



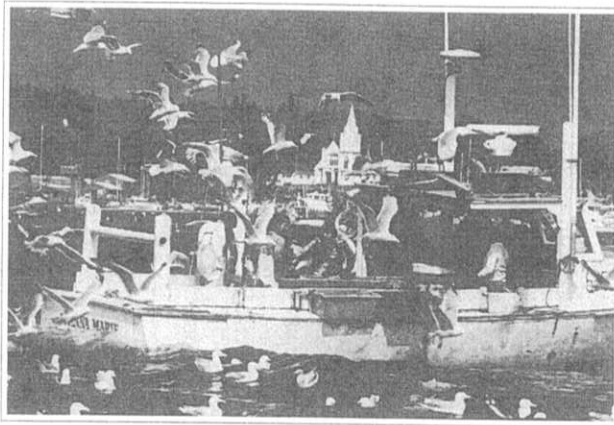
**Gulf of Maine
Council on the
Marine Environment**

Annual Report 1991/1992



THE GULF OF MAINE COUNCIL ON THE MARINE ENVIRONMENT

The Gulf of Maine Council on the Marine Environment was established in November, 1989 by the governors of Massachusetts, New Hampshire, and Maine, and the Premiers of Nova Scotia and New Brunswick. The mandate of the Council, detailed in a formal agreement among the five jurisdictions, is to discuss and act upon issues of common concern, including, but not limited to, the following:



- the protection and conservation of the ecological balance within the Gulf of Maine ecosystem;
- the problem of marine debris and ocean disposal of medical waste;
- the relationship between land use and the marine environment;
- the sustainable use of resources within the Gulf of Maine;
- cooperative programs to better protect and conserve the Gulf's natural resources.

The Council consists of 15 individuals, three appointed by each Governor or Premier.

The Gulf of Maine Working Group acts as the management arm of the Council on the Marine Environment, and with the

Council Secretariat, is responsible for day to day operation of the Council's affairs, fiscal management, and strategic planning. The Council Secretariat is an administrative staff function assumed by each jurisdiction in turn, as is the role of Council chairperson. The Working Group is comprised of senior staff persons within the government agencies represented on the Council, as well as staff of Canadian and U.S. federal agencies having a mandate to manage the Gulf's resources.

Three committees support the Council, and report directly to the Working Group. The Data and Information Management Committee undertakes tasks which promote the generation and dissemination of scientific data and resource management information, aimed at facilitating environmental decision-making in the region. Committee members are drawn from academia, state, provincial, and federal agencies.

The Marine Education and Participation Committee develops and oversees a program of educational initiatives aimed at cultivating a sense of stewardship among citizens in the Gulf region, and providing advice to the Council on development of public outreach programs. The committee is comprised of educators, media representatives, and communications specialists from government agencies and the private sector.

The Monitoring Committee is responsible for the implementation of the Gulf of Maine Marine Environmental Quality Monitoring Plan, adopted by the Council in 1991. Members are scientists from universities and government agencies, as well as policy makers from various levels of government.

LETTER FROM THE CHAIRPERSON

The past year has seen a significant expansion in inter-jurisdictional cooperation through the Gulf of Maine Program. Both the numbers and variety of projects increased markedly during the year and much progress has been achieved on many fronts.

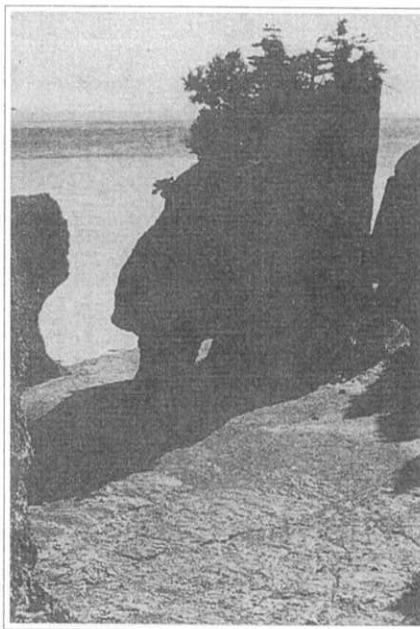
Successful completion of the first year of the Gulfwatch project yielded valuable information on environmental quality in the region, and clearly demonstrated that a successful environmental monitoring program can be undertaken involving all Gulf of Maine jurisdictions. As well as providing a solid basis for the expansion of this program in 1992-93, the experience gained this past year will be invaluable in implementing other components of the Council's Marine Environmental Quality Monitoring Program.

A priority of the Council in 1991-92 was the development of a system for improving the accessibility of the large amounts of data and information generated by universities, laboratories, federal, state, and provincial agencies. Substantial progress was made in the establishment of the Gulf of Maine EDIMS (Electronic Data and Information Management System), which will increase the ease with which both scientists and environmental managers obtain information on the Gulf of Maine.

Another key aspect of the Gulf of Maine Program is to cultivate a sense of stewardship among the citizens of the Gulf region, and to enable them to make responsible decisions regarding natural resource use. A Council-sponsored workshop for environmental educators and communications specialists in April, 1992 produced a number of excellent recommendations for promoting public knowledge and awareness of Gulf of Maine issues. These recommendations were essential to the development of a strategic plan for the marine education component of the Gulf program, and several have been incorporated in the Council's 1992-93 workplan.

Since the signing of the *Gulf of Maine Agreement* in 1989, the participating governments have realized the importance of establishing alliances with organizations outside government. This year the addition of one non-government Council member from each jurisdiction was a significant and progressive step. The Gulf of Maine Partnership Program developed during the past year will be a major effort to bring community organizations, individual citizens, businesses, and industry into the planning and decision-making activities of the Council.

One of the significant challenges faced by the Council in the coming year will be sustaining momentum under demanding economic conditions. Nevertheless, I am confident that the importance of our task to the future quality of life throughout the Gulf of Maine will ensure support for further progress on the Action Plan in the years ahead.



Jane Barry

GULF OF MAINE PROGRAM HIGHLIGHTS

1991

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July

- Council approves Gulf of Maine Action Plan
- Secretariat transferred to New Brunswick
- Gulf of Maine Visionary Awards announced
- Gulf of Maine video, "Our Common Heritage", is produced and distributed
- Council of Maritime Premiers, Land Registration & Information Service, hosts Coastal Zone Information Management Workshop



August

- Gulf of Maine Data and Information Management Committee meets
- Gulfwatch Pilot Project deploys mussels around Gulf of Maine
- Environment Canada releases second version of "Catalogue of Environmental Data In Atlantic Canada"

September

- Public Education and Participation Committee meets for the first time
- Coastal Convergence 91, a citizens' forum on coastal issues, is held in St. Andrews, N.B.

- Two Gulf Bays initiate water quality protection programs, the Casco Bay and the Massachusetts Bay Program

October

- U.S. States involved in Gulf of Maine Program receive \$250,000 grant from the U.S. Department of Commerce
- Working Group meets
- Coastal Convergence participants form coastal network

November

- Gulfwatch mussels are collected
- Environment Canada initiates Atlantic Canada Coastal Action Plan

December

- Council agrees to recommend to the governors and premiers that its membership be expanded to include non-governmental members
- Council and Working Group meet in Saint John, N.B.
- Gulfwatch mussels are sent to Maine's Department of Environmental Protection for analysis
- New Brunswick Commission on Land Use and the Rural Environment is announced

1992

January

- The Marine Law Institute and the Oceans Institute of Canada release report entitled "Assessing US and Canadian Laws and Programs Affecting the Marine and Coastal Environment of the Gulf of Maine"

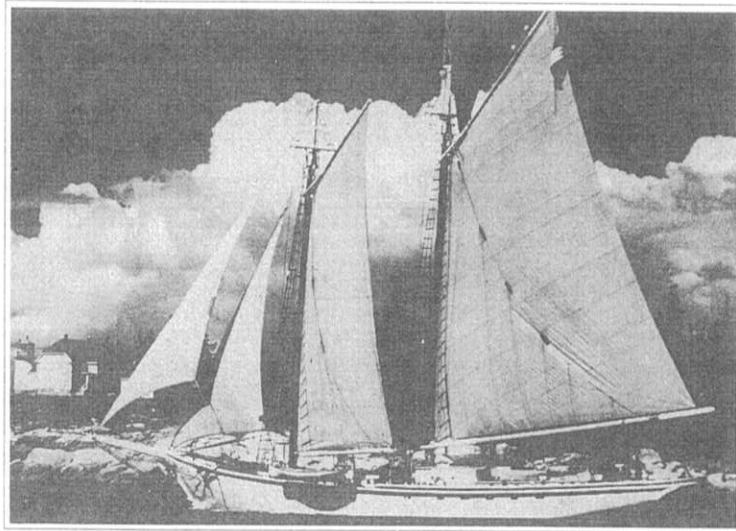
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February

- Gulf of Maine Working Group meets
- US State Department lends staff person to Gulf of Maine Program

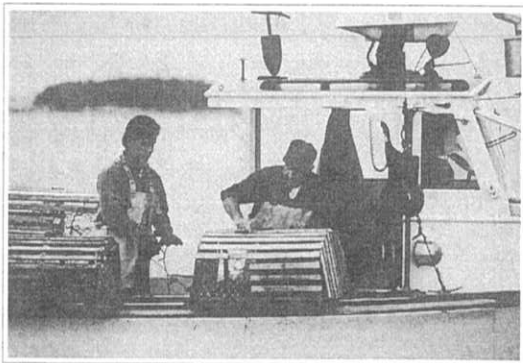
April

- Environment Canada hosts Gulf of Maine Action Plan Workshop in Halifax, Nova Scotia
- Working Group meets in Halifax, Nova Scotia
- Gulf of Maine Marine Education and Participation Workshop is held in Portland, Maine
- "Clean the Bay" campaign is launched



June

- Council member Richard Silkman speaks to meeting of national foundations on Gulf of Maine biodiversity
- Governors and Premiers agree to expand Council to include one non-government member from each jurisdiction
- Governor of Massachusetts and Premier of New Brunswick appoint non-government Council members



July

- Council meets in St. Andrews, N.B.
- Workplan and Budget for 1992-93 approved
- Gulf of Maine Partnership Program established

REPORT ON COUNCIL ACTIVITIES

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MARINE MONITORING AND RESEARCH

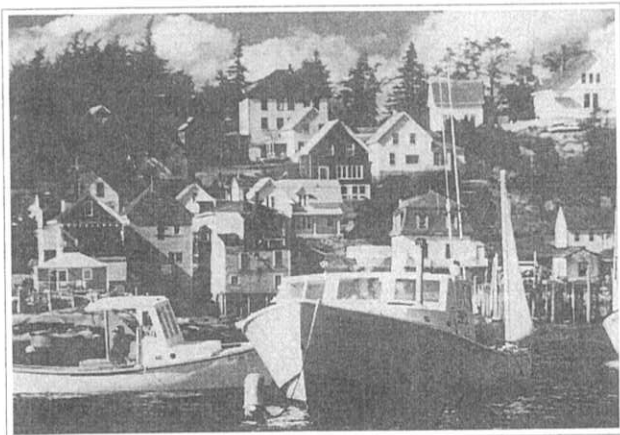
Gulfwatch Program

The Gulfwatch Program successfully completed its first year of implementation under the direction of the Council's Environmental Monitoring Committee, despite the loss of some mussel cages in August due to Hurricane Bob.

In addition to providing information for use in assessing the overall health of the Gulf of Maine, Gulfwatch has been a successful test of the ability of Gulf resource management agencies to undertake a cooperative monitoring program. Through numerous consultative meetings and workshops aimed at developing common sampling protocols, a region-wide environmental monitoring project has been successfully executed. This sets the stage for additional cooperative endeavours toward implementation of the Gulf of Maine Environmental Quality Monitoring Program.

Following analysis of samples retrieved in October, a report outlining results and conclusions was prepared. First-year results indicate a trend in which samples from urbanized areas showed significantly higher values of polyaromatic hydrocarbons (PAH), polychlorinated biphenyls (PCB) and metals. Of particular interest were the high concentrations of contaminants found in samples taken from the "clean" reference sites in the southern portion of the Gulf, compared with the "dirty" sites in samples taken from northern sites.

On the basis of the logistical success experienced in 1991-92, an expanded monitoring program is planned for the coming year. The Council appreciates the work of the Maine Department of Environmental Protection laboratory and the Environment Canada Halifax laboratory for their provision of analytical services which were essential to this program.



Data and Information Management Projects

Recognizing that a key to effective resource management is the availability of good data and information, the Council made a substantial effort to identify the needs of resource managers in the Gulf of Maine Region, and moved toward development of a system for accessing the large amounts of information which currently exist in a variety of sources.

All data and information projects were carried out under the direction of the Council's Data and Information Management Committee.

As a first step in developing a system for facilitating access to Gulf data and information, all principal generators and users within the region were surveyed to determine their particular

needs. The results were analyzed and detailed terms of reference for a prototype Environmental Data Information Management System (EDIMS) were developed. EDIMS will contain, in its initial phase, a directory of databases relevant to the Gulf of Maine. As well, EDIMS will contain a limited number of resident databases determined to be pivotal to the Gulf of Maine initiative. The University of New Hampshire will develop the prototype system, which is expected to be completed by late fall of 1992.

Gulf of Maine Research/Science Compendium

Numerous options for the creation and maintenance of a compendium of research activities were examined. A specific analysis of several systems was undertaken, which will be used to determine the feasibility for implementation in the Gulf of Maine Region.

Liaison With Gulf of Maine Research Organizations

The Council established contact with key Canadian and U.S. research organizations operating in the Gulf region, and discussed means of establishing timely and efficient communication links. A generic Cooperative Agreement between the Council and individual research bodies has been drafted and is under review.

Volunteer Citizen Water Quality Monitoring

In an effort to increase public involvement in protecting the water resources of the Gulf and to raise public awareness of the Gulf of Maine as a distinct ecosystem, the Council on the Marine Environment examined possible roles in supporting a Gulf-wide volunteer citizen water quality monitoring program. As an initial step, a catalogue of existing programs was compiled.

COASTAL AND MARINE POLLUTION

Point Source Pollution Inventory

In support of the Gulf of Maine Program, the U.S. National Oceanic and Atmospheric Administration (NOAA) is in the process of developing an inventory of contaminant loadings from all point source discharges to the Gulf, using existing information. States, provinces, and federal government agencies in the U.S. and Canada are currently compiling data for this project, which is co-funded by the U.S. Environmental Protection Agency. Expected to be completed in late 1992, the results will be used to identify significant pollutants, areas of impact, and appropriate implementation actions to address point source discharges.



Study of Non-Point Source Pollution Management Efforts in the Gulf

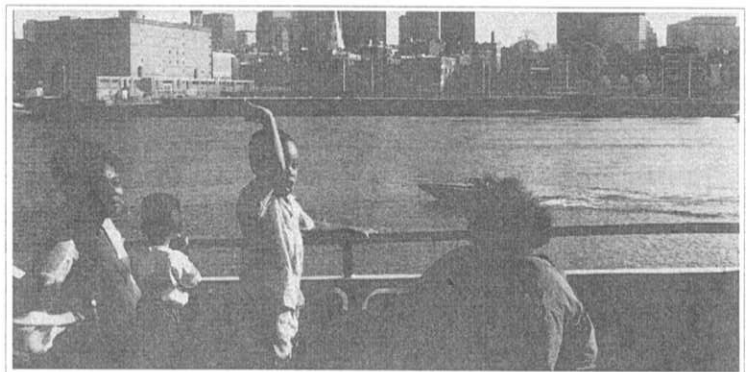
During the year, William Ferland, of the Environmental Law Centre of the University of Vermont, completed an overview of non-point source pollution control measures in place in the Gulf states and provinces. The report outlined the major land use activities under regulation in each jurisdiction, and contained recommendations for Council involvement in this cross-jurisdictional pollution issue.

Council Resolution on Combined Sewer Overflows

The Council conducted a review of programs and strategies in the U.S. and Canada to reduce the recognized impacts associated with discharges from combined septic/storm sewer systems. As a result, the members of the Council resolved to reaffirm their commitment to the prohibition of the construction of new combined sewers, and to work toward the abatement of effects from existing discharges.

PUBLIC EDUCATION AND COMMUNITY OUTREACH

A standing committee on Marine Education and Participation was created by the Council in July, 1991. The Committee is responsible, under the direction of the Council's Working Group, for developing a program of regional education initiatives, aimed at cultivating a sense of stewardship among the citizens living in the Gulf of



Maine region, and supporting informed decision-making on the use of the Gulf's natural resources.

In its first year of operation, the Committee concentrated its efforts on strategic planning. In developing a plan for the future, the Committee focused on the following priorities: to create educational materials on the Gulf of Maine for a variety of user groups, including the general public, elected officials, and the media; to facilitate communication among the scientific community, the media, and elected officials; to improve understanding of Gulf issues by specific sectors of the public; and to support public participation in coastal resource management issues at the local level.

The Committee also created two sub-committees to proceed more efficiently with Program workplan tasks. Two staff persons were hired to serve as education coordinator and media relations coordinator, respectively, and to support the activities of the Committee.

Under the direction of the Marine Education and Participation Committee the following tasks were completed in 1991-92:

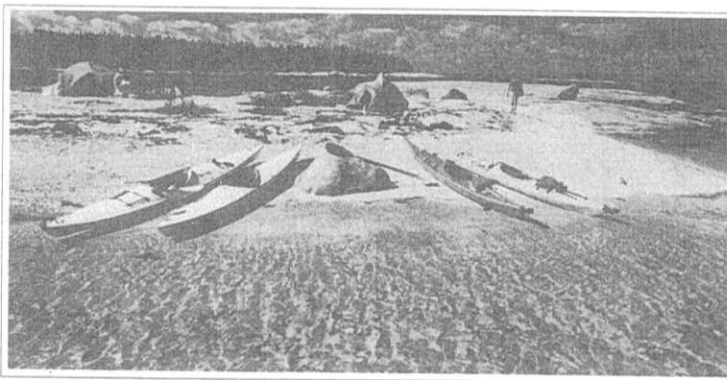
- A public participation and involvement strategy was developed for the Gulf Program;
- A poster/map of the Gulf of Maine watershed was designed, produced, and distributed;

- 5 issues of the Program newsletter, *Turning the Tide*, were published and distributed throughout the region;
- A comprehensive media and public involvement plan was developed, to raise media and public awareness of Gulf of Maine issues;
- An extensive list of media contacts in the five jurisdictions was compiled;
- Numerous articles, news releases and other promotional materials were distributed to the media and interested organizations;
- A successful workshop for marine educators and communications personnel was held to discuss a variety of Gulf of Maine issues.

Marine Educators Workshop

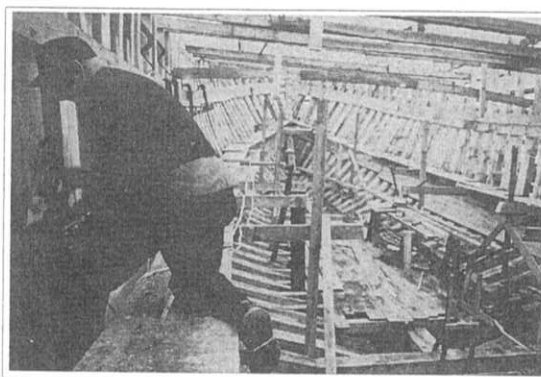
A highlight of this year's marine education effort was an international Marine Educators and Communicators Workshop, held in Portland, Maine in April. The objectives of this workshop were: to identify specific educational messages important in raising public knowledge and awareness of Gulf of Maine issues; to identify existing resource materials to convey the messages; and to suggest projects or programs for the Council to consider in developing future workplans.

Over 60 invited delegates from the five jurisdictions in the Gulf participated in the workshop, representing formal and informal education and public involvement programs. Many of the ideas suggested during this workshop have been incorporated into the 92-93 Council workplan. The workshop was funded by the U.S. Environmental Protection Agency and NOAA, and organized by Gulf program staff.



Policy on Scientific Literacy

At their meeting in Bar Harbor, Maine in July, 1991, the Council agreed to adopt a policy to foster communication of the results of scientific research in the Gulf of Maine in a manner which promotes scientific literacy in the general populace.



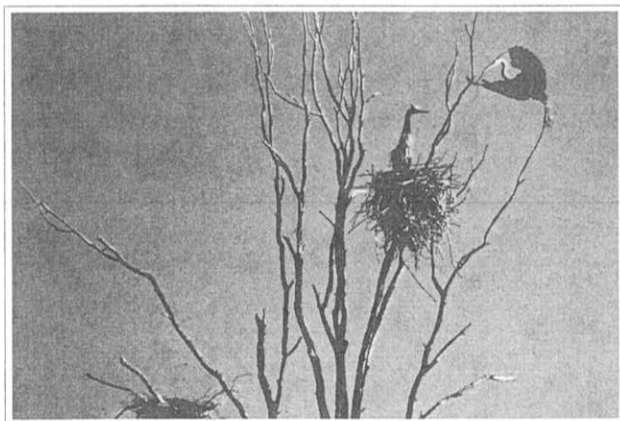
Following careful consideration of this issue by the Council's Marine Education and Participation Committee, the following policy was adopted by the Council in 1992:

The Council shall foster the communication of Gulf research efforts by ensuring, as a condition of support, that any research/monitoring projects include the following:

- *provision of a non-technical summary of research results and a statement of how the research benefits the public;*
- *provision of opportunities for teachers, communicators, and the public to communicate with or enter into an exchange with scientists;*
- *support for local monitoring/science education programs and projects, through assistance in establishing connections among groups, lending agency staff support to programs, and provision of help in locating sources of financial assistance;*
- *support for K-12 student exchange programs relating to marine environmental projects throughout the Gulf, including exchange visits to marine and educational research institutions.*

Marine Vessel Debris Reduction Projects

Through the efforts of program participants, the Council supported the establishment of two pilot marine debris reduction projects. The two projects are being implemented in Portland Maine, and Yarmouth, Nova Scotia. Funded by Council member agencies and various state, federal and provincial sources, the projects involve volunteer efforts by fishermen, wharf operators, and citizens interested in protecting the coastal environment. The focus is on education, in an attempt to encourage the recycling or proper land disposal of wastes.



HABITAT PROTECTION

During the year, the U.S. Department of the Interior, Fish and Wildlife Service, established the Gulf of Maine Coastal and Estuary Project. A Project office was established in the Gulf of Maine region, in Portland, Maine. Project staff have worked closely with the Council on the Marine Environment to foster

an integrated approach to the protection and sustainable use of Gulf of Maine fish and wildlife habitats.

Under the auspices of the project office, a wetland trend analysis project began in the Gulf of Maine Watershed. This study will utilize aerial photography and satellite imagery to determine historical trends in wetland change. Areas under study include Massachusetts Bays, Casco Bay, the New Hampshire coastline, and the St. Croix Estuary.

Efforts are also underway to identify priority wildlife habitat in several areas in the Gulf: Casco Bay and Merrymeeting Bay, Maine, Massachusetts Bays, and eastern Maine. Regional data sets on fish and wildlife habitats are being assembled for these areas as part of an overall geographic information system effort in the Gulf of Maine.

The Project office has assisted the Council's efforts in many other ways. These include distribution of public outreach materials, assignment of the Project's Outreach Specialist as member of the Council's Marine Education and Participation Committee, and development of a series of fact sheets about specific fish and wildlife resources in the region.

DEVELOPMENT OF GULF OF MAINE MANAGEMENT FRAMEWORK

Integration of Non-government Resources

In late 1990, the Council established a network of volunteer financial specialists to examine options for increasing resources to achieve the objectives set out in the Gulf of Maine Agreement. At their July, 1991 meeting in Bar Harbor, Council agreed to act on the recommendations of this group to expand Council membership to include non-government members, to collaborate with private foundations in the pursuit of common goals, and to seek tax exempt status for the Gulf of Maine Program.

Following careful consideration of several alternatives, the Council decided, at the December, 1991 meeting in Saint John, to recommend to the Governors and Premiers that its membership be expanded by five, drawing one non-government member from each jurisdiction. The governors and premiers concurred with the Council's recommendation, and have amended their agreement. Two new Council members were appointed, and began serving terms in July, 1992.

Council also directed their Working Group to examine the options for establishing a "round table" of non-government individuals to provide advice on issues and strategic matters. Several alternatives have been presented and are being considered by the Council.

Legal work is underway in Canada and the United States which will lead to the establishment of the Gulf of Maine Program as a tax-exempt association. Legal research, and the drafting of articles of association were undertaken, pro bono, by Mr. Gerry Godsoe and Ms. Catherine Gaulton of the Halifax, N.S. office of the law firm Stuart, KcKelvey, Stirling and Scales, and Mr. Gary Vogel of the Portland, Me. law firm of Richardson and Trough.

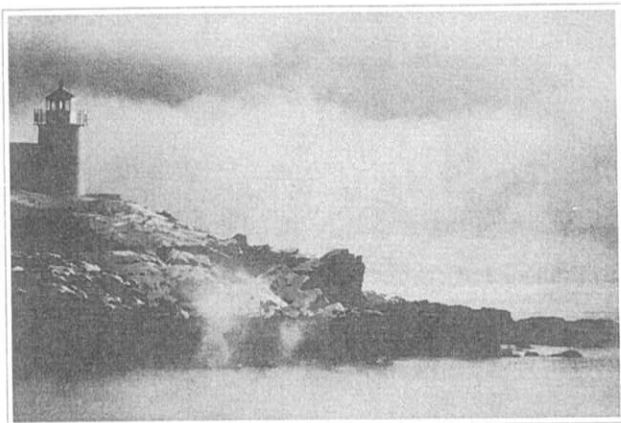


Comparative Assessment of U.S. and Canadian Marine and Coastal Management Laws

In order to move toward reduction of disparities and gaps in policy and environmental regulations, the Council enlisted the assistance of the Marine Law Institute (MLI) and the Oceans Institute of Canada (OIC) in an examination of laws and programs affecting the coastal and marine environment of the Gulf of Maine.

MLI/OIC have prepared an in-depth report which identifies common and divergent federal and state regulatory approaches and policies, identifies gaps in management regimes, and describes alternative approaches to marine and coastal management. Recommendations arising out of the analysis were reviewed by Council, and priority issues for action have been identified.

Council members have agreed to ensure that each jurisdiction conducts an analysis of the MLI/OIC report and assesses the applicability of the priority recommendations. The Council has also agreed to initiate activities that support implementation of priority issues addressed in the Action Plan.



Personnel Exchange

Council established a program to promote the exchange of resource management expertise among Gulf of Maine management agencies. In February, 1992, the U.S. State Department agreed to lend a staff person to the Gulf of Maine Program for one year.

National Estuary Program Application

In early 1992, the U.S. Environmental Protection Agency issued a call for nominations to the National Estuary Program (NEP). The NEP provides funds to support development of management and planning for estuaries of national significance. In April, the state governors, with the support of the Canadian members of the Council, nominated the Gulf of Maine for inclusion in the program. The nomination highlighted the international significance of the Gulf of Maine, and cited the management efforts already undertaken by the Council.

Liaison With Community Foundations

In response to approaches from several New England-based community foundations, the Council actively investigated opportunities for collaboration. Program staff have examined several mechanisms for cooperation, which will be developed. It is expected that specific cooperative projects will be proposed in the new year, as part of the 1992-93 Annual Work Plan.

PROGRAM ACTIVITIES AND SOURCES OF SUPPORT

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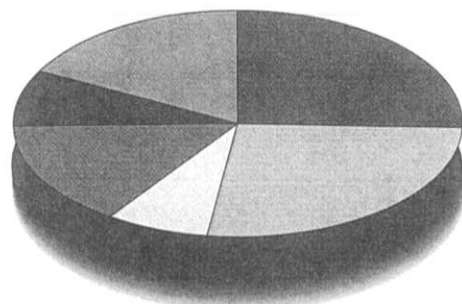
The Gulf of Maine Program supported activities in six categories during the period August, 1991 to July, 1992. The value of each category is shown below.

Resources which provide the foundation for the Gulf of Maine Program are derived from a wide range of sources. Provincial, state, and federal governments provide staff time, services and funds in direct support of the Program. Additional support comes from universities, foundations, non-profit organizations, businesses and individual citizens. The following organizations and individuals contributed to the Gulf of Maine Program in 1991-92:

Arthur Doyle, Fredericton, N.B.
Council of Maritime Premiers
Department of Fisheries and Oceans Canada
Environment Canada
Halifax (N.S.) District School Board
Hingham (Mass.) High School
Huntsman Marine Science Centre
Maine Department of Marine Resources
Maine Sea Grant Program
Maine Department of Environmental Protection
Maine State Planning Office
Maine Community Foundation
Maine Department of Conservation
Mary Cerullo, South Portland, Maine
Massachusetts Bays Program
Massachusetts Executive Office of Environmental Affairs
Massachusetts Coastal Zone Management Office

National Oceanic and Atmospheric Administration
National Marine Fisheries Service
New Hampshire Office of State Planning
New Hampshire Sea Grant Extension Program
New Hampshire Department of Environmental Services
New Brunswick Department of the Environment
New Brunswick Department of Fisheries and Aquaculture
New Brunswick Geographic Information Corporation
Nova Scotia Department of Fisheries
Nova Scotia Department of Environment
Paul Colombo, Raymond, Maine
Richarson and Troubh, Portland, Maine
Stuart, McKelvey, Stirling and Scales, Halifax, Nova Scotia
United States Army Corps of Engineers
United States Fish and Wildlife Service
United States Environmental Protection Agency
University of New Hampshire

GULF OF MAINE PROGRAM ACTIVITIES SUPPORTED 1991-1992



Program Coordination and Development
\$155,400 US / \$182,750 Can.

Habitat Protection
\$76,900 US / \$90,500 Can.

Marine Education
\$138,700 US / \$163,100 Can.

Coastal and Marine Pollution
\$68,900 US / \$81,050 Can.

Data and Information Management
\$243,700 US / \$286,600 Can.

Marine Monitoring and Research
\$233,400 US / \$274,500 Can.

Total \$917,000 US / \$1,078,500 Can.

COUNCIL MEMBERS AND PROGRAM PARTICIPANTS 1991-1992

COUNCIL MEMBERS

MAINE

RICHARD SILKMAN
Director, State Planning Office
DEAN MARRIOTT
Commissioner, Department of Environmental Protection

NEW HAMPSHIRE

JEFFREY TAYLOR
Director, Office of State Planning
ROBERT VARNEY
Commissioner, Department of Environmental Protection

MASSACHUSETTS

JEFFREY BENOIT
Director, Coastal Management Program
DIANE GOULD
Manager, Massachusetts Bay Program
(August, 1991-November 1991)
SUSAN TIERNEY
Secretary, Executive Office of Environmental Affairs
(November, 1991-present)

NEW BRUNSWICK

VAUGHN BLANEY
Minister of the Environment
(August, 1991 to October, 1991)
JANE BARRY
Minister of the Environment
(October, 1991 - present)
DENIS LOSIER
Minister of Fisheries and Aquaculture
(August, 1991 - October, 1991)
CAMILLE THÉRIAULT
Minister of Fisheries and Aquaculture
(October, 1991 - present)

NOVA SCOTIA

JOHN LEEFE
Minister of the Environment
(August, 1991-February, 1992)
TERRANCE DONAHOE
Minister of the Environment
(February, 1992-present)
GUY LEBLANC
Minister of Fisheries
(August, 1991-February, 1992)
LEROY LECERE
Minister of Fisheries/Labour
(February, 1992-present)

COMMITTEE MEMBERS

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JOHN PEARCE
National Oceanic and Atmospheric Administration
ROSEMARY MONAHAN
Environmental Protection Agency, Region 1
STEWART FEFER
Fish and Wildlife Service
CATHERINE DEMOS
Army Corps of Engineers

Observers

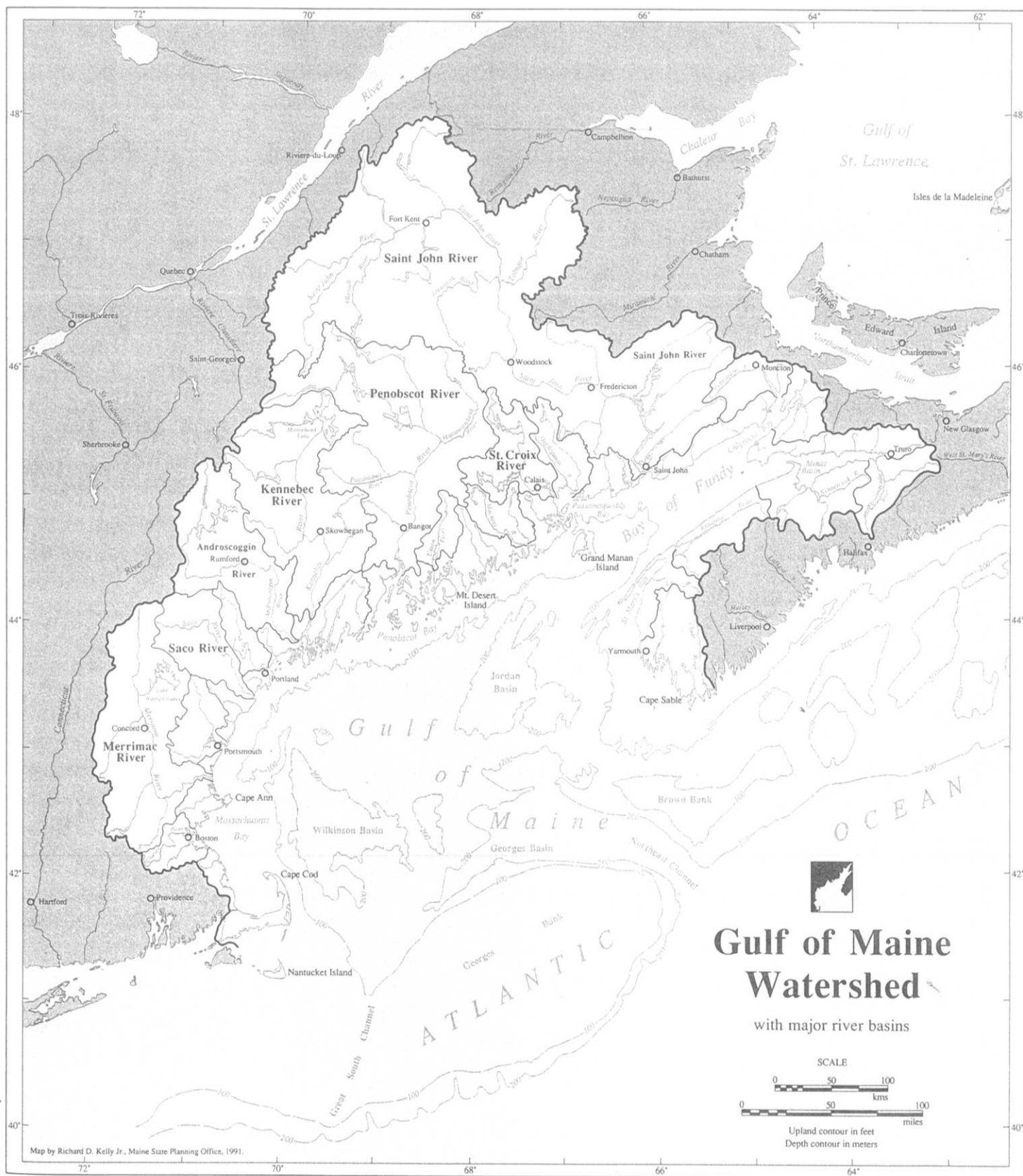
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PENN ESTABROOK
Maine Department of Marine Resources
JAMES BERNARD
Maine Natural Resources Policy Division

Gulf Program Staff

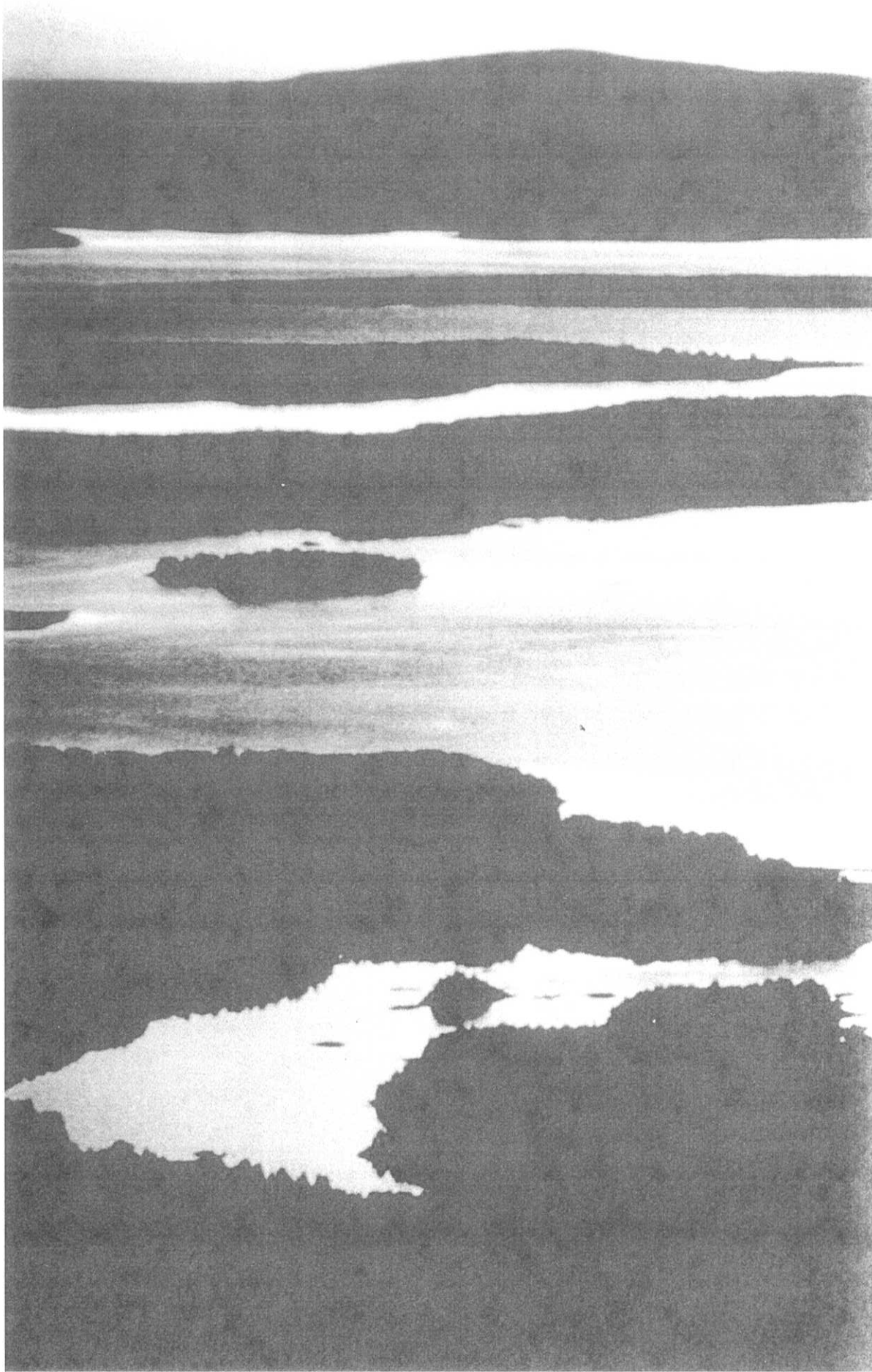
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Map by Richard D. Kelly Jr., Maine State Planning Office, 1991.



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