

Chapter 1

Introduction

Coastal Challenges: A Guide to Coastal and Marine Issues is an update and revision of an earlier guide, *Covering the Coasts: A Reporter's Guide to Coastal and Marine Resources*, initially produced by the National Safety Council's Environmental Health Center (EHC) as a resource for print and broadcast journalists. The earlier version was written to help news media report knowledgeably and responsibly on America's great wealth of coastal and marine resources and thereby help their print and broadcast audiences—the citizens at large—better understand coastal resource issues.

While the mass media continue to be the primary source by which the public comes to know and understand environmental issues—including those specifically dealing with coastal resources—citizens themselves increasingly are arming themselves with independent and additional information tools. For this reason, the second edition has been revised to appeal not solely to news media professionals, but also to citizens at large.

Coastal and marine resources are among the world's most treasured but least understood wealths. When it comes to the coast, the attraction is obvious. The nation's citizens, both those living along the nation's coastlines and those living far inland, long to be at the coast.

The mere scale of the coasts and of their abundant resources humbles the mind. Along the Atlantic, the Pacific, the Great Lakes, the Gulf of Alaska, the Bering Sea, the Arctic Ocean, and the Gulf of Mexico coasts, the United States has more than 95,000 miles of coastline. For recreation, livelihoods, and social and economic sustenance and well-being, coastal and nearshore marine resources help shape the nation's character and its distinctive personality. The nation's coasts are both rich in their promise for tomorrow and bountiful in their delivery of today's ecological,

recreational, aesthetic, and commercial rewards. The vastness of the coasts and their resources is matched only by the dimensions of the challenges society faces in preserving and nurturing those resources.

The saltwater ocean and freshwater coastal areas are constantly changing as a result of both natural and human forces. The coasts are at once resilient and fragile. Under siege from all directions, coastal lands and waters, and the resources they house, face assault from land, sea, and air. The pressures come in the form of constantly increasing coastal populations; inadequately planned land-use decisions; and pollutants carried downstream from cities, farms, and factories. The offshore pressures include the risk of oil spills, inadequate marine sanitation device programs, development of marine mineral and energy resources, and marine and beach debris.

The atmosphere also can pose a threat. Wind currents and refreshing breezes can carry with them toxins and other pollutants from inland sources, without regard for national boundaries. Acid deposition and the long-range transport of toxic air pollutants over time can harm even the seemingly most serene coastal reserve.

Citizens routinely worry about such pressures. But to meaningfully contribute to the management of coastal and marine resources, citizens need to understand the issues and legal processes involved. They will need to understand and address a variety of issues ranging from transportation systems to the elements of aquatic biology and atmospheric chemistry. The public sector often will face inadequate resources in its efforts to manage competing demands.

The scope and complexity of the programs in place to manage and protect the country's ocean and coastal resources are as extensive as the resources themselves are expansive.

Policy makers dealing with coastal resource management activities face the same day-in/day-out complexities as do those dealing with so many other environmental and natural resource

programs. Data alone are never fully adequate to make informed decisions. The desire for more and better scientific information and “certainty” will remain. However, “hard data” can go only so far in pointing the direction toward sound policies and practices.

The limitations on scientific certainty, and the inevitable limitations on data per se, are important. So too is monitoring in providing long-term trends data. Monitoring may be particularly helpful in estuaries, where saltwater and freshwater conditions can vary widely year to year. In terms of helping policy makers identify the scope of the challenges facing them, reliable monitoring data are invaluable. The absence of long-term data drawn from monitoring can greatly complicate priority setting and decisionmaking. In the end—with a thorough understanding of the best available information gathered and presented in the most conscientious fashion—professional judgment inevitably comes into play.

As scientific certainty is pursued, so are the financial resources for researching, managing, and protecting coastal and marine areas. And, simply put, society cannot afford all that could, should, or might be done to fully protect coastal and marine resources from potential damage. This problem is not unique to coastal management programs. Continuing efforts to refine and revise program priorities, timetables, and overall goals will be needed to ensure the most cost-effective strategies and implementation. This flexibility will be particularly important as population and development pressures on coastal resources exert increasing pressures in coming years and decades.

Coastal Challenges is designed to help readers steer through the broad spectrum of issues. It provides an overview of the complexity of the issues and of the regulatory framework—the numerous agencies responsible for various coastal and marine resource management programs. Finally, it provides a wealth of sources for more detailed information.