



Coastal Zone Management



With wide-ranging experience in the analysis of samples from the world's oceans and coastal areas, ICF International marine experts provide broad perspective on marine chemistry issues, as well as specific methodologies and standard operating procedures for the preparation and analysis of marine sediment and dredged materials. ICF has supported local, state, and federal agencies, and nongovernmental organizations (NGOs) in all areas of environmental and natural resources management, including coastal resources.

Our Approach

Scientific Analysis

ICF provides analytical services tailored to meet specific client needs, as well as specialized capabilities that directly support a wide variety of studies, including marine environmental assessments, liability claims for environmental damage, due diligence, bioremediation studies, and other environmental site assessment programs. Our project-specific approach provides sensitive analyses capable of attaining enhanced detection and quantitative limits to fulfill overall study objectives. The nature of sample matrices often interferes with and complicates the analysis of marine-related samples. Our extensive experience using cleanup procedures in the field reduces the effects of such inherent interference.

Information Technology Support

Our expertise in information management and technology applications strengthens our approach to coastal and natural resources management. ICF is a leader in developing innovative collaborative Internet portals and content management solutions to address public sector information collection, management, and dissemination challenges. We effectively integrate a wide range of data from disparate sources; improve the quality of decision-making; deliver information directly to employees, customers, or stakeholders; and transform data into strategic information. Our Geographic Information Systems (GIS) Resources Lab also provides spatial analysis and cartographic services.

Qualified Staff

ICF's underlying value stems from the quality of our analytical work and the experience and credentials of our team. Our marine chemistry programs are led by highly qualified environmental chemists with years of involvement in marine studies and project experience analyzing thousands of samples.

ICF Consulting's project-specific approach provides integrated solutions in coastal zone management by blending expertise in scientific marine analysis, information technology, and public awareness outreach.

- Information Management and Geospatial Data Systems
- Technology Research and Development
- Air and Water Quality Modeling
- Environmental Assessments
- Hazards Analysis and Planning
- Communications Training and Outreach
- Public-Private Partnerships and Voluntary Compliance Programs

Featured Solutions

Coastal Zone Management and Environmental Support

ICF supports the Government of the Bahamas in developing its environmental laws and regulations and establishing a 'national ministry for the environment' to support expanded economic development. We are conducting environmental impact assessments, coastal zone management planning, environmental monitoring, biodiversity conservation, emergency management, and public awareness programs in the island chain.

Coastal Consistency Determinations

As required by the Coastal Zone Management Act, ICF has prepared coastal consistency determinations for Strategic Petroleum Reserve (SPR) candidate expansion sites in states with approved coastal zone management programs. Our results address specific impacts to environmental and community resources in Louisiana and Mississippi.

Knowledge Management Systems for the Atlantic Coastal Cooperative Statistics Program (ACCSP)

ICF helped the U.S. National Oceanic and Atmospheric Administration (NOAA) define, develop, and implement a massive data warehouse and Web-based data analysis system that allows fishery managers and biologists to analyze unified, coastal data sets and provides them with better data and the ability to make improved decisions. For the ACCSP (a consortium of 22 federal, state, and regional agencies responsible for managing U.S. Atlantic coastal fisheries), we developed a data warehouse combining fishery data collected by each federal and state agency and permitting data access through an easy-to-use, Web-based analytical interface, which allows fishery experts on the East Coast to analyze comprehensive fishery data in real-time.

Public-Private Partnership Protecting Fresh-Water Reserve

ICF coordinated participation of various public and private organizations in the preventing of, planning for, responding to, and recovering from damage hazards related to oil spills and other environmental accidents that could endanger the enormous fresh water reserve in Amazonas, Brazil, which constitutes one-fifth of the planet's entire reserves.

Mapping Coastal Land Loss Due to Climate Change

ICF helped the U.S. Environmental Protection Agency (EPA) understand which lands would likely be lost as a result of changes in sea level due to global warming. We analyzed the entire Atlantic and Gulf Coasts for low-lying lands and developed a series of programs to model and display the results of sea-level rise and related wetland scenarios, combined with local shoreline protection strategies. The results identified areas along the Eastern Seaboard and Gulf Coast at risk of being inundated by heightened water levels, enabling EPA to target limited resources to vulnerable areas, prepare adaptation plans, raise awareness, and clearly communicate to the public the need to adapt.

Coastal Development and Water Quality Impact Analysis

For the city of Cancún, Mexico, ICF developed recommendations on how to decrease nutrient levels and oxygen depletion in waters adjacent to a development. We also analyzed engineering designs using numerical modeling techniques and evaluated runoff, tidal influx, channel configurations, and induced water pumping.

National Marine Fisheries Service (NMFS) Fisheries Statistics and Economics Division

ICF helped the Fisheries Statistics and Economics Division develop options for implementing a national fisheries information and vessel registration system. After facilitating meetings of the system's core design team and collecting and analyzing system data from various state-based fishery management agencies, we assisted in the production of report documents for the NMFS Report to Congress on system implementation. As contemplated in the Magnuson-Stevens Fishery Conservation and Management Act, the Atlantic component of this national system will be comprised of the information system and user interface developed by ICF for the ACCSP, a consortium of 22 federal, state, and regional agencies responsible for managing U.S. Atlantic coastal fisheries.

About ICF International

ICF International (www.icfi.com) partners with government and commercial clients to deliver consulting services and technology solutions in defense, energy, environment, homeland security, social programs, and transportation. Combining passion for our work with industry expertise and innovative analytics, we deliver compelling results throughout the entire program life cycle, from analysis and design through implementation and improvement. Since 1969, ICF International has been serving government at all levels, major corporations, and multilateral institutions. More than 1,600 employees serve these clients worldwide.

For more information, please visit www.icfi.com or contact:

Walt Palmer
Vice President
1.703.934.3252
WPalmer@icficom

David Bauer
Senior Vice President
1.703.934.3697
DBauer@icficom

ICF International
9300 Lee Highway
Fairfax, VA 22031 USA