

**Joseph M. Holmes**  
Graphics Director/Cartographer

**Research Planning, Inc.**

Mr. Holmes is a geographer and a specialist in cartography with 30 years of experience. He is an expert in all aspects of data acquisition and analysis, thematic map design, drafting, and digitizing. Mr. Holmes is also proficient in many areas of desktop publishing including, graphic design and layout, map production, book publishing, website design, photographic image processing, movie and report production. In addition, Mr. Holmes specializes in Geographic Information System (GIS) software for design, development, and production of map products using multiple thematic layers including topographic quads, digital elevation models, satellite imagery, aerial photography, and shoreline information. As a cartographer, he is capable of bringing together a wide array of graphic techniques to produce maps and documents where special consideration has been given to their intended use by the client.

## **EDUCATION**

M.A., 1984: Department of Geography, University of South Carolina, Thesis: "Cognitive Processes used to Recognize Perspective Three Dimensional Map Surfaces."

B.F.A., 1979: Department of Art, Western Carolina University, Specialized in Studio Art. Honors: Summa cum laude.

## **PROFESSIONAL EXPERIENCE**

**1985-present:** Graphics Director, Research Planning, Inc., Columbia, South Carolina.

**1984-1985:** Cartographer, University of South Carolina, Columbia, South Carolina.

Illustrator/Graphic Designer: Designed, illustrated, and published three full-featured coastal guidebooks with co-authors Miles O. Hayes and Jacqueline Michel through Pandion Books, a publishing division of Research Planning, Inc. These books are the first in a series that explore the origins of coastal features and the ecological aspects of select US coastal states. Each book is richly illustrated in full color with original drawings, photographs, aerial photos, satellite images, and maps detailing the areas they visited while conducting their research. (June 2007 to present)

Field Technician: Assisted in a three-month field effort to survey 150 randomly selected sites in Prince William Sound and the Gulf of Alaska in order to determine the extent of sub-surface lingering oil from the *Exxon Valdez* oil spill in Alaska. The results of this work were used to develop a model to determine other areas within Prince William Sound where subsurface lingering oil may still persist. (May 2007-September 2008)

Logistics Coordinator: Provided on-scene support for the NOAA-led Natural Resource Damage Assessment (NRDA) for the Citgo spill of 3-4 million gallons in Calcasieu Lake, Louisiana (August 2006)

NOAA and other ESI Atlases: Graphics Director for over 50 bound atlases that focused on sensitive shoreline habitats and wildlife resources at risk to oil spills. These include the coastal environments of Puerto Rico, Virgin Islands, El Salvador, Guatemala, Honduras, Hawaii, Alaska, Washington, Columbia River, Oregon, San Francisco Bay, Northern, Central, and Southern California, Lake Ontario, Northern Lake Michigan, Western Lake Michigan, Southern Lake Michigan, Lake Superior, Lake Huron, Texas, Louisiana, Mississippi, Alabama, Georgia, West Peninsular Florida (2 volumes), West Florida, South

Florida, East Florida, South Carolina, North Carolina, Delaware/New Jersey/Pennsylvania, Massachusetts, Rhode Island, Connecticut, and New York. (April 1986 to present).

NOAA ESI Summary Map Series: Graphics Director for four full color map sets of environmentally sensitive resources for the Puget Sound in Washington state, Prince William Sound in Alaska, Delaware Bay in New Jersey and Delaware, Cook Inlet/Kenai Peninsula in Alaska, and Kodiak Island, Alaska. (February 1986 - 2001).

Training Course Field Coordinator: 4-6 week-long field seminars each year covering the modern clastic depositional systems along the coastlines of South Carolina and south-central Alaska. These courses are sponsored by the American Association of Petroleum Geologists, as well as Schlumberger Well Services, British Petroleum, Arco, and Esso Canada. (June 1989 to September 2000).

CD-ROM Production: Produced interactive CD-ROMs titled “South Carolina Coastal Environments” and “Tidal Inlet Protection Strategies for Oil-Spill Response: Coast of Rhode Island”. (July 1998 and May 2000, respectively).

NOAA Port Studies: Graphics Director for 20 computerized map database studies that assess the risk of hazardous material pollution incidents in such major U.S. ports as Philadelphia, Los Angeles, Seattle, and Baltimore. (February 1985 to September 1991).

Nigerian National Petroleum Corporation Report: Graphics Coordinator for a comprehensive final report which assessed existing ecological conditions in the oil-producing regions of Nigeria for the establishment of control criteria and standards against petroleum-related pollution. (May 1985 to November 1985).

Remote Sensing Manual: Graphics coordinator for Introductory Digital Image Processing, 1986, Prentice Hall, authored by John Jensen, professor at the University of South Carolina (August 1984 to May 1985).

Thematic Atlas of Saudi Arabia: Cartographer for the production of a range of socio-economic maps for an atlas published by the Saudi government. (August 1984 to February 1985).

## **PUBLICATIONS**

Hayes, M.O. and J. Michel. J.M. Holmes, Illustrator. 2018. A Coast to Preserve: Coastal Geology and Ecology of Oregon and Washington. Pandion Books, Columbia, SC., in press

Hayes, M.O. and J. Michel. J.M. Holmes, Illustrator. 2017. A Coast Beyond Compare: Coastal Geology and Ecology of Southern Alaska. Pandion Books, Columbia, SC. 319 pp.

Hayes, M.O. and J. Michel. J.M. Holmes, Illustrator. 2011. A Tide-swept Coast of Sand and Marsh: Coastal Geology and Ecology of Georgia. Pandion Books, Columbia, SC. 299 pp.

Hayes, M.O. and J. Michel. J.M. Holmes, Illustrator. 2010. A Coast to Explore: Coastal Geology and Ecology of Central California. Pandion Books, Columbia, SC. 338 pp.

Hayes, M.O. and J. Michel. J.M. Holmes, Illustrator. 2008. A Coast for All Seasons: A Naturalist's Guide to the Coast of South Carolina. Pandion Books, Columbia, SC. 285 pp.

Dahlin, J.A. and J.M. Holmes, 1992, Guidelines for digitization of ESI maps and symbology standards. Prepared for the Marine Spill Response Corporation, Wash., D.C., RPI/R/92-5, 28 pp. plus appendices.

Jensen, J.R., E.W. Ramsey, J.M. Holmes, J. Michel, B. Savitsky, and B.A. Davis, 1990, Environmental sensitivity index (ESI) mapping for oil spills using remote sensing and geographic information system technology: in Intl. J. of Geographic Information Systems, Vol. 4, No. 2, pp. 181-201.