

Coastlines

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A Progress Report on Coastal Zone Management in New York



Prepared with the assistance of Paul Marr and Roger Allbee*

New York's first year of formal coastal zone management activity has been marked by significant work at the state, regional, and local levels. Aided by a \$550,000 grant from the federal Office of Coastal Zone Management and \$275,000 in matching state monies, New York thus far has been able to involve some seventeen agencies in divising the beginnings of a statewide management program.

New York launched its program in November of 1974 when it was awarded the federal grant for the first phase of coastal planning—data collection and analysis. At that time the Division of State Planning of the New York Department of State was designated as the directing agency. Because direct involvement of the public is essential in a successful coastal zone management program, the Division of State Planning has since divided the grant monies among other state agencies, regional planning boards, and local governments so each can provide integral parts of the basic information and analysis needed for the preparation of a management plan. The com-

plex work program entails, for example, setting of goals and objectives, the mapping and analysis of land and water uses in the coastal zone, the identification of potential development areas, the analysis of conflicts in land and resource use, the evaluation of water supply needs, and other such tasks.

Under the New York program, each agency or locality operates under a specific contract to work on selected aspects of coastal zone management for the particular area. These are some of the kinds of activities that have been going on in the past year:

-In the Genesee/Finger Lakes region, Dave Hyuck, a planner with the Genesee/Finger Lakes Regional Planning Board has assumed the primary responsibility for developing a regional plan. He has been meeting with the town planning boards in Wayne and Orleans counties to establish goals and objectives for the region.

-The Monroe County Planning Board has received money to study the Monroe County shoreline. Wendy Locksley, who is directing the ac-

tivity, has been working with advisory committees in each local town in the county to set goals and objectives.

-The City of Rochester has received a grant from the state to study the Genesee River region. A special consultant is studying the port, recreational and other uses of the riverbank.

-The Erie/Niagara Planning Board has received both coastal zone management funds and a 208 Environmental Protection Agency Water Quality Grant for coastal planning in that region.

-The towns of Lewiston and Porter have set up citizens' advisory councils to help look at their individual shorelines and provide input into a regional plan.

-The Nassau-Suffolk Regional Planning Board has begun to devise a plan for the Long Island coastal zone also with the assistance of a citizens' advisory committee. Four areas of particular concern in the planning are water supply and wastewater disposal, dredging and spoil disposal, coastal protection, and wetlands.

Other agencies directly involved at this time include the Department of Environmental Conservation, the St. Lawrence-Eastern Ontario Commission, the Black River-St. Lawrence Regional Planning Board, the Capital District

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**Paul Marr is Associate Professor of Geography at the State University of New York at Albany. He serves as Research Group Leader for Resource and Policy Studies at the New York Sea Grant Institute and is on assignment to the Division of State Planning to facilitate cooperation between Sea Grant and the Coastal Zone Management Program.*

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Gas Drilling Debated For Erie

Because of recent developments on this matter, the following special report has been prepared for "Coastlines" readers by Rob Patten, Regional Marine Specialist.

In 1971, the New York State legislature passed a law prohibiting drilling for gas in the underwater lands or shorelines of Lake Erie. But since that time, this nation has been confronted with an acute need for new energy resources. In addition large quantities of gas have been found along the shoreline in Chautauqua County, and many geologists feel that gas deposits may also exist offshore. So now, only four years later, those who live along Lake Erie are discussing whether to relax the environmental controls and allow offshore gas drilling.

Those who want to resume gas drilling in Lake Erie point to the Canadian experience with drilling for gas in Erie over the past 32 years. During this time the Canadians have drilled a total of 837 wells with 380 of them proving to be highly productive. In fact, the 1974 production from the Ontario portion of the lake reached 6.3 billion feet of natural gas. Advocates of drilling estimate that New York's natural gas reserves in the lake bed approximate 438 billion cubic feet of gas, while Pennsylvania may have as much as 600 billion cubic feet.

At least one government agency strongly supports renewed drilling in the Pennsylvania region of the lake, and that is the Pennsylvania Department of Environmental Resources—the body which regulates the leasing of off-shore lands for drilling. Eugene Frund, Chief of the Minerals Division believes that the environmental risks associated with gas drilling in Lake Erie are extremely low.

"I feel that the position taken by many environmental groups today opposing both oil and gas development is not justified," he said. "Drilling for natural gas is completely safe and should be allowed."

"Furthermore, the chances of finding oil in the Pennsylvania portion of Erie are very remote. If any oil is discovered, it shall be the policy of the Department

of Environmental Resources that all wells be sealed and no oil produced until there is little chance of oil being spilled from the well. The Canadians have adopted this practice, and it is recommended by the International Joint Commission (IJC)—the body governing the boundary waters between Canada and the United States."

Frund also points out that a 1971 U.S. Coast Guard study of pollution in the oceans shows that spills from drilling platforms are not the major source of water pollution by oil. Only 2% of the pollution may be attributed to drilling, while 28% of the pollution is caused by oil tankers and 30% (the largest share) comes from automobile crank case drainings.

"Surely by these standards it is the freighters and tankers that should not be allowed on Lake Erie," Frund said.

Environmentalists, however, are still not satisfied that gas drilling is such a harmless procedure. In New York, the League of Women Voters continues to support the 1971 law, believing that Lake Erie's use as the only domestic water supply for 11 million U.S. residents, must take precedence over all other uses. Members of the League and environmental groups have argued that one of the most serious environmental hazards that could result from offshore drilling would be salt contamination. Maps used by the drilling industry show salt formation underlying a considerable portion of Lake Erie in Ohio and Pennsylvania and very close to the lake in New York. Dr. Robert Sweeny, Director of the Great Lakes Laboratory at the State University College at Buffalo believes that salt water would have drastic effects on the lake's organisms.

"Salt water, with its higher density, would move along the bottom where it could adversely affect the fish food, organisms, and fish breeding areas," he has stated. "Through our research we know that most of the more valued Lake Erie fish species are intolerant of salt contamination."

Oil is seen as a potential environmental threat by many, and some geologists feel that the chances of oil discovery are greater on the United States' side of the lake because of the tilt of the land underlying the waters. Environmentalists point out also that Lake Erie is a shallow, treacherous body of water.

If an oil spill occurred during a heavy storm or during the heavy winter icing months, detection and immediate correction of that spill or salt water leak would be difficult, if not impossible to contain.

Finally, environmentalists feel that the benefits derived from drilling in Lake Erie would not necessarily accrue to the residents along the lake shore. There is no guarantee that the resources uncovered would remain there to benefit western New York's industry. Labor needed to develop and run the drilling rigs might be brought in from other areas, and so this new industry would do nothing to alleviate the serious unemployed problems in the area.

The state is presently holding public hearings to decide whether the ban should be lifted. Persons who are interested in taking part in these discussions should check their local papers for dates and places of the hearings.

Cornell Group Offers Help With Impact Statements

The Center for Environmental Quality Management (CEQM) at Cornell University is offering assistance to small communities in New York in reviewing Environmental Impact Statements (EIS) on projects in their areas.

This program, supported in part by grants from the Rockefeller Foundation and the Office of Water Research and Technology, U.S. Department of the Interior, offers an interdisciplinary team of graduate students who will clarify and translate into lay terms the technical issues involved in a particular EIS, and will explain some of the consequences of the proposed action so the community will have an improved basis for commenting on the proposed project.

This CEQM service is being offered on an experimental basis and is strictly limited to the capacity of the support staff. A negotiated fee will be established that will underwrite a portion of the review (mainly transportation costs for a site visit and presentation to the community). This fee is anticipated to be around \$100 or less, depending on the

New Horizons: Sand and Gravel Research



Research assistant monitors sounds reflected off harbor bottom on board the *Onrust*. (Photo by Dale Gassaway and David Hirschberg)

(Portions of this article have been reprinted by permission from the Mesa New York Bight Atlas Monograph #21: Sand and Gravel, Copyright 1975 by the New York Sea Grant Institute.)

Do you know where the single largest sand pit in this nation is?

If you were to guess any place within the terrestrial United States, you would be wrong, for this super sand pit is, in fact, under water!

Sand deposits in the Lower Bay of New York Harbor have been the largest single source of commercial sand for the New York City metropolitan area since 1963, and are calculated to be the largest such deposits in the country today. Fed by littoral drift from the Long Island and New Jersey coasts, the apex of New York Bight has seem-

ingly inexhaustible sand resources.

However, the rate at which sand is being removed from the harbor—most of it for fill in the gradual enlargement of Manhattan Island—is very great (10 million cubic yards in 1975) and may soon exceed the rate at which it is being renewed by littoral drift. Because sand and gravel are becoming increasingly important commodities, the State of New York, which holds title to the underwater lands, is now beginning to look at its offshore dredging practices. The ultimate goal: to formulate a long-range policy for offshore aggregate mining for the state.

For the past year, New York Sea Grant has had substantial involvement in this policy-making. Advisory Service Specialist Peter Sanko provided the initial input, bringing together representatives of state, federal, and local agencies concerned with the consequences of offshore mining of sand. As a result of subsequent discussions, the agencies and Sea Grant are now trying to stimulate a coordinated program of research that will yield the information needed to back up the statewide policy for sand and gravel mining.

New York Sea Grant researchers will be among those who will be contributing this vital information. Because many questions have been raised about the environmental effects of offshore sand mining, Dr. Jerry Schubel, Director of the Marine Sciences Research Center, SUNY at Stony Brook, is hoping to focus some of his efforts in this

area. He hopes to answer such questions as: What will deepening the harbor do to water quality and circulation patterns? If the West Bank Channel is deepened, will that affect erosion on Staten Island? How will dredging affect the fish and smaller living resources of Lower New York Bay? How much sand and gravel is in the harbor and how good is it?

Schubel has already started to gather some of the needed information. In November, 1975 he and some assistants went out on the Marine Sciences Research Center vessel the *Onrust* to do some "sub-bottom profiling," or, looking at the waterbottom to determine the changes in the sediment characteristics.

In the profiling process, sounds are transmitted from special apparatus behind the boat down into the sands under water. Another piece of equipment called an "eel," which is a long wire with microphones on it, picks up the "echoes" of the sounds as they go down into the sand and sends them back to a graphic recorder in the cabin of the boat. The quality of these echoes indicates how deep the sand is in particular locations.

"Coastlines" will carry additional details on Schubel's research as it progresses over the coming months. In the meantime, for more information on the status of sand and gravel mining, you may wish to read the New York Bight Atlas #21 on sand and gravel mining listed this month in "I Want More."

Group Offers Help *cont. . . .*

distance the team must travel from Cornell.

Federal requirements have resulted in increasing numbers of Environmental Impact Statements being filed by governmental units in support of proposals to build or alter facilities, or to grant permits to private parties. New York State has recently passed an Environmental Quality Review bill requiring EIS's for activities of state government bodies. This legislation will take effect in June, 1976.

The Review Team will act in an ad-

visory capacity and will present written and oral reports to the community. These reports will center around two activities: clarification of the major impacts resulting from the project and assessment of the adequacy of the Environmental Impact Statement in terms of its technical information. The Review Team *will not* prepare an EIS for the community, but rather will react to a written document prepared by an agency. It is assumed that this review activity will be "real" in that the community will have the written report from the CEQM Review Team in sufficient time to prepare

a response to the initiating agency. (This is often limited to 45 days from the notice in the Federal Register.) The CEQM Review Team will also make an oral presentation to the community at the conclusion of the review.

To learn about specific procedures for this program contact:

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IT'S UPDATE TIME!

Each year at this time we update our mailing list. If you wish to continue to receive COASTLINES, please take a few minutes to fill out this brief questionnaire and return it to us by March 1. For your convenience we have printed the return address on the reverse side of this form, so after you fill it out you only need to add postage, fold it in half, staple it and mail it. PLEASE ATTACH YOUR CURRENT MAILING LABEL(S) OR COPY DOWN THE INFORMATION ON YOUR LABEL(S) BEFORE RETURNING!

Thank you for your help.

I WANT MORE

Further details to help solve several coastal problems are available. Each month we try to list several publications of possible interest to you; please check off those you would like and return to the Sea Grant Advisory Office nearest to you. Addresses are listed on the back page. All are publications of the New York Sea Grant Institute.

Single copies of the following publications are free.

- J15 Insight #3, Coastal Zone Management: Fact or Fiction? Roger N. Allbee. 8 pp.
- J16 Publications of the New York Sea Grant Institute. 44 pp.

There is a charge for the following publications. Make checks payable to Cornell University.

- F5 Proceedings of a Workshop on the Shellfish Management Program, March 1975. 59 pp. \$.85
- F6 1975 Legislation on New York State's Coastal and Marine Resources. Russ Thomas. 25 pp. \$.75
- F7 Sand and Gravel (Mesa New York Bight Atlas Monograph #21) John Schlee with a section by Peter Sanko. 26 pp. \$4.00
- F8 Electricity Generation and Oil Refining (Mesa New York Bight Atlas Monograph #25) H. G. Mike Jones, Harold Bronheim, and Philip F. Palmedo. 22 pp. \$4.00

Here's a list of meetings the New York Sea Grant Advisory Service will be holding over the next few months. For more specific details contact the appropriate Advisory Service office. Addresses are listed on the back page of this newsletter.

Stony Brook Office

- January 8 - (Sheepshead Bay) Electrical Systems for Commercial Fishing Vessels
- Mid-February - Planning Hydraulic Systems for Commercial Vessels
- March - Advertising for Party/Charter Boats

St Lawrence Region

- Late January - Aquabusiness Management Course
- Mid-April - The St. Lawrence Region; Situation and Interrelationships

Lake Erie Region

- April 7 - Seafood for Genesee County Cooperative Extension Agents

Oswego Office

- January 14 - Update on PCB's for western New York Cooperative Extension staff
- Late March - 4H Leaders' Training session on "Let's Go Fishing" youth program

From _____

Place Stamp
Here

To: Linda J. Camp, Editor
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UPDATE

Some 40 marina operators, fishing guides, and agency representatives attended the North Country Conference for Recreational Boating and Fishing Businesses on December 2 in Clayton, New York. The conference featured presentations on dealing with aquatic weeds, by Mike Duttweiler of N.Y. Sea Grant Advisory Service, the importance of water-based industries by Tommy Brown of Cornell University, and one marina operator's view of current problems for marinas by Ron Wright of Morristown, New York.

One important outcome of the meeting; the north country marina operators are now considering the merits of forming some kind of cohesive regional organization as other operators in the state have already done.

Staff of the New York Sea Grant Advisory Service bid farewell to W. Dale Brown in December. Brown has been serving as Associate Director of the New York Advisory Service since the fall of

1973, and has focused his efforts on assisting the Great Lakes Advisory Service staff with program development.

Before coming to New York Sea Grant, Brown worked with the New York Cooperative Extension Service, specializing in administration of county and state Extension programs.

Progress report cont.

Regional Planning Commission, the Central New York Regional Planning and Development Board, Cayuga, Chautauqua, Columbia and Oswego counties, and the cities of New York and Troy.

A second kind of coastal zone management activity occurred in the state legislature. During its 1975 session, the New York State Legislature considered more coast-related legislation than in any other recent year. Twenty-five proposals were enacted into law, as opposed to seven in the 1974 session. Three other bills relevant to coastal zone/marine resources and passed by both the Senate and Assembly were vetoed by the governor.

Probably the most significant of these

bills is one which will now statutorily permit the commissioner of the Department of Environmental Conservation (the public agency primarily responsible for regulating and protecting all aspects of the state's environment) to consider the total impact a proposed project might have on any or all of the state's resources, including fish and wildlife, before granting or denying DEC approval (A-7650).

Two other bills passed which are important to coastal zone management. The first will require environmental impact statements from all public agencies before taking any action that might have a significant effect on our environment, including depletion or alteration of the state's marine resources (A-4533). The second provides for the regulation and protection of the state's freshwater wetlands (S-6450).

For more information relating to coastal zone management you may wish to read two publications listed this month in "I Want more"; *Insight #3-Coastal Zone Management, Fact or Fiction?* and *1975 Legislation on New York State's Coastal and Marine Resources*.

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