

### Qualifications Summary

- Experience managing fieldwork, designing databases, calculating chemical exposures, and conducting spatial analyses.
- Experienced in model development.
- Experienced in ecological risk assessments.
- ESRI ArcGIS; ETGeowizards; MatLab; SimaPro Life Cycle Assessment; StatSoft Statistica; SigmaPlot; Microsoft Office; Adobe Photoshop and Illustrator.

## JOSEPH FAMELY, M.E.M., B.A.

Environmental Scientist

### Fields of Expertise

Environmental management, modeling, environmental impact analyses, ecological risk assessment, geospatial analysis, environmental science and policy, land use planning, sustainable and restorative environmental design, greenhouse gas accounting.

### Higher Education

M.E.M., Yale School of Forestry & Environmental Studies (2009)  
B.A., Bowdoin College (2000)

### Employment History

2009-Present Environmental Scientist, Woods Hole Group, Inc.  
Summer 2009 Greenhouse Gas Analyst, Hudson River Valley Resorts LLC  
Summer 2008 Sustainability Planning Fellow, Yale Urban Design Workshop  
2006-2007 Environmental Scientist, Exponent, Inc.  
2000-2006 Associate Scientist, Menzie-Cura & Associates, Inc.  
Summer 2000 ClimateWise Project Manager, Maine Center for Energy & Environment

### Key Projects

#### Long Island Sound Dredged Materials Management Planning

Conducted a review of literature on dredge materials management and environmental data for Long Island Sound. Reviewed potential sites throughout the Sound for alternative placement of dredge materials – including beach nourishment via direct placement, upland beneficial use, shoreline confined disposal, and nearshore placement for beach nourishment and shoreline protection. Reviews of alternatives included site visits and desktop review (in an ArcGIS environment) based on spatial analysis of environmental/physical/cultural/infrastructure impacts of project development. The information developed will be used to develop a Dredged Materials Management Plan for Long Island Sound.

#### Shoreline Change Analyses for Private Property on Long Island

Conducted numerous quantitative spatial analyses of shoreline and dune movement over time in support of Coastal Erosion Hazard Area evaluations in New York. Analyzed multiple historical aerial photographs to digitize the shoreline and calculate long-term rates of

## **Key Projects (continued)**

change along transects through the beach and dune. Summarized results and recommended changes in the delineation of resource areas based on review of the data with respect to the New York State Coastal Erosion Management Regulations.

### **New Bedford Harbor Superfund Site**

Data analysis and technical reporting in support of Remedial Investigation for New Bedford Harbor Operable Unit #3. Analyzed sediment and tissue chemistry data along with toxicity tests and benthic community data to support management decisions in areas outside the harbor.

### **Greenhouse Gas Impacts Modeling**

Developed a greenhouse gas model to evaluate the impacts of multiple development alternatives for a proposed green resort and residential community development's New York State Environmental Quality Review Environmental Impact Statement.

### **Greater Dwight Development Corporation Sustainability Plan**

Developed a neighborhood sustainability framework for a New Haven community. Established goals, proposed sustainability indicators and targets, and suggested strategies for adopting sustainable community practices. Provided community development corporation with a quantitative and spatial (based on ArcGIS analysis) sustainability evaluation.

### **Alaska Cruise Ship Model**

Developed a model to help US EPA Office of Water assess residence times of contaminants associated with cruise ship discharge in Alaskan harbors.

### **Moss Landing Harbor Dredged Material Disposal Risk Assessment**

Developed a conceptual site model for Monterey Bay in support of an ecological risk characterization of disposal of dredged materials. Developed a sampling and analysis plan in coordination with the conceptual site model.

### **Ecological Risk Assessment of a Metal Finishing Plant**

Conducted a Stage I and Stage II ecological risk characterization for a former metal finishing facility in Massachusetts. Planned and led field investigations, managed data analysis, and authored risk characterization report.

## **Publications and Awards**

Yale School of Architecture Retrospecta, 2008-2009. Master Plan for Nusajaya / Zone B, Iskandar, Malaysia. Group project for ARCH 636a: Sustainable Design.

2008 Award for Outstanding Work in Restorative Environmental Design – Adapting Vernacular Architecture for Sustainable and Restorative Environmental Design Elements. Independent consulting project for Urban Villages' sustainable community development in Hudson, Alabama.

2008 Yale President's Public Service Fellowship. Placement at Yale Urban Design Workshop through Yale Office of New Haven & State Affairs.

Beinecke Scholarship, 2007-2009. Yale School of Forestry & Environmental Studies.