

**JEFFREY A. DAHLIN**  
Senior Biologist, GIS System Administrator

Mr. Dahlin is a senior biologist, specializing in oil spill planning and response. He has been part of RPI's scientific support team since 1985, providing expertise in resources at risk, on-scene support, and field studies. He has managed and been involved in the production of many Environmental Sensitivity Index (ESI) maps, and spearheaded the initial move to use of Geographic Information System (GIS) technology for producing ESI maps and digital products. He developed the GIS data structure and system that is currently in place for production of ESI maps. He has participated in several field studies in coastal USA, the Caribbean Islands, Panama, and Nigeria, examining the effects of oil spills on marshes and mangroves. Mr. Dahlin is responsible for statistical analysis on many projects, including the socioeconomic, biological, and chemical data collected for a three-year baseline study of the Niger Delta and all available data on uptake, depuration, sublethal effects, and toxicity of toxic substances on North American shellfish. He is currently working on a project to identify spawning aggregation sites in the Mesoamerican barrier reef system of the Mexico, Belize, Guatemala, and Honduras. He is also developing a database to maintain all of the environmental survey data collected for that region.

As a system administrator Mr. Dahlin is responsible for setting up and maintaining the computer systems in the company. He recently planned and administered the conversion from UNIX based GIS system to a NT based GIS system. His computer expertise includes the operating systems: UNIX (HP-UX), Windows NT 4.0, Windows 95/98, Macintosh OS. He is also familiar with the following hardware: HP 9000/700 series workstations, Macintoshes, and Intel based PC's. He is proficient in using and programming in: Arc/Info, ArcView and Oracle. He is also proficient with basic office productivity software such as Excel, Word, Access, and dBase. He has limited experience using statistical packages such as SAS.

## **EDUCATION**

B.S., Marine Science, University of South Carolina, Columbia, S.C. (1982).

## **PROFESSIONAL EXPERIENCE**

### **Resource Mapping/Environmental Assessments:**

**1983-Present:** Senior Biologist/Project Manager: Environmental Sensitivity mapping for many of the coastal areas of the United States.

**2002-2003:** Identify spawning aggregation sites in the Mesoamerican Barrier Reef System (Mexico, Belize, Guatemala, Honduras), and develop a database to maintain all of the data collected from environmental and oceanographic studies in the area.

**1998-Present:** Identifying Unusually Sensitive Areas, as determined by Groundwater wells. Used GIS to classify all the groundwater wells in the United States, based on digital data available from the states.

**1997:** Project Manager: Develop a resource map for the City of Cayce, South Carolina, include land use/land cover, infrastructure, flood zones, and planned development areas.

**1990-1991:** Project Manager, Shell Marsh Damage Assessment. Survey to determine long term fate and effects of an oil spill on wetlands in San Francisco Bay.

**1986:** Supervisor, “Galeta Island Spill Cleanup.” Supervised cleanup of 2-3 miles of heavily oiled shoreline on Galeta Island Naval Base, Panama.

**1985-1987:** Data Management Coordinator and Statistician, “Tropical Oil Pollution Investigation of Coastal Systems.” Responsible for the entry and analysis of data collected from the study of oil effects on a tropical coastal ecosystem. Statistical comparisons were done between sub- and inter-tidal environments and between different oil and dispersed oil combinations.

**1983-1985:** Mr. Dahlin lived in Nigeria and conducted extensive field surveys to collect socioeconomic, biological, and chemical data as part of the three-year baseline study of the Niger Delta. He was responsible for the analysis of the complex data set for this project.

#### **Contingency Planning:**

**1997:** Evaluation of the effectiveness of Area Plans and Area Planning Committees under OPA 90. For the U.S. Coast Guard, Dept. of Transportation.

**1987-1989:** Senior Scientist/Project Manager, Developed and wrote a Port Risk Assessment Manual to be used in conjunction with the Coast Guard Contingency Plans, which emphasized spill histories, natural resources at risk, and outlined physical factors such as tides and currents that may affect spread of a spilled substance. This was done for the port areas of New York/New Jersey, Baltimore, MD; Tampa Bay, FL; Pascagoula, MS; Hawaii; Charleston, SC; and Savannah, GA; Mobile, AL, Hampton Roads, VA.

#### **TECHNICAL EXPERTISE**

##### **Software:**

Expertise in ARC/INFO, PC ARC/INFO, ArcView, Oracle, SQL, Microsoft Exchange, various word processors, spreadsheets, database and graphics packages.

##### **Hardware and Systems:**

Expertise with Windows 95, 98 , NT, and 2000, unix (HP-UX), and Macintosh. Setup and administer a network with over 30 computers that are a mix of UNIX, Windows and Macintosh computer. Responsible for all network functions including administering email, FTP, and Web servers. Experienced in setup and operations of various peripherals, including large format scanners, plotters, laser printers, and color copier/printers.