Resource management, planning, policy making, and law are among the fastest growing marine professions. Professionals in these fields use information provided by scientists, economists, sociologists, politicians and community members in order to develop policies, laws and regulations that balance the needs of communities and industry with the long-term health of the environment. More and more trained and knowledgeable professionals are needed to deal with legal questions of maritime boundary delineation, legal responsibility in the event of accidents at sea and questions of international law.

What do professionals in these areas do?

Humans have only recently come to realize that most of our natural resources are finite. If we do not control, limit and change our patterns of resource use, we won’t have these resources in the future or in our children’s future.

Natural resource management professionals attempt to balance the use of our natural resources with the needs of communities and industry in order to ensure that these resources may be used without being depleted. Resource managers are an important liaison between preservation and development. They must understand scientific concepts and be able to apply scientific research to everyday needs, incorporate scientific data into public policy, and educate lawmakers and the general public on the need for balanced policies of resource use and development.

Like natural resource managers, policy makers and planners are responsible for finding an appropriate balance between development and economic growth for human populations, without jeopardizing the long-term health of the
natural resources that make growth possible. Policy Makers must balance human needs and desires with information on potential long-term impacts on the environment. This is done through the design and implementation of sound laws and regulations for population growth and development. Planners must work with these laws and regulations as well as with information supplied by scientists in order to develop concrete strategies for growth and development. Their work includes developing effective infrastructure such as roadways and transportation systems, water delivery and wastewater handling systems, and methods and strategies to manage solid waste (garbage) that will not destroy the natural resources of an area.

Legal professionals involved with marine-related issues include the lawyers and legal researchers who deal with environmental issues, international maritime law and treaties governing activities at sea. Other legal professionals deal with questions of responsibility when accidents occur at sea, and yet others specialize in areas related to the "ownership" of submerged resources such as shipwrecks and sunken cargo. Lawyers are needed to determine the legality and appropriate interpretation of often ambiguous policies and laws and to clarify what is sometimes unclear language in policy statements, regulations or agreements and treaties.

Education

Careers in all of these marine professions typically require an advanced degree, so a bachelor's degree in an appropriate area is essential. The management, policy, planning and legal professions offer a broad range of possibilities for undergraduate studies, from any of the biological, physical or earth sciences to political science, sociology or even liberal arts. Graduate studies and specialized training and experience through internships or work study in your specific field of interest are essential. Take any opportunity to work in or around these areas, including volunteer work.

High school students can prepare for a career as a marine professional by completing a broad range of studies including some upper level math and science courses, as well as civics, political science, economics and geography. Computer courses and a second language are also helpful.

Financial aid, work study and scholarships are often available to help pay the cost of completing the bachelor's degree. Check with the college or university of your choice for more details. Most universities offer scholarships, fellowships and assistantships or internships for studies in these fields at the graduate level. Also, many government agencies offer internships and summer employment opportunities for students in these areas.

Careers in resource management, planning, policy making and law

Admiralty lawyer - specializes in legal matters relating to inland waters and the high seas.

Coastal zone manager - identifies natural areas within the coastal zone; analyzes the effects of changes within the zone on natural ecosystems; develops management criteria for complying with land and water use guidelines and regulations in coastal areas.

Environmental planner - assesses the long-range needs of the coastal zone and those who use it; works to balance effective use of the land with conservation principles in order to prevent or mitigate environmental problems.

Marine economist - studies and analyzes the economic factors involved in the use and distribution of marine-related products and services; studies, evaluates and helps to develop governmental regulations and requirements in light of economic factors.

Marine geographer - determines maritime (political) boundaries between countries or states; and, determines maritime (physical/environmental) boundaries between ecosystems.

Maritime lawyer - implements and interprets international marine laws and laws governing coastal zone management.

Aquarium administrator - manages the business aspects of aquaria; supervises the layout of displays and exhibitions.

For more information, call or write: Virgin Islands Marine Advisory Services (VIMAS), University of the Virgin Islands Eastern Caribbean Center, St. Thomas USVI 00802 (809) 774-3004 or RR#2 Box 10,000 Kingshill, St. Croix USVI 00850 (809) 778-1112.