Dowling, M.J. , 2003, Quaternary Geologic Map of Rhode Island: Rhode Island Geological Survey STATEMAP Program, Glacial morphosequence map (scale: 1:100,000) (Interim map, 21 quadrangles).

Other Professional Training

Continued Completion of Required Professional Development per RIDEM Class 1 Designer Standards
OHSA Hazardous Materials Technician Certified
40-Hour OSHA (HAZWOPER) Trained, 8-Hour OSHA Supervisor Trained
FEMA IS-700 National Incident Management System (NIMS) Trained
NFPA Firefighter II Certified
Captain, Charlestown Richmond Volunteer Fire Department