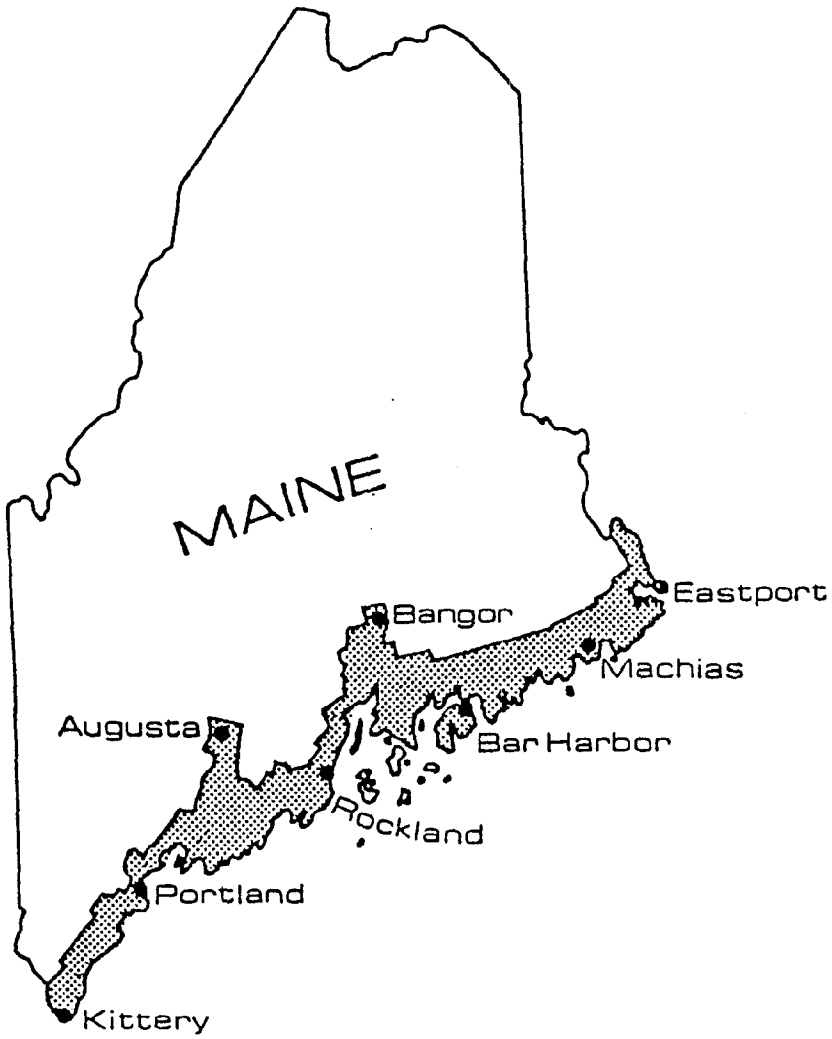
Maine's Coastal Program

SECTION C ANNUAL REPORT NOVEMBER 1989



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MAINE'S COASTAL PROGRAM

Section C
Annual Report

November 1989

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Submitted to

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Maine's Coastal Program
SECTION C ANNUAL REPORT

A. Estuarine Habitats

1. What are your State's major coastal wetlands protection problems or issues (institutional, man-made or natural) and how are you addressing them?

Problems or Issues

1. Illegal fill/dredging
2. Violation of permit conditions
3. Loss of habitat through erosion, storm, water level rise; reduced fresh water inflow or salt water infusion; sedimentation; or toxic pollution
4. Inadequate monitoring and enforcement
5. Inadequate regulation or laws
6. Limited geographic jurisdiction
7. Limited coordination
8. Lack of political will, public education, etc.

In your response to the above, please specify differences regarding:

1. Intertidal wetlands
2. Submerged aquatic vegetation
3. Nonvegetated shallow water areas, including salt ponds and lagoons; and
4. Freshwater or non-tidal wetlands in the coastal zone

Maine's major wetlands problem over the past several years has been a serious shortage of Dept. of Environmental Protection staff to adequately review, monitor, inspect and enforce its environmental protection laws. A significant backlog of permit applications accumulated as a result and, in some instances, work was done without State permits.

The staff shortage would have been more serious except for the funding of several DEP staff positions by Maine's Coastal Program. In FY 88 and 89 the Legislature increased the DEP budget and additional personnel have been hired. The quality of reviews and DEP monitoring and enforcement efforts already have improved, and the number of site inspections has increased.

A consultant recently reviewed about 10% of coastal wetlands cases and all cases involving large areas of wetland fill. He found the DEP/BEP approach to be consistent and rigorous. The most commonly denied activity was requests for filling; among wetland types, mrshes were less likely to be affected by proposed alterations than rocky shorelines or flats; and very few substantial coastal wetland fills have been approved. Only six cases in the 20 years since enactment of the Coastal Wetlands law

involved filling greater than one acre, and four of these were for highway improvements or public port facilities. Mitigation was generally required where substantial fills were allowed. Finally, persons who violated the law by illegally filling coastal wetlands were subject to stiff penalties.

Actual wetland losses have not been well-documented, though it has been estimated that historically 1 to 2 percent of Maine's original vegetated wetland acreage has been lost or converted to other uses. The State's most authoritative analysis of wetlands problems and issues is contained in Maine Wetlands Conservation Priority Plan, prepared jointly by the SPO, Bureau of Parks and Recreation, and the Wetlands Subcommittee of the Land and Water Resources Council. The report's "Executive Summary" is reproduced below. It concludes that wetland losses are greatest for smaller wetlands in rapidly developing areas of the state, e.g. southern York County, south coastal areas and other high-growth urban centers. Coastal salt marshes are experiencing the greatest threats from fringing development, whereas inland wetlands, especially smaller ones, are being filled.

Unfortunately, no single comprehensive wetland mapping system or database exists. Existing wetland inventories give only a partial indication of the extent and type of wetlands in Maine. They are based on different wetland definitions and classifications, size criteria for inclusion and inventory methodologies. Consequently wetland losses and trends are extremely difficult to monitor. Maine currently is exploring the idea of developing a single comprehensive wetland mapping system that would be compatible with other State GIS efforts.

Cognizant of the threat of wetland loss, Maine has been tightening its environmental laws to enhance wetland protection. New coastal sand dune rules were adopted by the DEP. The rules incorporate a new series of computerized geology and coastal hazard maps developed by the Maine Geological Survey (with Coastal Program funding) for 27 beach and sand dune environments along 30 miles of the southern Maine coast. The maps are referenced as best available information in acting on permit applications.

In 1985 a Freshwater Wetlands Law was passed, protecting all freshwater wetlands larger than 10 acres. (Coastal salt-water wetlands were already protected, regardless of size.) The Mandatory Shoreland Zoning Act was amended to extend the shoreland zone to include coastal and freshwater wetlands. The DEP prepared a model ordinance for this purpose and some towns, especially those under extreme development pressure, have adopted standards which are even more restrictive. (Kennebunk, for example, excludes wetland areas in calculating lot sizes in subdivision developments.)

In 1988 the Legislature consolidated several environmental laws affecting wetlands under a single Natural Resources Protection Law. Resources protected include: coastal wetlands

and sand dune systems; freshwater wetlands of 10 acres or more; great ponds of 10 acres or more (including associated wetlands; rivers, streams and brooks and associated wetlands; and significant wildlife habitat.

Activities within 100 feet of a waterbody are regulated since they have the potential for indirectly affecting the waterbody. Additionally, the Shoreland Zoning law regulates activities within 250 feet of a waterbody or wetland, and it is the policy of the Maine Bureau of Public Lands to recognize wetland values in leasing decisions regarding State-owned submerged lands. Finally, the State is considering the recommendations made in the Maine Wetlands Conservation Priority Plan reproduced below.

2. To the best of your ability, please fill out the wetlands chart attached.

Data on wetlands lost and gained are not available, as indicated above. The Maine Wetlands Conservation Priority Plan, with reference to the state as a whole, attributes historic wetland losses to commercial, residential and urban development; transportation and roads; floodplain development; dredging and dredged material disposal; hydropower development/water storage; peat mining, timber harvesting and agriculture; pollution (e.g. from coastal overboard discharges) and natural causes. The chart below shows estimated statewide losses of vegetated wetlands since European settlement.

3. How is your State/program required to factor cumulative impacts into estuarine habitat/wetland project review decisions?

Maine's environmental laws do not provide review standards for cumulative impacts. The State follows a general policy of no net loss of wetlands, however, and the Natural Resources Protection Act, which is its primary tool for wetland protection, specifies (among other standards) that activities will be permitted in wetlands only if they "will not unreasonably harm any significant wildlife habitat, freshwater wetland plant habitat, aquatic habitat, travel corridor, freshwater, estuarine or marine fisheries or other aquatic life."

Unfortunately, freshwater wetlands under 10 acres are not regulated under the NRPA, but they can be zoned as Natural Resource Protection Areas and regulated by municipalities under the State's Mandatory Shoreland Zoning Law.

Cumulative impact is a problem only in the absence of regulation based on sound land use plans. The problem is being addressed over the longer term under Maine's Comprehensive Planning and Land Use Act. One of the state goals established under the Act, which applies to "planning and regulatory actions of all state and municipal agencies," is: to protect "critical natural resources, including without limitation, wetlands, wildlife and fisheries habitat, sand dunes, shorelands, scenic

vistas and unique natural areas." The Act specifically requires municipalities to develop comprehensive plans and implementation strategies with timetables reflecting this and the other goals.

4. What problems have you had with implementing a cumulative impact review policy or process? How are you attempting to address them? If you do not have such a policy/process, is one being considered?

See question 3.

5. Does your State have a state-wide habitat/wetlands mitigation policy, or do any individual state agencies employ any mitigation policies or internal guidelines? If so, describe the policy framework used to mitigate impacts to wetlands. Please attach a copy of the policy framework.

Maine does not have a specific state-wide wetland mitigation policy per se, though the DEP currently is in process of developing one. The Natural Resources Protection Act lays the foundation for such a policy by specifying that proposed mitigation may be considered in determining whether there is unreasonable harm to significant wildlife habitat, "if that mitigation does not diminish in the vicinity of the proposed activity the overall value of significant wildlife habitat and species utilization of the habitat and if there is no specific biological or physical feature unique to the habitat that would be adversely affected by the proposed activity."

The DEP uses mitigation in its review of permit applications affecting wetlands. When compensatory activities for the development of a wetland for other purposes are recommended, it is usually the extent of wetland loss that is mitigated.

The Maine Dept. of Transportation (MDOT) also has a mitigation program in compliance with Federal Highway Administration policy. FHA policy requires federally funded projects to consider ways to avoid or minimize wetland losses and, after all practicable measures have been taken, to give first consideration for compensation to mitigation within the highway right-of-way. In cases where mitigation outside the right-of-way is necessary, Federal funds may be used to improve existing publicly owned wetlands or to purchase replacement wetlands. MDOT reports that opportunities to mitigate losses of wetland functions and values within highway rights-of-fway are limited and creation of wetlands off-site can be expensive and of doubtful public benefit.

6. When "compensatory mitigation" is required or allowed for unavoidable wetland alterations, what methods can be used (i.e. creation, restoration, mitigation banking) and where is it required (or allowed), i.e. on-site, in a similarly functioning ecosystem, within same watershed, anywhere in coastal zone?

See question 5.

7. How is compensatory mitigation measured or mitigation banking credited? Is mitigation measured by area using replacement ratios or is it measured functionally by the functional equivalence of the lost wetland? If it is measured functionally, how is functional equivalency assessed? Which system is employed, e.g., HEP PennHep, FHWA/Adamus Method, WET II?

See question 5.

8. How does your state assess the quality of compensatory mitigation? Does the state require monitoring and research on mitigation projects? If so, what is the basis for a successful/unsuccessful determination?

See question 5.

9. How are mitigation conditions that are placed on permits coordinated with other Federal or State resource agencies?

The DEP routinely circulates permit applications under the Natural Resources Protection Act and the Site Location of Development Act for review and comment by other concerned State agencies, such as the Dept. of Inland Fisheries & Wildlife, Dept. of Marine Resources, Bureau of Public Lands and the Maine Geological Survey. Coordination with federal agencies is accomplished as necessary on a case-by-case basis.

MAINE WETLANDS
CONSERVATION PRIORITY PLAN

Executive Summary

Maine is 25% wetland. More than 5,000,000 acres of freshwater wetlands and approximately 160,000 acres of tidal wetlands are currently estimated to occur in Maine. The diversity of climatic and physiographic conditions in Maine accounts for the diversity of wetland types and their extent in Maine. Forested and shrub swamps are most abundant, while tidal marshes and beach systems are least abundant. Each have important natural values and the latter are crucial for the survival of many species of migratory birds. Other wetland types in Maine include mudflats and rocky shores, freshwater marshes, bogs and fens, floodplain wetlands and other seasonally flooded flats or basins with wetland vegetation and/or soils, according to the U.S. Fish and Wildlife Service definition of wetland.

Wetlands have many natural and cultural values and provide many important functions such as fish, wildlife and endangered species habitat; flood control, nutrient retention and sediment trapping; production of timber and other natural resources; and recreation, education and research, and use as natural areas. The "critical edge" or wetland-upland transition zone is extremely important for wildlife, providing a buffer protecting the wetland from indirect or secondary impacts, such as pollution.

Existing wetland inventories give only a partial indication of the extent and type of wetlands in Maine. Inventories have used different wetland definitions and classifications, size criteria for inclusion and inventory methodologies. Though a number of wetland inventories exist in Maine, there is a critical lack of a single comprehensive wetland mapping system that could be used for regulatory, planning and management purposes. The absence of a complete mapping or inventory system not only precludes the determination of current extent and location of wetlands, it makes wetland losses and other trends impossible to monitor.

Historically, 1-2% of Maine's original vegetated wetland acreage has been lost or converted to other uses. There has also been a net gain in open water wetland areas, although extent of this is not well recorded. Some restoration and mitigation projects have resulted in the creation of some vegetated coastal and inland wetland areas, but their replacement value for wildlife or other functions is not well known.

When wetlands are altered or destroyed for various kinds of development, maintenance and operating costs are generally higher than wisely developed upland sites. There are more environmental and socioeconomic costs associated with wetland alterations that must be considered, since these costs will inevitably be passed on to the consumer.

Alterations which result in outright wetland loss include filling, dredging and draining. Losses of wetland function and value are far more difficult to measure, but are just as serious and in fact more widespread. Important here is the loss of riparian or buffer areas adjacent to wetlands which are crucial for preserving the integrity of wetland functions and values. The conversion of land use around a wetland can also alter or destroy the natural values or integrity of a wetland.

The filling of wetlands has occurred throughout Maine's history of settlement as these "wastelands" were "improved" for residential and commercial development. Agricultural activities have converted vegetation types and when located in or near floodplains may have reduced some natural flood control features. Other wetland values have been lost or reduced, even thought the area may still be classified as wetland. Dam construction has created open water habitats while often flooding vegetated wetland types.

Currently, wetland losses are greatest in smaller wetlands in rapidly developing areas of the state, e.g. southern York County, south coastal areas and other high-growth urban centers. Coastal salt marshes are experiencing the greatest threats from fringing development, whereas inland wetlands, especially smaller ones, are being filled. While the values of individual small wetlands may not be great, they are extremely important within a larger landscape context. The cumulative loss of many small wetlands via development activities may be just as severe as the loss of a smaller number of large wetlands when habitat and cultural values are considered.

Inconsistency between state and federal wetland laws, in terms of differing definitions, size of wetland regulated and exemptions, has complicated matters for developers and regulators alike. Within Maine, different agencies of state government have different mandates, (e.g. DEP regulates activities in wetlands to preserve their functions and MDOT is required to build safe roads for the public, which may include filling wetlands). Nationally, there are similar conflicting mandates, but these are being merged into a more unified policy in favor of stronger wetland protection.

Enforcement and implementation of regulatory wetland protection programs varies at all levels - federal, state and local - and are generally outpaced by the current rate of wetland alterations. Many wetland alterations are inadequately regulated, especially developments on smaller wetlands and the cumulative impacts on specific wetlands or wetland complexes. Regulation is ineffective in evaluating how seriously or permanently an alteration impairs wetland functions. It is unknown to what extent certain wetland functions are being lost by what degree of alteration.

Many losses of wetland function and value are attributed to activities in upland areas immediately adjacent to wetlands, (e.g. housing and industrial development, landfills). Most regulatory programs deal with the wetland itself and not specific activities on adjacent lands that could adversely affect the wetland indirectly. Regulation may not stop development from occurring near wetlands; however, non-regulatory initiatives (designation, registry, easements, etc.) may provide important opportunities to address problems created by adjacent and upland developments that affect wetlands.

Acquisition is often the only means to ensure the long-term protection of certain high-value wetlands and their component species. Permanent protection is also required for buffer areas around these high priority wetlands, to avert the potential for secondary impacts upon protected wetlands. Although the state and private entities have already protected some important wetlands, there are still acquisition needs which have not been met. There is agreement within the conservation community, wildlife biologists and natural area managers, that wetland acquisition is a high priority for Maine. The potential for wetlands as educational resources has scarcely been developed in the state, and may be contributing to any lack of understanding of the biological and cultural importance of these ecosystems.

RECOMMENDATIONS

1. Consistent with federal definitions, a definition of what constitutes a wetland needs to be adopted by the state with the intent of enhancing regulation of all wetlands, particularly those of smaller size (less than 10 acres).

2. A single comprehensive wetland mapping system is needed for the state that will incorporate ecological wetland units of all sizes, including critical resources, such as fish and wildlife habitat and endangered and threatened species and their habitats. A computerized mapping system should have the ability to track extent and types of wetland losses, as well as locations of development activities in or around wetlands.

3. Maps created by the system should be at a scale useful to towns and regulatory agencies for planning and should be GIS-compatible, as has been done by the National Wetland Inventory. A GIS-based wetland mapping system should provide the basis for trend studies to determine accurately the rates of loss or conversion and to identify regions of critical concern.

4. In addition to acres of wetland altered or converted, losses of wetland function and value need to be assessed as well.

5. Particular attention should be paid to improving monitoring, regulation and control of activities in buffer zones around wetlands; ie. in "critical edge" habitats.

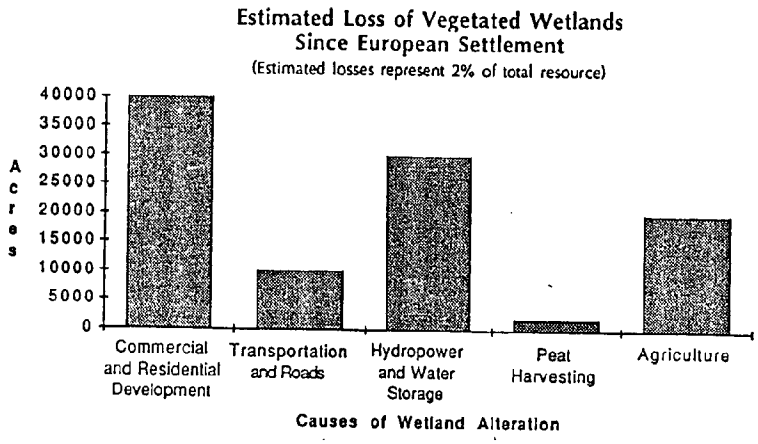
6. Enforcement of state and federal wetland laws needs to be improved. Greater information dissemination to the development community should occur through the regulatory structure.

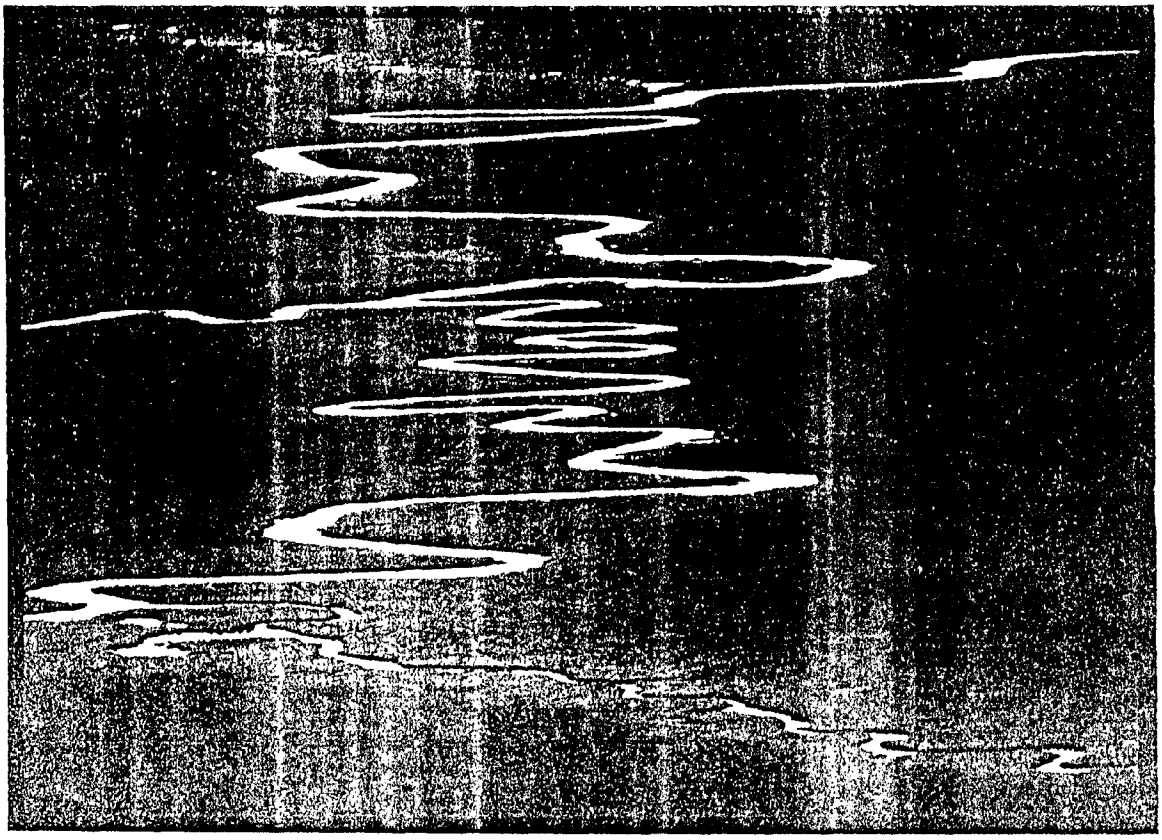
7. A clear and consistent mitigation policy and guidelines needs to be developed and implemented by the state.

Causes and Amounts of Wetland Loss

Many of the increased development pressures on wetlands relate directly to population growth. Increasing urbanization, residential and commercial development, increased roadways and use of wetland resources all result in direct and indirect adverse impacts on wetlands. The following factors and activities have been identified as contributors to historic wetland loss. The net effect of these activities on wetland loss is illustrated in Figure 5.1.

Figure 5.1 Estimated loss of vegetated wetlands in Maine since European settlement.





Sunkhaze Meadows and Stream, east of Bangor. Wetlands like these cover at least 25 percent of Maine, perhaps more.

Wetlands and wild animals

Writing rules to protect them can be difficult

By David D. Platt
Photography by Christopher Ayres

DRAWING UP RULES to protect natural resources is a sure-fire moneymaker for lawyers and consultants, because it gets so complicated.

A roomful of people representing contractors, environmental groups, state agencies, and landowners showed up for a recent workshop on rules to protect wetlands, for example — each expressing concerns from different points of view, many suggesting modifications to ease the burden on a particular constituency.

Earlier this fall, hearings on a different set of rules (actually maps) that would steer development away from nesting bald eagles drew considerable public comment. Future rule-making and mapping of fragile environments and wildlife habitats can be expected to attract attention too, as the state moves to protect the public's interests in a variety of natural resources.

The eagle maps and the wetlands rules were this year's major moves to implement Maine's two-year-old Natural Resource Protection Act. Passed during the same legislative session that produced the state's landmark growth-management law, the Act combines elements of laws protecting coastal and freshwater wetlands, endangered species, sand dunes, streams, and great ponds.

Once the wetlands rules are done and the eagle maps adopted, there will be other projects, says Environmental Protection Commissioner Dean Marriott: mapping and data-gathering, updating old rules that protect the shores of streams and great ponds, writing new rules to protect high mountain areas and manage "critical wildlife habitat" such as deer wintering areas.

Complex as the arguments over the rules sometimes get, the idea behind the Natural Resource Protection Act was to simplify the state's permitting process, says State Planning Director Richard Silkman. "We had a number of natural resources — coastal sand dunes, inland wetlands, and so forth — all permitted under different statutes with different standards," Silkman recalls. "There was confusion."

> BEFORE THE *new Act, Maine's basic environmental statues didn't protect high mountain areas or the habitats of endangered wildlife, for example — and some standards were weak.*

There were holes in the laws as well — before the new Act, Maine's basic environmental statutes didn't protect high mountain areas or the habitats of endangered wildlife, for example — and some standards were weak. "We leveled them up to the most stringent standard," Silkman maintains.

Overall, the idea was to create a surer world for applicants and for the agencies (particularly the Department of Environmental Protection and the Land Use Regulation Commission) that review applications and grant permits. In addition, says Maine Audubon attorney Karin Tilberg, the Act "brings together the resources that interconnect naturally," making it possible for regulators to consider a number of different impacts at the same time before giving someone a license to clear, build on, fill in, or otherwise alter a natural area.

Rules set boundaries, which is why rule-making often gets contentious. This fall's rule writing effort for wetlands produced three different drafts — one from a business group, one from an environmental group, a third from the Department of Environmental Protection.

The Maine Chamber of Commerce and Industry favored classifying wetlands by "function" instead of listing all the different plants in them; the Natural Resources Council wanted "alternatives" examined before

allowing someone to fill high-value wetlands; the DEP stressed "no net impact." There were differences over "compensation" (replacing a destroyed or degraded wetland) and "mitigation" (avoiding or reducing the impact of a project) and when each of these strategies might be appropriate.

Precedents were on everyone's mind: "my concern is that this rulemaking not be a vehicle to emblazon 'compensation' on our environmental laws," commented one environmental attorney.

Consistency was another concern. The DEP's draft exempted "public safety projects affecting less than 20,000 square feet of wetlands," an exemption some characterize as a loophole created especially for the state Department of Transportation (DOT). "I'm uncomfortable encouraging public agencies not to toe the line," declared Margaret Roy, a member of the Board of Environmental Protection, which must ultimately approve the rules. "The DOT is different," countered Bill Reid of the department's Location and Environment Division, asserting that all of 1988's DOT projects had affected only 17 acres of wetlands.

A major task facing the rule-drafters is defining what constitutes "unreasonable harm" where natural resources are involved — be they wetlands, wildlife, fragile mountain areas, or bodies of water. "What's 'unreasonable' harm to each category of wetland?" wonders Maine Audubon's Tilberg. "With coastal wetlands it may be 'unreasonable' to lose any more. But in lower-value wetlands it may be OK to lose something."

Alice Knapp, a lawyer for the Maine Chamber of Commerce and Industry, agrees that the definition of "unreasonable harm" is critical, but worries that the new rules may go too far. "The rules are supposed to define it," she says, "but we seem to be getting into the DEP's interpretation instead."

Adding to Knapp's concern is a proposal from the Natural Resources Council that applicants for some wetlands permits be required to show there is "no practicable alternative...that would not involve a wetland." The DEP, says Knapp, "reads alternatives into the 'unreasonable' standard, but it has no statutory authority to do so." Allowing regulators to consider alternatives, Knapp says, would pave the way for "obstructionist tactics" by opponents of projects. "It's a real, practical concern," she maintains. The Natural Resources Council, the Maine Audubon Society, and other environmental organizations have pressed for consideration of alternatives in a number of contexts over the years, most notably in hydroelectric licensing cases.

(Yet to be addressed is an inconsistency in state law. The DEP's draft wetlands rules contain references to forested wetlands, but the regulations administered by the Land Use Regulation Commission in Maine's unorganized townships don't. The Legislature intended for the Natural Resource Protection Act to apply statewide, suggesting that someone will have to reconcile these two sets of the rules.)

The discussion over the wetlands rules illustrates how difficult it is to come up with regulations everyone can live with. In the coming weeks, the DEP will attempt to reconcile the various points of view so it can hold a formal public hearing on the wetlands rules, which will be up for adoption early next year.

"We started with wetlands because they're the most critical now," says Environmental Protection Commissioner Marriott. "Next we'll step back and do all the rest." In some cases, that will mean re-writing existing rules (for stream alteration and great ponds) to bring them up to date and make them uniform; in other cases it means writing new rules (for high mountain areas). In most situations it will mean collecting voluminous amounts of data.

Because of the expense, information-gathering can become as much of a problem as definition-writing. The Natural Resource Protection Act and the state Endangered Species law require the Department of Inland Fisheries and Wildlife (IF&W) to map habitat for endangered species, for example. The now-completed eagle maps came first; habitat for other endangered creatures is to follow.

All parties say they want as much information on resources as possible. But the mapping requirements of the Natural Resource Protection Act may prove to be a stumbling block to full protection, because tight budgets mean it will take years to finish the maps. Old regulations covering fresh water wetlands and sand dunes mention wildlife habitat but don't require expensive maps. Says Maine Audubon's Tilberg. "It's nice if it can happen, but unless it does it's a step backward."

Alice Knapp, the Chamber of Commerce and Industry attorney, wants to see the maps completed and thinks the public ought to be willing to pay for them. "Economics is a real problem in the environmental arena," Knapp admits. "Environmental protection is incredibly expensive." But she wouldn't like to see things "frozen" until the habitat maps are done, because "that's not good public policy."

State Planning Director Richard Silkman regards information-gathering and mapping as important. "When we expanded the scope of the law, we didn't know where all the resources were," he says, "so we said the law wouldn't be implemented until they'd been mapped by IF&W." Whether the McKernan administration will support added appropriations for mapping remains to be seen, but everyone expects budgets to be tight next year.

"Wildlife habitat," says Natural Resources Council attorney Beth Nagusky when asked where the state should turn its attention after wetlands. "Up to now there's been no recognition of cumulative loss." Protecting wildlife habitats could be just as tough as wetlands: they're diverse, spread all over the place, subject to just as many differences of opinion, and have just as much potential for obstructing development. "Wildlife habitat will be harder to get your hands on than wetlands were," she predicts.

When you set out to simplify things, that's what happens. ■

BEP hears concerns about proposed wetland rules

AUGUSTA (GGS) — Stiff new regulations designed to protect Maine's 5 million acres of swamps, bogs, coastal marshes, tidal flats and boggy forest lands got a generally sympathetic airing before the Board of Environmental Protection Tuesday.

Industry spokesmen expressed concern the proposals would be too stringent, but the three-hour session produced more questions than complaints. The hearing was held to get public comments before a formal proposal is sent to public hearing.

Donald Witherill, director of the Department of Environmental Protection's natural resource division, said the proposed rules would allow "no net loss of wetland values" as a result of construction activities.

He proposed a strict classification system that would forbid any construction in "high-value wetlands" except as needed for wharfs, piers and other "water dependent uses," or for highway construction required in the interests of "public safety."

Less stringent requirements would be imposed for moderate- and low-value marshes.

Beth Nagusky, an attorney for the Natural Resources Council of Maine, who had originally been critical of the classification system, said she had changed her mind.

"As we work on this we have become more comfortable with this concept," Nagusky said. "We now think the system may be more workable than the plan we proposed."

Proposals by the council that the department conduct hearings on even stiffer regulations had prompted the DEP staff to make proposals of its own. The council originally proposed that all wetlands be treated as equally valuable.

William Reed, an environmental planner with the Department of Transportation, worried the rules could be interpreted to ban new bridge construction.

"Bridges aren't a water dependent use, but they are certainly needed," Reed said. Witherill said necessary construction would qualify under the exception for public safety.

But Tom Doyle, an attorney who represents industries and utilities, said that as drafted, the rules would exclude private bridge construction over particularly valuable wetlands in the forest lands of the state.

Doyle also urged exemptions for utility lines that may cross wetlands and complained "there is no justification" in the law for requiring applicants to consider alternative routes for private roads that would impact on wetlands.

"If the Legislature had wanted the department to require applicants to look at alternatives to filling wetlands, it would have said so in the law," Doyle said.

Witherill replied alternatives are required to fulfill sections of the law that forbid "unreasonable" intrusion into wetlands and the proposed language had the endorsement of the attorney general's office.

Alice Knapp, a spokesman for the Maine Chamber of Commerce and Industry, also called the proposed rules too stringent and said the chamber is drafting its own version of wetland regulations, and would have them available in time for a formal public hearing scheduled for Jan. 4 in Augusta.

Editorials

LURC's decision

When it meets today in Gardiner, the Land Use Regulation Commission should endorse its staff report that recommends against a zone change request for a proposed subdivision on Bellier Cove in Cobscook Bay, an important habitat for waterfowl, especially black ducks, and the occasional home of bald eagles.

Located in Edmunds Township in Washington County, the 59 acres proposed for development by Mount Holly Inc. currently are divided into two restrictive zone designations — 22 acres in a tightly regulated Shoreland Protection Subdistrict, with the remaining 38 acres under General Management.

The Yarmouth-based developer needs the entire parcel rezoned Residential Development to allow for its subdivision into 12 lots, from 2.5 to 5 acres in size, that would be marketed for $25,000 to $40,000 each.

The controversy over this subdivision is a classic example of the pressure for development that has been exerted on Maine's prime coastal property. For residents of the southern part of the state, it is an experience in deja vu, while mid- and northern coastal residents will see present experience mirrored in this conflict between resource protection and development.

There are three good reasons why the full commission should accept the recommendations of its staff.

Although the developer has reached an agreement with the Department of Inland Fisheries and Wildlife on a plan that is even more restrictive in some ways than the LURC zoning regulations — including 250-foot buffers along the shoreline and voluntary restrictions on two inland parcels — there simply is too much at stake for the species of wildlife in this area for the state to allow this type of subdivision encroachment into a fragile habitat.

During testimony last July, Douglas Mullen, manager of the Moosehorn Wildlife Refuge, said he believed that the project eventually would drive waterfowl out of the cove. "I really have a problem with a housing development in that area," Mullen told the commission. So do a lot of other people concerned about sites targeted by similar proposals up and down the coast of Maine.

The zoning designations of the Land Use Regulation Commission are there for a purpose. They are written the way they are for a reason. The commission recognized the inherent values in this land when it applied the Shoreland Protection and General Management restrictions. As the LURC staff already has observed, there is no good reason for the agency to change its approach to land management in that area. There is, at this time, no shortage of seasonal and second homes along Maine's coast.

Most important for LURC is the impact this and similar decisions will have on public perception of how the commission regards its own procedures, regulations and historic justification for protecting the land placed in its care by the Legislature.

LURC has taken its share of abuse in the past few years — some of it richly deserved, but much of it misdirected anger that rightly belonged to staffing problems and lack of clear direction from the executive and legislative branches of government.

The commission now is in the position, in a sense, of starting over, of rebuilding or reestablishing public confidence in its mission and its actions. The best way to begin that process is with a clear statement by LURC of commitment to consistent and straightforward application of its own zoning regulations. It can start on Cobscook Bay.

Council and land trust intervene to protect Cobscook Bay wildlife

by Jerry Bley
Resource Specialist

The Natural Resources Council of Maine and the Quoddy Regional Land Trust have intervened before the Land Use Regulation Commission in opposition to a proposed subdivision on Cobscook Bay. At a July public hearing, the Council and QLRT presented evidence demonstrating that the 60-acre subdivision proposed by Mount Holly Inc. would have a major impact on the area's valuable bald eagle and wintering black duck populations.

Mount Holly, a major land developer, has petitioned LURC to rezone a section of Bellier Cove, in Edmunds Township, near Moosehorn National Wildlife Refuge. Mount Holly has developed several subdivisions along the shore of Cobscook Bay, though this is the company's first proposal in Maine's unorganized territories.

Maine's Department of Inland Fisheries and Wildlife has called Cobscook Bay a wildlife resource of international significance. The bay supports 15 pairs of nesting bald eagles, the highest concentration of any area in the northeastern United States. In addition, about a quarter of the state's wintering black duck population is found in Cobscook Bay. North America's black duck population has been in a serious decline for several decades. Wildlife biologists believe that loss of wintering habitat is one of the major reasons for the decline.

"The area has been identified as a critically important wildlife area which has been targeted for protection by state and federal wildlife officials," said Beth Nagusky, staff attorney for the Council. "It's an area that should be zoned to protect wildlife values, not slated for intensive development."

While there is not an active eagle nest on the proposed development site, Charles Todd, a biologist for IF&W, testified that the area is used by eagles and provides potential nesting habitat. Todd said that a pair of adult eagles showed up in the Bellier Cove area this spring and could possibly nest in the coming year.

Doug Mullen, manager of the Moosehorn National Wildlife Refuge, said that hundreds of black ducks use Bellier Cove every winter. Wintering black ducks are extremely wary, he said, and are likely to be driven away by any activity along the shoreline. Mullen predicted that the development of Bellier Cove would ultimately result in the loss of the area as suitable wintering grounds. Because of the area's extraordinary resource values, the U.S. Fish & Wildlife Service is investigating the possibility of purchasing land surrounding Bellier Cove, including the proposed development site.

Mount Holly did sign an agreement with Maine's Department of Fish & Wildlife which restricts development within 250 feet of the shoreline; in exchange, the agency will remain neutral on the application before LURC. Nagusky believes that the agreement will do little to protect the area's unique wildlife values. "The department acknowledges that the agreement will do nothing to protect the habitat for nesting eagles. Furthermore, if homes are occupied in the winter, human or pet activity along the shore is likely to threaten black ducks, which must maintain their energy reserves during that time of year."

Nancy Neilson, representing the Quoddy Regional Land Trust, testified that there is no need for the subdivision in the community. She presented data from the Maine State Housing Authority demonstrating that the high-priced shorefront lots would not be affordable to people in the region. She said that of the previous 22 lots sold by Mount Holly on Cobscook Bay, not one had been sold to a local resident and only three had been sold to Maine residents. Neilson also argued that the proposed development would significantly raise the demand for municipal services in the area.

Bill Crissinger/Maine Department of Inland Fisheries and Wildlife

"It's an area that should be zoned to protect wildlife, not slated for development."
Beth Nagusky

The Council contends that the proposed subdivision is inconsistent with LURC's comprehensive land use planning which discourages the type of spawling development proposed by Mount Holly. Because of LURC's "adjacency policy" which encourages development that is adjacent to existing development, approval of the Mount Holly subdivision could allow development of all of Hurley Point, on which Bellier Cove is located.

"If LURC approves this proposal, it could establish a precedent that would lead to serious damage to Cobscook Bay's renowned wildlife resources," said Nagusky. LURC is expected to decide on the proposal in October.

B. Coastal Pollution

1. What are your State's major coastal pollution trends and problems? What water quality parameters and contaminants does the State monitor? Please attach relevant statewide or coastal reports and a brief description of state water quality monitoring programs.

While the quality of Maine's coastal waters is good overall, recent finding point to rising levels of pollutants from a wide range of sources. Toxic substances are washing into Maine waters from urban and agricultural runoff, atmospheric pollution and sewage overflow. Scientific reports have documented certain problems related to bacteria from sewage, residential discharges, non-maintained sand filter systems, malfunctioning sewage treatment plants and combined sewer overflows (CSOs). Also, hydrocarbons, trace metals accumulating in coastal sediments and fish tissues and toxic substances have been identified as contaminants causing water pollution problems. (See The Gulf of Maine, Sustaining our Common Heritage, Katrina Van Dusen and Anne Johnson-Hayden, SPO, November 1989.)

DEP's Marine Monitoring Program, initiated in 1987, is establishing baseline data on a broad set of persistent toxic contaminants including trace metals, hydrocarbons and synthetic organic compounds. More complete descriptions of the program can be found in the "Final Project Report" reproduced below and in Maine's Marine Environment: A Plan for Protection, March 1989. This program to date has provided data in several harbors and bays; however, it will be several years before the entire coast is characterized. DMR monitors marine waters and shellfish tissues for public health parameters including the red tide organism and fecal and total coliform.

Overboard discharge, "the private discharge of domestic wastewater into public surface waters," is a problem which has caused the State to take action in order to protect its coastal waters and shellfisheries. Overboard discharge systems discharge treated effluent into surface waters where traditional septic systems or connections to municipal systems are not a viable option. Despite this improvement over the traditional "straight pipe" discharge, over one-fourth of the State's mussel and clam habitat now is closed to shellfish harvesting because of contamination from domestic sewage pollution. The State had permitted over 3,000 overboard discharge systems as of 1987, when a law prohibiting any new such systems was passed.

Currently, Maine is identifying redeemable shellfish areas, reviewing discharges that must be removed by 1992, and helping organize a true story project to demonstrate the advantages of cooperative joint solutions. Funds and technical assistance are being provided to assist coastal town and private homeowners with design and construction of alternatives to overboard discharge systems.

On November 7, Maine voters passed a $4.4 million bond issue to fund several sewage treatment projects. $1 million is earmarked for removal of overboard discharges. Residents will be reimbursed for 90% of the cost of replacement, businesses 50% and seasonal residents 25%. The Department of Marine Resources will establish priorities so that those systems discharging to productive shellfish areas will be the first to be removed. Expenditure of these funds should result in the reopening of several clam flats.

$1 million will be spent to continue funding for the small community program to help fund improvements or purchase equipment for treatment plants.

$2.4 million will be used to reduce CSOs in Casco Bay.

2. In which specific areas (e.g. specific bays or estuaries) has water quality significantly improved or declined? What factors (such as increased urbanization, upgraded STPs) have caused these changes?

In highly urbanized and industrialized areas water quality has declined significantly. For example, Casco Bay shows a high incidence of liver tumors in flounder. It has been identified by the State as a priority area for clean-up actions. Also, legislation has been introduced nominating Casco Bay for designation under the National Estuary Program. Additionally, saltmarsh plants in the Saco River demonstrate high levels of certain chemicals discharged into the water from tanneries and other industries. Fish in the Androscoggin are contaminated with dioxin from paper mill effluent, which shellfish in Boothbay Harbor contain high levels of lead. Non-point source pollution such as runoff from farm fields, parking lots, and rooftops, etc., is an issue which the State has been investigating; changes in land use planning, such as the use of detention basins and buffer strips are being promoted.

3. Which agency is responsible for the 401 certification program? Briefly describe the certification process, including how the state CZM agency interacts with the water quality agency. Is the 401 process effective? How can it be improved?

The Water Bureau of the Department of Environmental Protection is responsible for issuing 401 water quality certificates. One person is responsible for all marine certificates in the State. Because he also is responsible for administering the Marine Monitoring Program he has familiarity with the contaminant problems of coastal waters, so certification decisions are more informed than they have been in the past. However, the increasing number of applications is rapidly exceeding the ability of one person to fulfill this function.

An MOU between DEP and SPO to improve water quality has enhanced interaction between the two agencies, insuring that coastal policies are reflected in DEP decisions. The major

hindrance to effectiveness in the 401 program is lack of baseline data, a problem gradually being addressed by the Marine Monitoring Program. If Casco Bay receives funding under the Estuaries Program State money will be redirected to other areas of the coast. Coordination needs to be improved with the other agencies responsible for marine water quality, including DMR, DOT and DHS.

4. What are your state's efforts to mitigate plastics pollution problems, including all forms of marine debris, e.g. driftnets? What has your state done to address tributyltin pollution?

Plastics: Plastic items were the most prevalent collected during the volunteer cleanup of Maine's shores last October. The cleanup is thoroughly reported in the performance report for the quarter, including statistics on number of miles covered, type of debris and number of participants.

The DEP's environmental monitoring program, initially funded through the State Coastal Program, found that pollutants are degrading the marine environment and that a larger research program is needed to assess the extent of the problem. The 1989 Legislature created a Solid Waste Authority, one of the primary purposes of which is to develop a strategy to address plastics in the marine environment. Also, the issue of waste disposal from recreational boats currently is being studied to identify how plastics might be eliminated from State waters.

Tributyltin: A 1988 State law bans the use of tributyltin on non-aluminum boats under 80 feet.

5. What is being done by your State to address non-point source pollution? What is the status of the non-point source plans required by the EPA under Section 319 of the Clean Water Act? What steps have been taken in the following areas: stormwater management; water quality-related considerations in marina sitings; special area management plans for estuarine areas; institution of best management practices for land disturbing activities; educational efforts; and other?

The DEP is developing a state-wide non-point source program. With the help and guidance of Coastal program staff, they have developed an assessment and management plan as required by EPA under Section 319 of the Clean Water Act. The assessment has been accepted by EPA as adequate. The management plan is still under review. Stormwater management, water quality aspects of marina siting, estuary protection, development of best management practices and educational efforts have all been included in the proposed management plan. Copies of both documents are available.

6. Describe the CZM agency's involvement in EPA initiatives such as the National Estuary Program (include committees on which you are a member) and Near Coastal Waters Program. Address ways in which the initiatives can be improved.

SPO has written a letter of support for Maine's nomination of Casco Bay for the National Estuary Program. SPO staff have met with EPA Region 1 staff regarding the Near Coastal Waters Initiative. We have provided considerable data and guidance in the development of the draft document on near coastal waters issues in Maine. EPA is providing partial funding for a conference to be held in December on Gulf of Maine environmental quality issues. This conference will fulfill requirements of the Near Coastal Waters program for public education and input on coastal water quality issues.

Report cites serious problems for Gulf of Maine

By BOB CUMMINGS
Staff Writer

PH 11/21/89

Pollution and overfishing continue to blight the Gulf of Maine, the vast near-shore sea that stretches the length of the Northeast coast from Cape Cod to Nova Scotia.

A new study, prepared for an international conference on the Gulf of Maine, reports that the gulf, once one of the most productive coastal waters in the world, may be irreversibly blighted by chemicals, poisonous heavy metals, bacteria and overfishing.

The evidence:

- Dangerous quantities of lead are found in the mudflats and sands of even remote sections such as Penobscot Bay.
- Heavily industrialized harbors such as Saint John, New Brunswick, and Boston are so seriously degraded that they are unlikely to ever fully recover.
- Commercial fishing is in trouble because of declining fish stocks, and there is evidence that some important species have stopped reproducing.
- Liver lesions, rotting fins and "other forms of environmental stress" are common in some species of fish and shellfish.
- Several hundred thousand acres of mudflats are closed to commercial harvesting due to bacteria pollution.

The 63-pag
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McKernan called the gulf "a shared resource" with the other states and provinces and said the report and conference "are intended to lay the groundwork for improved, cooperative management of the gulf."

Copies of the report and information on the conference are available from the State Planning Office, Augusta.

company smoke stacks, and the sediments and bacteria that flush from farm fields, urban streets, suburban lawns and home sewage septic fields.

Some pollution results in the immediate death of marine organisms. When 5,000 gallons of jet fuel was spilled into Penobscot Bay in 1971, five years later clams still had not returned to one 65-acre flat.

But "the greatest threat" is not the occasional big spill that results in the immediate death of marine organisms, the report says. Rather it is the "largely

Signs of gulf's troubles

- Dangerous quantities of lead are found in the mudflats and sands of even remote sections such as Penobscot Bay.
- Heavily industrialized harbors such as St. John, N.B., and Boston are so seriously degraded that they are "unlikely" to ever fully recover.
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- Several hundred thousand acres of mudflats are closed to commercial harvesting due to bacteria pollution.

Gulf / *On the danger list*

PH 11/25/89

When an international conference on the Gulf of Maine assembles in Portland next month, it will have a full plate of problems to digest.

A new study prepared especially for the conference says the gulf is rapidly being poisoned by chemical and bacterial pollution and is being subjected to other forms of environmental stress, such as overfishing and coastal land development.

There's really nothing new in that report except the urgency with which it warns that the growing putrefaction of the gulf "may be difficult or impossible to reverse." Still, we must try — and now — to combat the sort of killing pollution experienced by waters off urbanized states to the south and parts of Europe. That is the mission of the conference, which will include delegates from other New England states and the Maritime Provinces.

The gulf, as Gov. McKernan points out, is "a shared resource" stretching from Nova Scotia to Massachusetts Bay. Boston Harbor, the most polluted in the nation, is on the Gulf of Maine. It and other industrialized harbors such as Saint John, New Brunswick, may simply be too dirty to reclaim. But every effort must be made to protect the gulf in general.

The new gulf study suggests that the biggest threat to the gulf is not some big, dramatic event such as an oil spill, but something far more insidious. It is the "largely unseen, sub-lethal, chronic contamination" by everyday commerce in and around the gulf.

It's time to start reversing that disastrous pattern.

A threatened Gulf of Maine

New report details a steady environmental decay, overfishing

By BOB CUMMINGS
Guy Gannett Service

PH 11/22/89

Pollution and overfishing continue to blight the Gulf of Maine, the vast near-shore sea that stretches the length of the northeast coast from Cape Cod to Nova Scotia.

A new study, prepared for an international conference on the Gulf of Maine, reports the gulf was once one of the most productive coastal waters in the world but may be irreversibly damaged by chemicals, poisonous heavy metals, bacteria and overfishing.

The evidence:

- Dangerous quantities of lead are found in the mudflats and sands of even remote sections such as Penobscot Bay.
- Heavily industrialized harbors such as St. John, N.B., and Boston are so seriously degraded that they are "unlikely" to ever fully recover.
- Commercial fishing is in trouble because of declining fish stocks, and there is evidence some important species have stopped reproducing.
- Liver lesions, rotting fins and "other forms of environmental stress" are common in some species of fish and shellfish.
- Several hundred thousand acres of mudflats are closed to commercial harvesting due to bacteria pollution.

The 63-page document was prepared by Katrina Van Dusen and Anne Johnson Hayden of the Maine State Planning Office in cooperation with coastal protection officials in Massachusetts, New Hampshire, New Brunswick and Nova Scotia. It is part of the background materials for an international conference on the Gulf of Maine to be held in Portland Dec. 10, 11 and 12.

Gov. John R. McKernan said the report and conference are "first steps" towards reversing the "overharvesting of marine resources, pollution and intensive land development that have begun to affect the Gulf ecosystem."

McKernan called the gulf "a shared resource" with the other states and provinces and said the report and conference "are intended to lay the groundwork for improved, cooperative management of the gulf."

Copies of the report and information on the conference are available from the State Planning Office in Augusta.

The conference was planned in response to evidence that "pollution, habitat destruction, and overuse" threaten the economic and recreational resources that have attracted fishermen and settlers to the area for more than four centuries.

European explorers first discovered the wealth of fish life in the Gulf of Maine in the 1500s and the fishing industry continues to employ 20,000 people.

But both the health of the fishing industry and the attractiveness of the area for recreational boaters and beachgoers are threatened by a combination of pollution and overfishing, the authors say.

> **The Gulf of Maine is dangerously polluted — and may never fully recover.**

Van Dusen and Hayden blame much of the degradation on a series of small pollution events.

"We cannot point at one oil spill, one industrial discharge or one development project to explain the evidence of environmental harm," they write.

Rather, the problems stem from thousands of discharges from industries and municipalities, fallout of harmful chemicals from industrial and power company smoke stacks, and the sediments and bacteria that flush from farm fields, urban streets, suburban lawns and home septic fields.

Some pollution results in the immediate death of marine organism. When 5,000 gallons of jet fuel was spilled into Penobscot Bay in 1971, five years later clams had not returned to one 65-acre flat.

But "the greatest threat" is not the occasional big spill that results in the immediate death of marine organisms, the report says. Rather it is the "largely chronic contamination" from many small pollution episodes that reduce the ability of fish to reproduce.

"Unfortunately, such changes are not easy to detect, but they are the warning signs of degradation that may be difficult or impossible to reverse."

Major fish kills are rare in Boston Harbor, for instance, but flounder in the area are handicapped by rotting fins, lobsters are commonly caught with decay spots on their shells and mussels in the harbor "were the most contaminated" in the nation.

Nor is relatively pristine Casco Bay immune, the report says. Fin fish caught in the bay had livers contaminated with some of the highest levels of lead, silver and zinc in the nation.

Even "clean" tidal power can cause harm, the report concludes.

A small experimental tidal turbine on the Annapolis River in Nova Scotia has "affected local current patterns, caused riverbank erosion, killed fish, altered the natural deposition of sediments and influenced the soft shell clam fishery."

A Working Conference
December 10-12, 1989
Portland, Maine

Convened by
Governor John R. McKernan, Jr.
Premier John Buchanan
Governor Michael Dukakis
Premier Frank McKenna
Governor Judd Gregg

the Gulf of Maine

Maine
Nova Scotia
Massachusetts
New Brunswick
New Hampshire

Sustaining Our Common Heritage

Dear Conference Participant:

I am very pleased to invite you, on behalf of Governor Gregg, Governor Dukakis, Premier McKenna, and Premier Buchanan to join us in shaping a plan to ensure that the Gulf of Maine remains one of the world's most productive ecosystems. As part of this effort, we are convening a conference that will lay the foundation for cooperative state/provincial work to sustain the productivity for which the Gulf is reknown.

The Gulf of Maine is a resource at risk. This sea within a sea, which extends from Cape Cod Bay to the Bay of Fundy, has abundant marine and coastal resources. It is threatened, however, by unprecedented pressures from coastal development, resource use, and pollution.

On December 10-12, 1989, we will convene a conference in Portland, Maine to bring together interested citizens and professionals from government, marine research, and academia. The conference will provide a forum for people to discuss priority issues and develop a framework that addresses the following areas:

- monitoring environmental conditions
- improving marine water quality
- managing land resources and land uses
- protecting marine habitats
- developing coastal and marine resources
- encouraging public involvement and participation
- strengthening international relations

This working conference is a first step in framing a plan for the Gulf that looks beyond state, provincial, and national boundaries. In order to sustain our common sea, we must begin a process of collaborative planning and management. Consensus on the Gulf's future can only be reached by sharing information and ideas in open dialogue. We hope that you will join us at the conference and in our ongoing efforts to sustain the Gulf of Maine.

Sincerely,

Honorable John R. McKernan, Jr.
Governor, Maine

IMPROVING MARINE WATER QUALITY THROUGH BETTER SHORELINE MANAGEMENT

Maine Department of Environmental Protection

FINAL PROJECT REPORT

INTRODUCTION

In 1988, the Maine legislature established a new marine environmental monitoring program the purpose of which was to determine the extent, sources and fates of chemical pollution along Maine's 3,800 mile coastline. The program was minimally funded during its initial year with the expectation to expand it depending on the success of that first year. Because expectations for the program were so high and the task ahead so large, it became clear from the outset that if the program were to gain credibility, much more needed to be done than could be done using the original $33,000 state budget.

Results which could be used by resource managers and environmental regulators were identified as the top priority for that first year. Faced with the dilemma of having inadequate funds to accomplish the necessary results, the Maine Department of Environmental Protection applied for and received this project grant from the Maine State Planning Office's Coastal Program. A Memorandum of Agreement was signed between the two agencies on September 7, 1988.

PROJECT DESCRIPTION

Four immediate objectives were identified as critical to increasing the likelihood of the marine environmental monitoring program's continuance and became the basis for this project.

1. Staffing would be committed at a level of one half time Biologist II, one full time Biologist II, one full time Chemist II together with laboratory services.

2. In order to place pollution data along the coast of Maine in perspective, collection of baseline information from several coastal areas of Maine was tasked as follows:

a. Chemical analyses of sediments from the Piscataqua River estuary, Casco Bay, Boothbay Harbor, Machias and Jonesport Bays would provide a wide geographic distribution of sediment quality along the Maine coast.

b. Chemical analyses of blue mussel (Mytilus edulis) from the same areas; Piscataqua River estuary, Casco Bay, Boothbay Harbor, and Machias and Jonesport Bays, would compliment the sediment data and provide an approximation of biological availability of the various pollutants.

c. Development of an in-situ bioassay technique for the blue mussel would enable the monitoring program to further approximate biological availability of pollutants in areas of the coast where the blue mussel was not indigenous, in particular along the sandy southwestern coastline.

d. To supplement the information being collected directly by the monitoring program, coastal pollution information and data generated by other workers would be reviewed for quality and comparability, and then incorporated into the monitoring program.

3. Based on the information and experience gathered during the first half of the project period, a long term plan would be designed. A feasible work plan and budget would then be developed.

4. A program strategy in the form of a report to the Governor and Legislature would be written which would outline what is known about pollution along Maine's coast, what the research priorities should be, and how the State of Maine can best protect its coast from further pollution.

RESULTS

The additional funding provided by NOAA's Office of Coastal Resource Management through the Maine State Planning Office's Coastal Program was directly responsible for the widely held opinion that Maine's new Marine Environmental Monitoring Program was not only worthy of continuance, but of expansion. With the exception of sub-objective 2c. (bioassay development), all four objectives were successfully achieved. Quarterly progress reports (appended) describe the specific workplan tasks completed.

The first major product of the OCRM grant was the preparation and implementation of Casco Bay's *Agenda for Action* (appended). As a result of further analyzing Casco Bay, the State was prepared to develop a defensible plan to adequately address the issues of pollution in Casco Bay. *Agenda for*

Action outlined the following management steps the State of Maine would take during 1989 as well as a series of steps it would take in the 1990s.

AGENDA FOR ACTION IN CASCO BAY

IMMEDIATE ACTIONS - 1989

1. The Governor shall nominate Casco Bay to be designated a Nationally Significant Estuary.
2. Declare Casco Bay a Priority Waterbody for comprehensive action by all State Agencies.
3. Strictly enforce of all waste discharge licenses held in Casco Bay through use of penalties and corrective action
4. Review and revise municipal and industrial discharge license monitoring requirements to reflect concerns of Casco Bay.
5. Require municipal monitoring of stormwater and combined sewer overflows.
6. Report violations of water quality standards immediately to municipalities.
7. Assess present and potential economic value of uses within Casco Bay.
8. Prepare legislation requiring all marinas to provide for adequate pumpout facilities.

CONTINUING ACTIONS FOR THE 1990s

1. Identify, prioritize and adequately treat stormwater and combined sewer overflows.
2. Quantify inputs of toxics, nutrients, and bacteria into Casco Bay.
3. Remove discharges conflicting with designated uses.
4. Prepare a Comprehensive Casco Bay Watershed Plan.
5. Develop a public education program on Casco Bay's environmental issues.
6. Review and coordinate inter-agency management goals for Casco Bay.
7. Expand and improve the State's environmental data management system.
8. Review and revise as necessary State policy on the location of snow dumps and the ocean disposal of dredge spoils.

As of October, 1989, all short-term steps had been implemented, including the marina pump-out legislation, and all long-term steps had been either completed or initiated.

The second major product of the OCRM grant was the preparation of *Maine's Marine Environment - A Plan For Protection* (appended). In this report, the distribution of sediment and blue mussel tissue chemistry is reported across the state and a general statement of coastal environmental health is made. More importantly, Section II of the report includes the long term work plan and funding strategy to advance the marine monitoring program. In order to complete the work plan, a budget of $816,350 has been proposed. Clearly, the time period over which the plan is implemented depends on a variety of funding sources and levels. The report was submitted to the Maine Legislature in March of 1989. During that same session of the legislature, the marine program's budget was increased from the original year's $33,000 to $100,000 in fiscal year 1989. For 1990, a similar appropriation is anticipated.

The marine monitoring strategy has since been incorporated into the State of Maine's Clean Water Strategy. Based on its promise, the U.S. Environmental Protection Agency earmarked approximately $67,000 for furtherance of coastal monitoring activities out of the State's general operating account. This money will be used almost exclusively to complete a remaining backlog of chemical samples.

The third major product was the nomination of Casco Bay to the National Estuary Program (appended). Due to the concern about Casco Bay's water quality and the high value of the bay as a natural and socio-economic resource, the State of Maine is committed to protecting the bay from further degradation as well as correcting problems where they exist. The strength of this nomination lies not in the fact that Casco Bay is as polluted as some of the heavily urbanized bays and estuaries around the country and already in the National Estuary Program, but rather that Casco Bay warrants inclusion in the program in order to prevent very real pollution threats from necessitating very expensive restoration. Additionally, because of the variety of biological resources and land uses in its watershed and because Casco Bay is more typical of coastal areas with similar population pressures, it could serve as a model for more coastal areas around the country than those major metropolitan waters now in the program.

After the July nomination had been submitted, the U.S. Environmental Protection Agency, Region I, contributed services in-kind to advance our

understanding of Casco Bay's pollution problems. Their contribution contained three components:

1. Fluorescent dye studies were conducted to document trajectories and zones of dilution from and around the outfalls of the municipal treatment plants in Portland, South Portland, and Yarmouth.
2. Effluent toxicity tests were on treated effluent from the city of Portland and South Portland.
3. Benthic samples were collected to begin development of a biological community data base which will eventually be used to develop biological criteria for ambient pollution monitoring.

The fourth major product was the development of a proposal to revise surface water classifications of all the State's coastal waters (appended). Public hearings were held in Portland, Rockland, Ellsworth, and Eastport during August. Information collected and synthesized as a result of the OCRM grant award assisted with the formation of the classification revisions. The proposal goes now to the Legislature, where the revisions are to be voted into law.

RECOMMENDATIONS

Although significant progress has been made during this first start-up year of the marine monitoring program, many issues have been deliberately ignored until resources are available to properly address them. Three issues which were identified in the statewide strategy as deserving of attention have over the last year become so visible and controversial that they can no longer be ignored.

1. Eutrophication - has been identified by some workers as the most serious environmental threat, on a global basis, to the health of our oceans. Although this is not known to be a problem yet in Maine, there are some areas where concerns have been raised. In Casco Bay, two areas, Harraseekett River estuary and Maquoit Bay, experienced phytoplankton blooms sufficient to prompt public complaints. In one instance (Maquoit Bay), the bloom was severe and implicated as the cause of extensive shellfish mortalities. To date the marine program has focused on toxic chemical pollution. We recommend that steps be taken now to assess the threat of eutrophication and develop an appropriate statewide strategy to address it.

2. Dredging - is now being proposed more and more frequently along the Maine coast as both industrial harbors are being developed and expanded and recreational boating is increasing. The real environmental impacts associated with both the dredging and disposal are actually not known. True ecological monitoring has never been conducted on any areas in Maine, yet fishermen report higher incidences of lesions on fish caught in the vicinity of at least one of the approved dump sites. At best, toxicity tests on the materials themselves are able to show only short-term impacts and do not address the chronic impacts. We recommend that the marine program focus on dredging and disposal impacts and expand that which the U.S. Army Corps of Engineers and U.S. Environmental Protection Agency is now doing and develop State guidelines or policy to manage these activities.

3. Biological Monitoring - was identified early on in the monitoring program as one of the long term goals of the program. Through development of biological criteria and monitoring, it will be possible to determine whether or not anomalous communities exist. This will then trigger the question of whether the anomaly is natural or a result of pollution. Protection of biological and ecological integrity is seen as the ultimate reason for pollution management. Development of criteria is needed for each ecological region and is therefore expensive. In Maine, we anticipate more than a dozen regions and habitat types, each requiring development of a unique set of criteria. We recommend that the monitoring program begin this long term task by selecting one region and habitat type and using it as a pilot study to develop the methodology for marine biological criteria development in Maine.

CONCLUSION

The NOAA-OCRM grant contributed directly to the success of Maine's newly established Marine Environmental Monitoring Program. By funding additional staff resources, the grant enabled the program to achieve the four major management objectives identified in the project description; staffing, data compilation, program development, and program strategy development and proposal. The program was consequently well received by both the public and Legislature, and has resulted in the attraction of further interest and resources from both state and federal sources.

DEP BULLETIN

Attention: License Holders

Subject: Good News for Overboard Dischargers

Date: September 1989 Contact: 289-3901

In 1989 the State of Maine amended the Overboard Discharge Law to make it easier for licensees to comply. The basic ideas behind the law haven't changed. The law still:

- Prohibits new discharges
- Prohibits increases of existing discharges
- Prohibits the expansion of seasonal discharges to year-round discharges
- Emphasizes the cleanup of shellfish areas
- Aims for the eventual removal of all discharges

The old law left some people with a lot of concern and uncertainty, and most of you let the State know about it. So, in 1989, the Overboard Discharge Law was amended to resolve some of the uncertainties. The amended law:

- Removes the special exemption that allowed commercial discharges to increase
- Sets up a fund to help pay for the replacement of overboard discharge systems
- Allows discharges to remain in place until an alternative waste disposal system is possible and DEP has made funds available to you to help pay for the replacement
- Limits the instances in which DEP can require holding tanks

This should make you breathe easier, but don't relax too much. In return for the above benefits, the Legislature wants you and the Department to pay more attention to your waste discharge system to make sure that it complies with your waste discharge license. In fact, the new law requires DEP to inspect each system at least twice each year and to pass the cost of the inspections on to you, the licensee. The inspection fee is in addition to the licensing fee that you may have paid or will pay.

DEP ISSUE PROFILE

Nonpoint Source Pollution Control

revised: October 1989 contact: (207) 289-7659

Background

The clean water in Maine's rivers, streams, lakes, coastal waters, wetlands, and groundwater is a precious resource, a source of pride for Maine residents, and a critical component of the natural environment that is so attractive to visitors. It deserves our best efforts for protection.

Two major types of pollution threaten our water quality: point source and nonpoint source.

What is "point" source pollution?

Point sources are the easier of the two to identify because they are direct discharges to waterbodies, mostly by way of pipes. Examples include discharges, usually licensed, from sewage treatment plants and factories. For the past 15 years Maine has made steady progress in cleaning up point source pollution. One dramatic result has been the return of gamefish to several large rivers along which manufacturing and sewage treatment facilities are located.

What is "nonpoint" source pollution?

Nonpoint source (NPS) pollution is more difficult to identify. It does not originate from a specific "point," like a pipe. Instead, it results when large numbers of the same human activities contribute pollution in a scattered manner after rain storms. It is often characterized as "runoff" from farms, construction sites, parking lots, and roads. Forestry, mining, and waste disposal activities also contribute to the problem.

The principal pollutants contributed by these sources include nutrients, sediment, pesticides, toxic substances, organic enrichment, salts, and petroleum and its byproducts.

What are the impacts of NPS pollution? How widespread are they?

Despite the progress in cleaning up point source pollution, degraded water quality persists in a number of Maine's waterbodies as a result of NPS pollution.

In Maine, NPS pollution has caused an estimated 187,000 acres of groundwater aquifers to fail to meet safe drinking water standards and now threatens about 53,000 acres of lakes. Use of several estuaries along Maine's coast, over 1,000 miles of rivers and streams, and 35 lakes and ponds have all been impaired by nonpoint source pollution.

On a national level, the U.S. Environmental Protection Agency (EPA) estimates that a full 60 percent of all pollution sources are nonpoint related.

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What is being done to control NPS pollution?
Nonpoint source pollution is now acknowledged to be a major source of water use impairment to Maine surface water and groundwater resources. An NPS pollution assessment report, recently completed by DEP, indicates that nonpoint-related impacts occur in every drainage basin in Maine.

To respond to the variety of NPS problems, EPA and state environmental agencies have developed a series of management program objectives and action plans to increase the effectiveness of both federal and state NPS controls. Achieving visible water quality improvement or protecting high-quality waters from degradation will be accomplished using one or a combination of six management initiatives: information and education, financial assistance, technical assistance, monitoring and evaluation, enforcement, and continued planning.

Currently, in Maine, best management practices (BMPs) are being developed to control NPS pollution in all land uses. BMPs, the building blocks of the NPS program, are conservation practices or ways of performing specific activities in a manner that protects water quality. The program encourages municipalities to consider the use of BMP. in their planning and ordinance development efforts currently underway.

Can I help reduce NPS pollution?
Yes. Nonpoint source pollution is a big problem, but the good news is that in our everyday activities we can help reduce nonpoint pollution and keep our environment clean. By making simple changes in our daily lives we can make a tremendous difference in the quality of Maine's water resources. Here are just a few ways you can help.

- **Litter:** Place litter, including cigarette butts and fast food containers, in trash receptacles. Never throw litter in streets or down storm drains. Recycle as much as possible.

- **Fertilizers:** Fertilizers contain nitrates and phosphates which, in abundance, cause algae blooms that can lead to fish kills. Avoid overuse of fertilizers, and do not apply them before a rainfall.

- **Pesticides:** Many household products made to exterminate pests are also toxic to humans, animals, aquatic organisms, and plants. Follow the label directions carefully. Do not overuse pesticides, and use natural alternatives whenever possible.

- **Household Hazardous Products:** Many common household products (paint thinners, moth balls, and drain and oven cleaners, to name a few) contain toxic ingredients. When improperly used or discarded, these products are a threat to public health and the environment. Do not pour hazardous products down any drain or toilet. Do not discard with regular household trash. Use natural and less toxic alternatives whenever possible. Contact DEP's Bureau of Oil and Hazardous Materials Control at 289-2651 for information on proper disposal.

- **Motor Oil:** Motor oil contains toxic chemicals that are harmful to animals, humans, and fish. Do not dump used motor oil down storm drains or on the ground. Recycle all used motor oil by taking it to a service station or local recycling center.

- **Car Washing:** Like fertilizers, many car detergents contain phosphates. If you need to wash your vehicle, use non-phosphate detergents.

- **Pet Waste:** Animal wastes contain bacteria and viruses that contaminate shellfish and cause the closing of swimming areas. Pet owners should pick up after their pets with a newspaper or scooper and dispose of the wastes in the garbage or toilet.

- **Septic Systems:** An improperly working septic system can contaminate groundwater and create public health problems. Avoid adding unnecessary grease and solids to your septic system. Inspect your septic system annually, and pump it out at least every 3 to 5 years.

- **Boat Discharges:** Dumping boat sewage introduces disease-causing bacteria and viruses into the water and adds nitrates and phosphates that can trigger algae blooms. Boat owners should always use Marine Sanitation Devices or pump-out facilities at marinas.

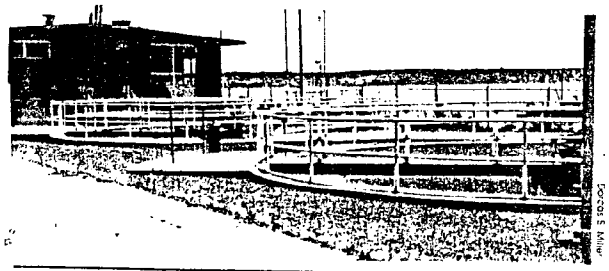
How can I get additional information on NPS pollution?
For more information on what you and your community can do to reduce nonpoint source pollution, phone DEP's Bureau of Water Quality Control, NPS Program, at (207) 289-7659 or write to:

Department of Environmental Protection
Bureau of Water Quality Control -- NPS Program
State House Station 17
Augusta, ME 04333

Other sources of information and assistance include your regional planning agency and your local Soil and Water Conservation District.

Sewage overflows threaten urban and rural waterways

Council joins local group to push for clean-up in Thomaston



Dorcas S. Miller

The sewage treatment plant has been malfunctioning for years, closing a large area of clam flats.

Continuing the Council's efforts to curtail coastal pollution, NRCM has agreed to assist a group of mid-coast citizens to press for clean-up of the Thomaston sewage treatment plant. Council attorney Ron Kreisman, working with the Georges River Tidewater Association, identified the Thomaston plant as one of the worst polluters on the coast.

The facility, which is located near the mouth of the St. George River, has been malfunctioning for years, but neither the Department of Environmental Protection nor the town's government had made efforts to correct the problems.

The Georges River Tidewater Association documented the problems, which include numerous violations of state and federal law. The plant's discharges of raw and poorly treated sewage have closed a large area of clam flats which the Tidewater Association has calculated would be worth over $500,000 per year as productive clam flats. This closure may be the largest in the state in terms of lost revenues.

"The Tidewater Association came to us asking for legal assistance," said Kreisman, "and the Council decided to become involved because of our ongoing commitment to cleaning up coastal pollution. Over the past two years, as we pushed for tighter restrictions on overboard discharge systems, we said that these private systems were only part of the coastal sewage problem. We noted that until DEP addresses the pollution caused by town treatment systems which are discharging into estuaries, and until the department goes after violations of state and federal law, we will not see the reclamation of many shellfish areas.

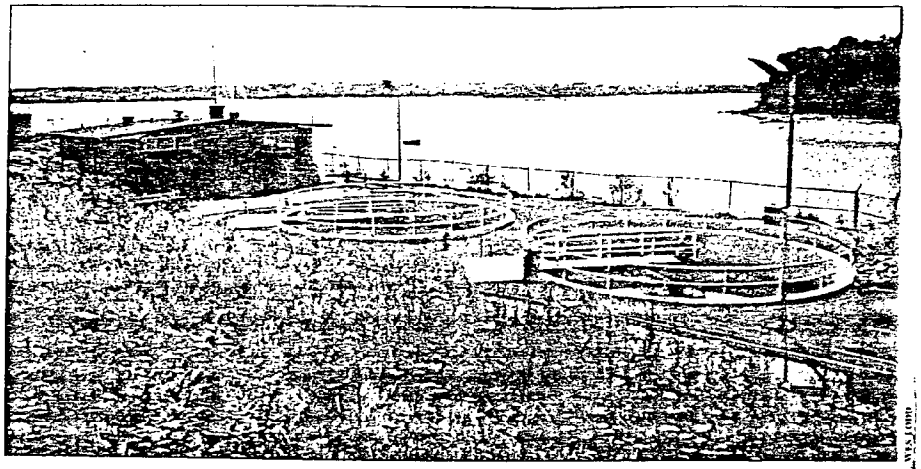
"During the legislative debate on overboard discharge, the Council promised to follow through on the other major polluters. We picked Thomaston because of the magnitude of the problem and the failure of state officials to act."

The Council and the Tidewater Association are already seeing some results of their demand for a clean-up. In September, in a meeting between the two organizations and the DEP, enforcement officials from the Water Bureau for the first time acknowledged how serious the problems were and showed a strong commitment to solving them. For the first time, the department appears ready to take enforcement action against Thomaston.

The Council and the association also scheduled meetings with local officials to try to resolve the problems and move forward in a constructive and timely manner. "Our desire is to work with local and state officials to ensure that prompt corrections are made to bring the facility into compliance with federal and state law," said Kreisman.

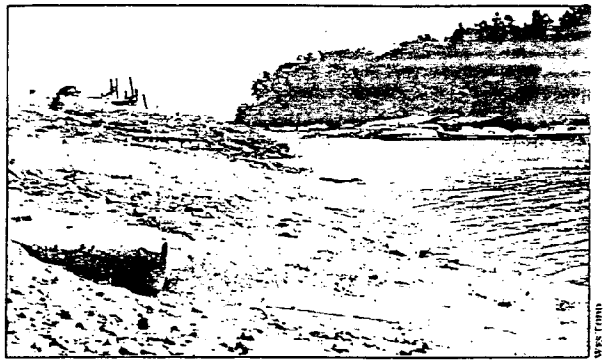
"As long as officials commit to an expeditious clean-up schedule, we do not anticipate that legal action will be necessary. However, because of the length of time that these problems have plagued the plant, and the extent of shellfish beds which are closed, the Council and the Tidewater Association want immediate action. Otherwise, we will have to turn to the courts for legal enforcement." [illegible] 11-11/89

NTL FISHERMAN 11/89



WES TODD

Considered by many to be primarily a problem in large urban areas of the Northeast, combined sewage overflow (CSO) strikes small communities, as well. The sewage plant here in Thomaston, Maine, is frequently unable to treat sewage and storm-water runoff simultaneously, shutting down the productive shellfish beds shown in the background.



WES TODD

SAVE THE BAY

In the spring, the overflow pipe in Thomaston (above) flows with the same ferocity as the one at right, which leads into Narragansett Bay in Rhode Island. Not only is raw, untreated sewage a problem, but storm-water runoff also brings with it toxic chemicals and other compounds that threaten water quality.

Maine ocean waters not untouched

Pollution levels on rise in Gulf of Maine, state officials say

By Susan E. Flood
Of the Star staff

PORTLAND — The Gulf of Maine is not immune to pollution from industrial and municipal sources, according to testimony from Maine environmentalists gathered by Sen. George J. Mitchell and U.S. Rep. Joseph E. Brennan Friday morning in a public hearing concerning pending House and Senate legislation for protecting coastal waters.

Although Maine enjoys a more pristine marine environment than many of the country's coastal states, it has already seen the effects of sewer effluence and sediment runoff from construction sites in its lead and PCB levels. Mitchell, who originated two bills for coastal protection in the Senate, opened the hearing by remarking that, under the proposed legislation, Maine will be included in a 10-site marine research program.

Mitchell said the bills aim for a cooperative arrangement between private laboratories, universities, and state agencies for three year studies in each area, each eligible for $3 million in basic support grants each year. The funding would be provided by the current 3-cent-per-barrel fee charged on foreign-produced oil, according to Brennan.

The expanded research would be backed up by more powerful pollution prevention and control measures, the senator said. Among the provisions made by the Marine Protection Act would be establishment of an information council to advise coastal landowners of proper land management practices for pollution prevention, establishment of a strict, no-discharge act to vessels in designated waters, and expansion of the scope of ocean discharge standards.

Friday's hearing followed two similar hearings held in Washington last month. Witnesses were Dean Marriot, commissioner of the state Department of Environmental protection, state Rep. James Reed Coles, D-Harpswell, Gregory Brown of the University of Maine, Edward Blackmore of the Maine Lobsterman's Association, Barbara Stevenson of the Associated Fisheries of Maine, Dr. Dennis Taylor of Bigelow Laboratories, Ronald Kreisman of the Natural Resources Council of Maine, and Nancy Papoulios of the Maine Audubon Society.

The witnesses were unanimous in their support of the increased funding for research, and their statements prioritized consistent, stable funding to build and strengthen research programs.

Marriot, speaking first in support of the legislation, cited shellfish beds and swimming areas closed because of pollution as proof that the state should begin to "act aggressively to avoid uncontrollable damage."

Casco Bay is currently receiving the most attention for its pollution problem, Marriot said. Lead levels in flounder from the bay and in crabs from Boothbay Harbor were the two highest found in the country, he said, but more knowledge and better funding for research are necessary before the problem can be properly attacked.

But, Marriot said, the Gulf of Maine must be approached "as an integrated whole, rather than piece by piece, bay by bay."

Kreisman, who said his council two years ago was partially responsible for creating legislation to prohibit new private discharges to coastal waters, called for adequate funding for combined sewage overflow removal. Also, he said, data must be increased to set definite standards for designating coastal waters in terms of their state of degradation.

Signs that coastal development can change the marine environment, and that we are overburdening "what may have been viewed as an endless capacity to disperse and hide the disintegration caused by human misuse," are visible, according to Brown.

Landings of finfish have declined in recent years, and the tons of solid waste being dumped into the ocean have killed sea animals. Coastal erosion, a natural part of the ecosystem that is disturbed by development, is necessary to the early life stages of shrimp and lobster.

The University of Maine is prepared to work closely with other groups to promote legislation "mirroring research and monitoring of the Gulf of Maine," said Brown. But long-term funding is needed to support extant administrative centers and a large base of expertise for such research to have its optimum effect, he said.

These existing structures will simplify the research process by eliminating the need for a bureaucratic layer between the researchers and will ease planning and coordination of research, Brown said.

DEP cites runoff as growing threat to water resources

AUGUSTA (AP) — Maine's water is being polluted extensively by runoff from farm fields, streets, parking lots, logging operations and lawns, according to a new study by the state Department of Environmental Protection.

The study concludes that such miscellaneous contamination represents a growing portion of the state's water pollution problem and one that will be hardest to stop.

Environmental specialists say such "non-point pollution" is difficult to control because it comes from no specific point. Another example is sewage plant effluent, which contains material from many sources that connect to the sewer system.

Ronald Dyer, a DEP water quality specialist who did the study, said the major cause of pollution continues to be industrial wastes that discolor water and generate obnoxious odors.

But non-point pollution is responsible for enormous quantities of dangerous substances that are being washed into Maine waters annually, he said.

According to Dyer, the sources include tons of sulfates and nitrates, which originate from industrial mills and automobile exhausts and then drift through the air and onto the ground.

The study says that statewide, hazardous-waste pollution represents a minor source of contamination in relation to other sources.

Far more serious, the report says, are ordinary leach field sewage disposal systems. The 230,000 septic tank leach fields in Maine represent the largest cause of non-drinkable water in the state, the study says.

It cites road salt contamination as a major health threat, saying 135 wells are "known to be contaminated due to uncovered salt piles."

The non-point pollution study was required by federal clean-water laws. Congress also has required states to eradicate non-point pollution, but has not provided money, Dyer said.

Dozens of plants discharging untreated wastes, reports say

BL. 8/25/

PORTLAND (AP) — Dozens of Maine industries are failing to pre-treat wastes as required and some are discharging caustics, acids, heavy metals and toxic chemicals in municipal waste-water plants, federal reports say.

Reports filed annually by plant operators with the U.S. Environmental Protection Agency show that the most common violation is the discharge of wastes that increase the cost of operating plants but do not result in pollution of rivers or coastal waters.

However, the reports also document occasional improper discharge of caustics, acids, heavy metals and toxic chemicals, which sometimes flow through treatment plants unchanged and pollute receiving waters.

Effluent sometimes also upsets the plants' delicate balance of microscopic bugs and nutrients so that the treatment facilities stop working efficiently.

The reports were filed by the 15 municipal plants that treat significant amounts of waste from major industries. Treatment plants are required to monitor wastes they receive and set up industrial "pre-treatment" programs for harmful substances.

Biddeford paid a $20,000 fine two years ago to the EPA for having no pre-treatment program at all. Ricardo Cantu, who directs the Biddeford program, told the agency in his most recent report that he still lacks time to supervise the program adequately.

James Jones, a water quality specialist with the Maine Department of Environmental Protection, said problem spots remain, but the quality of the pre-treatment program is generally improving.

He said the program reduces the cost of wastewater treatment for industrial cities and towns and assures that cleaner effluent is discharged into rivers and coastal waters.

Vivian Matkivich, pre-treatment coordinator for the Lewiston-Auburn Water Pollution Control Authority, reported that 13 out of 24 "significant industrial users" served by her plant were in violation.

Federal law requires that cities and towns impose penalties that range from fines and letters of warning to "publicity." Under that provision, names of serious violators are required to be published in a daily newspaper.

The Portland Water District, which operates treatment plants in Portland and Westbrook, charged industrial users an extra $384,765 during the 12 months that ended last June for violations of pre-treatment requirements.

Most of the extra charges were for the excess discharge of wastes that use up oxygen in the water during the treatment process.

The Portland sewage treatment plant treats wastes from several dozen industrial plants. Most were involved in one or more violations during the year, according to Phillippe G. Boissonneault, quality assurance supervisor for the water district.

He said he sent out 26 letters of violation, assessed 20 surcharges and notified five companies that their violations would be publicized if conditions did not improve.

Boissonneault said the threat of publication worked and violators promptly improved their discharges to the plant.

Several Portland companies were also cited for discharging excessive amounts of heavy metals.

Some heavy metals ended up being discharged into Casco Bay, but the bulk end up as part of the sludge that is spread on farm fields as a fertilizer and soil conditioner.

Boissonneault said concentrations of heavy metals in the sludge and in the effluent discharged into Casco Bay are well under the limits state and federal agencies consider safe.

Penobscots' study reaffirms warning of tainted fish

By Nancy Remsen
Senior Writer

The Penobscot Nation released results Friday of a recently completed study of contaminants found in fish taken from the Penobscot River and the results reaffirm the need for pregnant women and nursing mothers to avoid eating fish taken from the river below Lincoln, said Clemon W. Fay, a fisheries biologist.

The state already has issued an advisory warning people against consuming more than 12 meals a year of fish such as bass or pickerel caught in the Penobscot River between Lincoln and the Penobscot Bay. The warning, which also applies to other major rivers on which paper mills using a bleach process are located, was issued in 1986 after dioxin was found in fish tissue.

Dioxin, a suspected carcinogen, and related contaminants such as furan shouldn't be consumed by pregnant or nursing women, even in minute amounts, because of the tendency of these substances to concentrate in milk and body fat, Fay said. These substances are discharged in parts per trillion with waste water from paper mills using chlorine bleaching processes.

Fay stressed, however, that the levels of dioxins found in the two kinds of fish analyzed in the Penobscot's study "were at or near analytical detection limits and relatively low when compared to data from other major U.S. river systems receiving dioxin discharges."

Fay said that using risk-assessment criteria set by the state's toxicologist, it appeared that people other than pregnant or nursing women safely could consume one meal a month of bass fillets caught in the Penobscot River below Lincoln.

"*It is recommended that no one consume white* suckers," the other fish analyzed for contaminants, Fay said.

The fish tissue study done by the Penobscot Nation complements work done by the Bureau of Water Quality Control in the Department of Environmental Protection.

Barry Mower, a biologist in the water bureau, said that as part of a dioxin monitoring program, the DEP took samples of fish from 12 sites in Maine, including two on the Penobscot River, and had the tissue tested for dioxin.

The Penobscot Nation took samples of bass and white suckers from six sites: one on the East Branch, one on the West Branch and at Chester, South Lincoln, Passadumkeag and Costigan.

Bass were selected because they are becoming an increasingly popular fish with anglers and because they are predators, meaning they eat other aquatic creatures, Fay said. White suckers were selected because they live on the bottom of the river and become food for other fish and wildlife.

"Smallmouth bass fillets were found to contain low levels (1-2 parts per trillion) of dioxin in the Passadumkeag and Costigan station areas, and *low levels (1-8 parts per trillion) of furan at all* stations except Grindstone on the East Branch," Fay said.

White suckers were found to contain levels of dioxin and furan that were 10 to 100 times higher than those found in the bass, particularly the fish taken at the South Lincoln station, he said.

"Not only did suckers contain these high levels of dioxins, but also relatively high levels of PCBs (polychlorinated biphenyls), Fay said.

The Penobscot Nation had all its fish samples tested for dioxins, furans, PCBs, arsenic, cadmium, copper, lead, mercury, selenium and zinc. The tests were done at an independent laboratory in North Carolina.

The levels of heavy metals found in the fish appeared to be close to what is found naturally in the river, but Fay said the Penobscot Nation did note somewhat elevated levels of mercury in bass from the West Branch station and higher levels of arsenic in bass from the Passadumkeag area.

The samples used in the Penobscot's study were adult fish, Fay said. The bass were 4 to 8 years old while the white suckers were 12 to 20 years old. By looking at older fish, the analysis shows the cumulative effect of contamination over the life of the fish, but doesn't indicate if the same hazards exist today, he explained.

Both the state and the Penobscot Nation plan to continue monitoring for contaminants in fish.

The Penobscots will repeat sampling at some locations and add new sites, Fay said. Future studies also might look at new contaminants or use different fish species, he said.

Mower said that this spring the state will collect new samples from the Penobscot as part of its continuing dioxin monitoring program.

DEP proposing tougher standards for state rivers

AUGUSTA (AP) — The state Department of Environmental Protection is proposing tougher clean-water standards for sections of 21 rivers and several areas off the coast, leaving the final determination up to the Legislature.

Among the rivers that should receive the state's highest classification, says the DEP, are the upper portion of the St. John River in northern Maine, the upper West Branch of the Penobscot River near Baxter State Park, the Sheepscot River in central coastal Maine and the Saco River above Little Ossipee River.

If they are deemed by lawmakers to be "outstanding resources," those and other rivers would have to be protected in their natural state. Rivers and coastal waters receiving the highest rating cannot be dammed or receive any discharges.

Among sections where dams would be banned are the West Branch of the Penobscot River, where Great Northern Paper Co. had proposed a major hydro-electric dam known as the "Big A." Plans were rejected in 1986.

Five of waterways considered pristine in the DEP's recommendations are located in the rapidly developing southern Maine.

DEP Commissioner Dean Marriott said the proposals are "a tremendous accomplishment."

"We have come a long way and are committed to go further," he said.

The DEP's study, which encompasses three-fourths of Maine's waters, completes a reclassification of all surface waters in the state. The Kennebec and Androscoggin river basins have been reclassified within the past year.

In its latest study, the DEP recommends upgrades to its highest water classification sections of these rivers:

- Upper St. John above Allagash;
- East Branch of the Penobscot;
- West Branch of the Penobscot above Debsconeag Deadwater;
- Pleasant River;
- West Branch Narraguagus;
- St. George to Union;
- Sheepscot;
- Crooked;
- Saco above the Little Ossipee River;
- East and West Branches of the Piscataquis.

The DEP recommends that these waters receive upgrades to its highest coastal water quality classification:

- Inner Cobscook Bay;
- Cutler to Quoddy Head;
- Kittery to Isle of Shoals.

Also, all waters abutting publicly owned lands.

Times Record 11-21-89

Upgrade the waters

With revenue flowing to the state's treasury off by more than $11 million in October, Legislators are going to have precious little money to spend on new programs come January. One vital piece of legislation that lawmakers must enact is a reclassification of Maine rivers and coastal waters — the first such effort since 1965.

The recommended water upgrades were prepared by the Department of Environmental Protection, and cover three-quaters of the state's surface waters. The Kennebec and Androscoggin river basins have already been reclassified.

The reclassification would increase water quality standards for sections of 21 Maine rivers. Fresh waters are classified as AA, A, B or C. Rivers classified AA must be protected in their natural state, and cannot be dammed or receive any discharges. Upgrades to AA are proposed for sections of 10 rivers, including the Sheepscot.

Coastal waters are classified SA, SB or SC. Like fresh waters classified AA, coastal SA waters merit the highest protection. Upgrades to SA are recommended for all coastal waters abutting publicly-owned lands, such as wildlife refuges, state parks and Nature Conservancy holdings. In this area, that includes the Popham Beach area and Reid State Park area.

A DEP official said the higher water quality standards are possible, in large part, because of improved municipal and industrial wastewater treatment systems. Upgrading the water quality ratings of rivers and coastal waters will help guarantee that the process of cleaning and protecting Maine's waters continues.

Teamwork sought in Casco Bay cleanup

By KARIN RONNOW PPH 10/25/87
Staff Writer

Greater Portland's coastal communities are being asked to join forces on a single, comprehensive plan for correcting Casco Bay pollution problems.

South Portland city administrators say they are spearheading the effort both to avoid lawsuits and to develop coordinated goals for keeping sewer overflows out of the bay.

South Portland Assistant City Manager Jeffrey Jordan says other local officials will be asked to participate in the effort along with representatives of the state Department of Environmental Protection and the federal Environmental Protection Agency.

"We're concerned that plans may vary among Cumberland County towns on efforts to monitor combined sewer overflow," Jordan says. "Because they vary, there may be an overlap of information being collected.

"The best way to reduce that overlap and promote greater efficiency would be to develop a plan in concert with the DEP and U.S. EPA so that there's a common understanding of what is acceptable."

Jordan says South Portland and Portland officials were alerted to possible coordination problems when they discovered DEP was having similar conversations about the collection of water quality and sedimentation samples in both cities, duplicating efforts.

In addition, "We have not received copies of any of DEP's studies or correspondence as to what they have found in their analysis," Jordan says.

He says the Nov. 2 meeting of the various parties will be held to share information and "develop a clear plan to evaluate the problem and how to clean it up."

The problem in most area communities concerns allegations that they are violating the federal Clean Water Act by discharging bacteria through combined sewer overflows, thus violating clean water standards in Casco Bay.

The main culprit is the combined sewer overflow systems, the old pipes carrying both storm water and sewage that overflow during rainstorms. During heavy storms, the system pours untreated wastewater into Casco Bay because the volume is more than the treatment plant can handle.

But local officials believe they shouldn't be blamed, Jordan says, because they have cooperated all along with federal standards.

The 1972 Clean Water Act required cities to build treatment plants and paid for 75 percent of the construction costs. The plants were considered state-of-the-art at the time. However, once the treatment plants were in place, environmental agencies found the water quality, as defined by the Clean Water Act, was still not being met, Jordan says.

"So, they looked at combined sewer overflow, active when treatment plants aren't able to handle the rain water and sanitary water," he says. "They found that periodically sewage treatment operations were violating their discharge license by having those points of overflow," he says.

This year, EPA began to consider a national strategy for addressing the overflow problem. In August the federal agency instructed the states to submit a plan by January to eliminate combined sewer overflows.

At that point, Jordan says, DEP began taking a closer look at local communities in order to cope with pressures from the EPA.

DEP eventually slapped proposed consent decrees on the desks of municipal administrators in Yarmouth and South Portland, requiring the communities to begin monitoring programs and to develop a schedule for eliminating overflows.

South Portland responded to the threat with an aggressive, $20 million cleanup proposal including rehabilitation of and improvements to the sewer system and treatment plant.

Interim steps include continued monitoring of pollution levels and research into new treatment technology.

City Manager Jerre R. Bryant said the city either had to come up with the plan or sign the consent decree.

Other communities embraced South Portland's approach and said they would be willing to join a cooperative effort to clean up the bay.

Meanwhile, local officials say a lack of state or national guidelines — and funding — for dealing with combined sewer overflows puts the burden for upgrading the systems on local taxpayers.

For South Portland, cleaning up and expanding the sewer treatment plant is a $20 million proposition.

For Portland, estimates have been put at $100 million.

Deciding who pays for it will come later, Jordan predicts. Meanwhile, the issue is not going to fade away, Jordan says, especially with presidential politics driving the issue.

"With President Bush having made some strong comments about water quality in Boston Harbor and his promise to address clean water, the issue of water quality is on the front burner," Jordan says.

"The campaign also helped in focusing the issues for environmental groups," he adds, "and those groups have become very active. This issue isn't going to go away."

Coastal communities know about overflow problems

Many of the area's coastal communities are acquainted with problems stemming from sewer overflows at their treatment plants.

The Portland Water District has been sued by three environmental groups, led by the Boston-based Conservation Law Foundation of New England.

The water district is charged with permitting unsafe levels of fecal coliform bacteria near its wastewater treatment plants in Portland and Gorham.

It also has been charged with allowing raw sewage to flow into Casco Bay from combined sewer overflow.

The groups filing the suit want the water district to install millions of dollars worth of equipment that would use chlorine to clean the bacteria out of its discharges and then remove the chlorine before the water is released into the bay.

Before the suit was filed, the DEP had ordered the water district to correct problems at its wastewater treatment plant and to speed up the process of phasing out combined sewer overflow systems.

Here is a look at the sewer situation in other area communities:

- In South Portland the 11-year-old sewage treatment plant, built to handle 5.5 million gallons of sewage a day, is being operated beyond capacity.

When it rains, some of the combined storm water and sewage is pumped through the treatment plant and into the harbor, and some of it leaves the sewer system through 22 overflow locations.

In addition, much of the 100 miles of sewer pipes are old, and are slowly being rebuilt and replaced to stop sewage from backing up into the basements of people's homes.

- Cape Elizabeth has a 3-year-old treatment plant that handles sewage only. However, a portion of the town's sewer lines flow into South Portland, which is contractually responsible for the treatment and disposal of that sewage.
- In Falmouth, a new sewer line was built this year to resolve the problem of failing septic systems polluting the mudflats, Norton Brook and Mill Creek where they enter Casco Bay. There is no combined sewer overflow system.
- Cumberland sends its sewage to Falmouth.
- In Freeport a sewage plant failure last December dumped at least 200,000 gallons of sewage water onto clamflats at the Harraseeket River. State officials closed the flats immediately, a stretch of about three miles wide by a quarter mile long.
- The Scarborough Sanitary District has a 5-year-old treatment plant, and relatively new sewer pipes. It has no problems with combined sewer overflow.
- Westbrook's wastewater is treated in Portland Water District's Westbrook plant, making the water district contractually responsible for it.
- Yarmouth's treatment plant frequently allows untreated sewage to enter the Royal River near its entrance to Casco Bay during heavy rain because rainwater floods the combined sewer overflow system.

Yarmouth's engineers have determined that about 1 million gallons of excess water is entering the town's sewer system during heavy rains.

In August, Yarmouth's Town Council received a report estimating preliminary repairs of the town's sewer system will cost up to $450,000, with additional costs in the future.

- Brunswick's treated wastewater runs into Merrymeeting Bay.

Government agencies announce new plans to clean up Casco Bay

By TUX TURKEL
Staff Writer

SOUTH PORTLAND — Signaling a stepped up effort to protect and improve water quality in Casco Bay, the federal Environmental Protection Agency and Maine's Department of Environmental Protection on Monday joined forces to study and curtail pollution in the bay.

The joint effort complements a state action plan for Casco Bay announced in February by the administration of Gov. John R. McKernan.

The plans announced Monday build on the McKernan proposals by bringing federal money and staff to help determine the nature and extent of pollution problems, and promise greater enforcement and stricter standards.

The plan is based on the premise that Casco Bay is an important natural and recreational resource that is under stress but not beyond repair.

"It is still a salvageable operation here, not like Boston Harbor," said Paul Keough, the EPA's acting regional administrator.

Researchers are taking samples this week of discharges from local treatment plants and sediments in Casco Bay and its estuaries.

The samples will be analyzed in an attempt to measure the existence of bacteria, toxic chemical compounds and metals.

The EPA also hopes to get $300,000 later this year to study the impact of storm water runoff into the bay.

Monday's announcement was greeted with cautious optimism by a spokesman for environmental groups, which have sued polluters, as well as the state and federal government, for lax regulation in the past.

"It's about time, and welcome to the fight," said attorney Jeffrey Thaler, who represents the Island Institute in Rockland, the Boston-based Conservation Law Foundation and the Maine Audubon Society.

"But based on the track record of the last eight years, I remain skeptical. I want to see the muscle put where the mouth is," Thaler said.

In July, the three groups sued the Portland Water District, charging that the district had taken too long to develop plans to reduce its pollution of Casco Bay.

On Monday, Keough and state DEP Commissioner Dean Marriott chose scenic Spring Point Lighthouse, with boats bobbing in the water nearby, as a backdrop for their news conference.

But also visible in that symbolic setting was an oil tanker at the adjacent pipeline terminal and the Cousin's Island power plant in Yarmouth, where environmental violations resulted in fines of $430,000 this month against Central Maine Power Co.

On Monday, officials outlined several immediate and long-range undertakings.

During the past two weeks, researchers have tracked discharge from sewage plants in Portland, South Portland, Falmouth and Yarmouth. They also have been following up on a 1980 study by Bigelow Laboratory for Ocean Sciences that first identified elevated levels of toxic compounds in the bay.

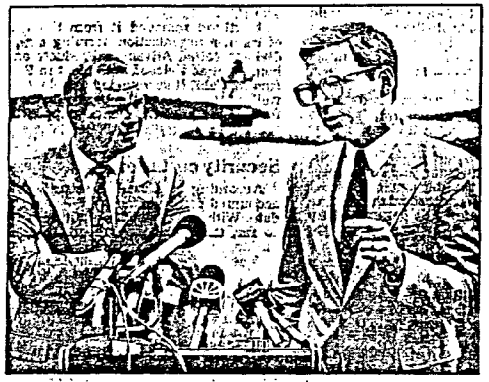
They are taking 52 sediment samples at 16 sites that will be analyzed for metals such as copper and chromium.

State and federal regulators also plan:

- Stepped up inspections and sampling of discharges at all major industrial and municipal facilities.
- Intensive review of monitoring reports from water discharge permits.
- Technical assistance to communities to help with industrial pre-treatment programs.
- More inspection of oil terminals and review of spill-prevention measures.

EPA officials are optimistic that money for a storm water runoff study will be approved in Washington, because they have designated Casco Bay as a pilot project for EPA's Near Coastal Waters Program.

The program identifies threatened and impaired water bodies and creates a management plan to improve conditions.



Staff photo by David MacDonald

Acting EPA Regional Administrator Paul Keough, left, listens while DEP Commissioner Dean Marriott speaks in South Portland Monday.

Brent Macey photo

Professors Jim Vaughn and James Novotny and student Raymond Marks collect water samples Tuesday.

Scientists check Wells clam flat pollution

By BRENT MACEY
Staff Writer

WELLS — Two microbiologists and an undergraduate student from the University of New England have begun taking samples of mud and water from the Wells clam flats in hopes of determining the extent and severity of pollution there.

On Tuesday, professor Jim Vaughn, professor James Novotny, and undergraduate student Raymond Marks took their first high-tide samples from five areas of the marsh where the state department of Marine Resources has been testing for dozens of years.

"We hope our findings will support the state's findings," Novotny said, adding that state tests in recent years have shown such high pollution rates that the flats have been closed to public clamming. "We're working in cooperation with (the) state, he said."

The project will be similar to state tests, but much more extensive.

Vaughn said the tests will determine levels of three types of bacteria and one virus, which are all associated with human waste and could cause dysentery or hepatitis.

The tests are also sensitive enough to determine if the pollution is being caused primarily by humans or animals.

The research will be conducted at different phases of the tide, during different weather conditions, and during different seasons.

The professors, both microbiologists, were hired by the town of Wells at a cost of $5,500 to begin testing during the fall and winter.

Vaughn and Novotny hope the town will come up with another $4,500 by the next annual town meeting to extend the study through spring and summer.

By next spring, Vaughn said, test samples now being analyzed will show whether any sites have consistantly high readings.

If they do, more tests will be conducted in upland areas in an attempt to pinpoint the source of the pollution.

"The stuff we'll be looking for is sewage that could be coming from runoff from septic systems, or coming down from the rivers," he said.

The five areas being tested are on Drakes Island Road, Upper Landing Road, Lower Landing Road, the Mile Road and Pope's Creek.

The scientists have already taken two mud and water samples at low tide from all five areas during heavy rains.

The samples gathered Tuesday were taken after several days of dry weather and at high tide.

Water district to pay $40,000 in pollution fines

PORTLAND (AP) — The Portland Water District will pay $40,000 in fines to the state and put up $25,000 for improvements to the East End Beach in Maine's largest city under a consent order filed Thursday in Superior Court.

The district also faces a potential $100,000 in additional fines if it fails to take steps to reduce the discharge of pollutants into Casco Bay.

State Attorney General James E. Tierney and Environmental Protection Commissioner Dean C. Marriott announced the agreement, noting that it was the third such action taken this year as part of an effort to clean up the bay.

"Publicly owned treatment plants are just as answerable when it comes to polluting the environment as major private industry," Marriott said in a statement that was released in Augusta.

Said Tierney: "Neither the Department of Environmental Protection nor this office will tolerate the further pollution of Casco Bay, nor any other tidal waters of the state, by anyone."

The agreement, which settles numerous violations alleged by the state, requires the district to immediately pay $40,000 in fines. It also requires that $25,000 be placed in an escrow account for a public works project at the East End Beach, to be completed by the end of June 1990.

An additional $100,000 in fines was suspended, so long as the district completes construction of a chlorine contact basin and dechlorination facility, which will further treat wastewater discharged into the bay, by March 1, 1991.

Justice William S. Broderick approved the consent order Thursday morning.

The water district, commenting on the agreement, acknowledged that its 10-year-old wastewater treatment plant was inadequate, but said recent temporary improvements have brought it up to current licensing standards.

"We are now in the process of final design and construction which will result in an $8 million permanent improvement to the plant to keep us in compliance into the near future," the district said in a prepared statement.

Joseph B. Taylor, the district's general manager, said the district had been caught off guard when DEP said it would levy the fines.

"Until recently, we considered that we were being given only 'guidelines' by the DEP, not absolute limits. Then suddenly, we found ourselves being fined for not meeting those 'guidelines,'" Taylor said. "We are pleased that we now finally have specific regulations from the DEP that we are to follow. Without firm directions from the DEP, we simply could not expend ratepayer monies for solutions to what would have been speculative requirements."

Tierney and Marriott said the latest agreement stems from a campaign to clamp down on illegal discharges into Casco Bay and other tidal waters. Earlier this year, they said, similar settlements resulted in a $98,500 fine against the S.D. Warren Co. and a $60,000 penalty against Central Maine Power Co.

Experts bring threat of catastrophic oil spill to Maine

By Susan Morrissey
Midcoast Bureau

ROCKPORT — A major oil spill "can and possibly will happen in the Gulf of Maine," an oil-spill expert warned Tuesday.

"My second point is that you can do something about it," said Richard Steiner, a University of Alaska professor, commercial fisherman and member of a citizen's team organized to cope with the catastrophic spill that blackened Alaska's Prince William Sound in March.

Steiner advised Maine residents and politicians to open their eyes to the real danger posed by tanker traffic and oil exploration in Maine waters.

Maine's goals, he said, should be spill prevention and a realistic plan to mitigate the effects if a disaster occurs.

"Establish a task force — a working group on the coast to work with the oil industry and the state," he said.

> The $4 million oil spill fund established by the Legislature in 1978 is "a modest sum compared with the cost of a billion-dollar oil spill."
>
> — David Sait of the Department of Environmental Protection's Response Services

"Once the oil is in the water, not a lot can be done," he added.

To prevent a tragedy, the state should establish vessel traffic-separation lanes along the coast and appoint a civilian authority of experts to inspect tankers and to thoroughly investigate chemicals used to break up oil slicks.

Additionally, politicians should support the formulation of a national energy policy.

A combination of citizen oversight and industry responsibility is needed to reduce the risks, he said.

Even though a recognized potential exists for a major spill off Maine's coast, "our capabilities don't meet the challenge," said Katrina Van Dusen, senior planner of the state's Coastal Program.

One of several experts to speak during the forum held at the Samoset Resort and titled "Oil Spills: a Lesson from Alaska for Maine," Van Dusen warned that exploration for oil and natural gas in the Gulf of Maine "could get on track at any time."

Eight test wells drilled on the Georges Bank in 1981 and 1982 yielded no oil, but Van Dusen said the push to develop domestic oil supplies provided a virtual guarantee that the search for petroleum would continue off the state's rocky coast.

"There will be oil and gas exploration," she said.

Preliminary investigations indicate that oil strikes in the gulf could yield enough crude to maintain an even larger fleet of tanker traffic than exists now. It is unlikely that enough oil exists to justify construction of a pipeline, she said.

With tanker traffic already routine along the coast, a tanker accident is the most likely source of a spill.

"But it's all oil and risky, and we need to go about preventing it as best we can," Van Dusen said.

Prevention, improved cleanup methods and more resources will be needed to cope successfully with a spill, measures that should be implemented before disaster strikes, she added.

Commander John McGowan, who heads the Coast Guard's Emergency Response group for Maine, concurred with Van Dusen.

If the Coast Guard is to work effectively to prevent a catastrophic oil spill, the agency needs more personnel and the ability to step up inspections of foreign oil tankers. Such inspections are mandatory on foreign vessels now, but cannot be done frequently enough to ensure that potentially dangerous vessels are kept out of our coastal waters, he said.

David Sait of the Department of Environmental Protection's Response Services, said that the $4 million oil spill compensation fund established by the Legislature in 1978, would not begin to cover the cost of cleaning up a major spill.

"It's a modest sum compared with the cost of a billion-dollar oil spill," he said.

Because the state exercises only "weak regulatory authority over the tankers," Sait said "strict liability" now constitutes Maine's best defense against a large spill. Federal programs being designed in Washington are a mixed blessing, he said, b cause they tend to preempt, rat than augment, state programs.

The most optimistic news dur the afternoon-long forum came fr the oil industry, represented by M Huntington of the Maine Petrole Industry. Huntington said that a consequence of the Alaskan oil s last spring, the oil industry is laun ing a new spill-fighting initiative

The oil industry's plan emphasi prevention, response and resear and will be implemented next ye he said. In Maine, a facility will built at Portland, one of sever centers under the umbrella of t east coast command center in N York, itself one of five oil-spill s sponse centers located on the ea south and west coasts.

Portland will be designated a r gional staging area, and a maj cleanup equipment storage area w be built there.

"We recognize that more can done," said Huntington.

C. Ocean Dumping

1. What types of materials and approximate quantities (.e.g. sewage sludge, acids, municipal solid waste, dredge spoil, building/construction waste, drilling muds and cuttings) are legally dumped in your State's waters? Please include any maps containing site designations for the above activities.

Ocean dumping in Maine waters consists almost entirely of dredged spoils, although the Monhegan Island community has used ocean dumping to dispose of municipal solid waste. A preliminary proposal by the Bureau of Public Lands in an ongoing legislatively-mandated study is for offshore disposal of abandoned ships and boats.

No comprehensive records are kept of amounts of material dredged by the Army Corps of Engineers and private contractors. However, it has been estimated that between 1950 and 1989 the Corps of Engineers conducted 98 projects in Maine involving over 4.6 million cubic yards of dredged material. From 1982 to 1989 the Corps dredged 0.7 million cubic yards. Of this amount, about a third (231,000 cubic yards) received ocean disposal.

Active Army Corps of Engineers disposal sites are located off Rockland, Portland and Cape Arundel. The Portland and Rockland sites are designated by the U.S. EPA as permanent long-term disposal areas. Cape Arundel has interim status but is under consideration for final designation.

From 1985 to 1989 the Corps issued the following permits for ocean disposal in Maine waters:

*	Cape Arundel	11 permits	255,000	cubic yards
*	Portland	8 "	73,000	" "
*	Rockland	18 "	592,000	" "
*	Saco Bay	2 "	253,000	" "
	TOTAL	39 permits	1,173,000	cubic yards

Note: The DEP allows disposal of dredged spoils at locations other than the designated sites on a case-by-case basis.

2. What are your State's major problems related to ocean dumping and how are you addressing them?

There is concern that a significant amount of dredged material is dumped haphazardly or short of the approved dump site in violation of disposal permits. There also is public concern about the effect of contaminated dredged materials on marine organisms. In particular, the lobstermen who fish near the Cape Arundel site are concerned about contamination of lobsters (see clippings).

3. What state agency has the chief decision-making authority on ocean dumping issues/ Describe the nature of your program's involvement in the EPA process of ocean dump site designation and the COE permit process. What types of problems, if any, have you encountered?

The Maine Coastal Program has ongoing responsibility for the review and consistency determinations of dredging projects conducted within the State's coastal boundary. Comments are provided on technical reports and EIS's prepared for or by the Corps of Engineers pursuant to its river and harbor dredging program. The State provided comments on final EPA designation of the Cape Arundel dump site early in the process and is now awaiting the EIS. Permitting of both dredging and dumping of dredged materials is by the DEP's Land Bureau under the State's Natural Resources Protection Act.

The Office of Comprehensive Planning of the DECD provides municipalities with technical assistance regarding dredging projects and recently published A Guide to the Regulatory and Funding Process for Coastal Dredging (November 1989) for that purpose, in cooperation with the SPO. The SPO also is in process of developing an overall dredge management strategy for the State, described in quarterly Coastal Program performance reports.

DREDGING PROJECTS IN MAINE, 1950-1989

	Corps of Engineers Improvement Projects	Corps of Engineers Maintenance Projects	TOTAL	Non-Corps Projects
	Number of Projects			
1950-1969	33	24	57	n.a.
1970-1981	3	23	26	82
1982-1989	4	11	15	n.a.
TOTAL	40	58	98	n.a.
	Number of Cubic Yards			
1950-1969	1,449,007	201,806	1,650,813	n.a.
1970-1981	196,354	2,077,871	2,274,225	870,200
1982-1989	143,800	572,767	716,567	n.a.
TOTAL	1,789,161	2,852,444	4,641,605	n.a.

CORPS OF ENGINEERS

IMPROVEMENT DREDGING
1982-1989

PROJECT NAME	YEAR/DISPOSAL SITE	QUANTITY	ANNUAL TOTALS
Saco River	1982/upland	7,300	33,300
Corea Harbor	1982/ocean	26,000	
Stonington Harbor	1983/ocean	42,500	42,500
Jonesport Harbor	1987/ocean	68,000	68,000
			143,800

MAINTENANCE DREDGING
1982-1989

PROJECT NAME	YEAR/DISPOSAL SITE	QUANTITY	ANNUAL TOTALS
Kennebec River	1982/river	53,300	53,300
Penobscot River	1984/river	44,625	64,625
Portland Harbor	1984/ocean	20,000	
Kennebunk River	1985/ocean	26,156	152,931
Penobscot River	1985/river	44,625	
Portland Harbor	1985/NA	44,650	
Royal River	1985/upland	37,500	
Kennebec River	1986/river	57,902	253,459
Royal River	1986/upland	42,626	
Rockport Harbor	1988/ocean	10,000	10,000
Wood Island Harbor	1989/ocean	38,452	38,452
			572,767

For Portsmouth Harbor

Maine lobstermen question dredge plans

YORK, ME - Southern Maine lobstermen are keeping their fingers crossed.

An agreement has been worked out that should protect their lobster gear from being parted off by a tug and scow transporting Portsmouth Harbor dredging spoils to the Cape Arundel disposal site.

Dredging had not begun at press time, but lobstermen were satisfied with an alternate tug route worked out with the Army Corps of Engineers, the agency in charge of the dredging project.

"As long as he (tug operator) stays where he is supposed to, our gear should be okay," said Erica Bridges.

Bridges, who lobsters out of York harbor, was one of an estimated 130 lobstermen whose traps were in the pathway originally set for the dredge tug and scow.

The $16.6 million Portsmouth Harbor dredging project was scheduled to begin on Sept. 10, 1989 and continue until July, 1990.

According to Fran Donovan, the Army Corps' assistant area engineer of the Rivers and Harbors Division, the dredged materials are to be dumped at the Cape Arundel Open Water Disposal Area located in Maine waters off Kennebunkport. The 450,000 cu yds of dredge materials are mostly sand, gravel, and rock, Donovan said.

In early September, when lobstermen were alerted to the hauling lane originally specified by the Army Corps, they sent up a cry.

"It was marching right through our choice fishing grounds," Bridges said.

At a meeting in York on Friday, Sept. 8, over a hundred lobstermen voiced strong opposition to the hauling route. They also questioned the toxicity of material dredged from Portsmouth Harbor.

A state Department of Environmental Protection (DEP) water quality permit was issued for the project. But lobstermen challenged the test results that were used as a basis for approving the dumping because the sampling was done several years ago.

Donovan and lobstermen thrashed out an alternate hauling lane that would take the tug and scow out of Portsmouth Harbor on the shipping lane. The route travels south of the Isles of Shoals, then proceeds northeast to loran line 9960-X-25900. That line is taken until it intersects loran line 9960-W-13510, which leads directly to the buoy at the Cape Arundel site.

The alternate route would stay in effect until Jan. 15, when the original hauling route would be resumed.

Donovan said the alternate haul route has been approved on an interim basis, pending an assessment of cost. It is estimated to be twice the length of the original 25-mile course.

New Hampshire pays a local matching share of the project, so the state would have to go along with cost changes, Donovan said.

The dredge contractor, Great Lakes Dredge & Dock Co., however, seemed open to considering the hauling route change.

While cautioning that he did not know the details of the alternate route, company spokesman Dave McCarthy said, "We are more than willing to work with the corps and lobstermen to get the project going and disrupt as little as possible."

McCarthy said dredging will be an round-the-clock operation, with the tug and scow averaging two to three trips a day (24 hours) to the disposal site.

Great Lakes Dredge & Dock Co. is credited with giving the first notice of the starting date of Portsmouth project and the route of the dredge tug and scow.

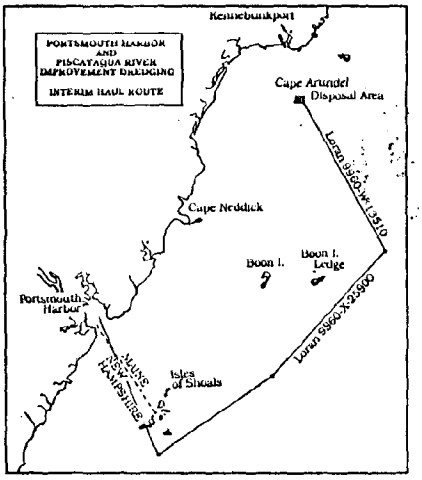
"We got a letter from Great Lakes Dredging on Aug. 23 asking that we notify fishermen to move their gear," said Lt. Joe Fessenden of the ME Marine Patrol.

Fessenden said that it was apparent the hauling lane would lead to a problem with gear loss. His officers immediately began hearing complaints, not only about the route but also concerns about the safety of the material being dumped.

Fessenden set up the Friday night meeting, and included an invitation to the DEP.

In response to fishermen's questions, DEP and corps officials agreed that new samples of the dredge material would be tested, Fessenden said.

Susan Jones



Lobstermen to hold dredging test

By NEIL HARTSTEIN
Staff Writer

YORK — Local lobstermen, fed up with waiting for test results on a Piscataqua River dredging project, plan to take their own sediment samples this Thursday.

The dredged materials are being dumped at the Cape Arundel ocean disposal area near Kennebunkport, and the fishermen are concerned that the spoils contain toxic substances that could harm marine life along the coast. The dredging project is in Portsmouth Harbor near the Portsmouth Naval Shipyard, which has dumped hazardous wastes in the past.

A commercial fishing boat owned by Herb Poole of York is scheduled to carry fishermen, divers, state lawmakers and the media to the dredging site Thursday to collect the samples, York lobsterman Erica Bridges said Monday.

The samples will be brought to the private Peck Environmental Laboratory in Arundel for analysis at a cost of $525, Bridges said. The results should be available next week.

The Army Corps of Engineers contends that 90 percent of the 310,000 cubic yards of materials to be dredged is sand or gravel incapable of trapping hazardous wastes. Tests showed the other 10 percent to be silt or clay containing "acceptable" levels of contamination, the corps said.

Fishermen attending a Sept. 8 meeting with corps officials said the 10-year-old tests were unacceptable and demanded new samples be taken. Prodded by state and federal lawmakers, the corps agreed to the tests.

But Bridges and other fishermen fear the corps is dragging its feet, and that river silt and not sand is being dumped at Cape Arundel while they wait.

The corps' test results were supposed to be ready last Thursday, but the DEP did not receive the samples for analysis until last Friday. That means another week of waiting, Bridges said.

She said she received a call Friday from Dean Marriott, DEP commissioner, who told her the corps' own labs were backed up two to three weeks, so the samples were brought to DEP for analysis.

Deb Garrett, a DEP spokeswoman, said Monday the corps did "a very preliminary run-through" on the samples before delivering them to DEP for further testing.

The DEP will check two samples of silt for 10 to 12 hazardous materials, including PCBs and heavy metals, Garrett said. Just to play it safe, the DEP also will test a sand/gravel sample to confirm the corps' statement that toxic substances will not adhere to that mixture, she said.

The results could be available by Friday, she said.

Garrett added that, to the best of her knowledge, no Portsmouth Harbor silt or sediment has been dredged to date.

"They're nowhere near the stuff that's toxic," she said.

Bridges acknowledged that the results of the fishermen's tests won't be available until after the DEP's tests are in, but said they still will be useful for purposes of comparison.

She said she wants to make sure the corps didn't cheat and take its samples from somewhere else.

"I don't trust them, plain and simple," Bridges said. "I didn't see them take the tests. How do we know they didn't get it out of someone's backyard or a clean beach? Their main goal is to get the job done, period."

Fran Donovan, assistant area engineer for the corps, could not be reached Monday for comment on Bridges' charges or Thursday's sampling by the fishermen.

Kathy Gest, press secretary for Sen. William Cohen, said the senator wants the dredging project stopped until a satisfactory determination is made as to what's in the spoils.

Plankton caused second slick

A thick growth of harmless plankton caused a second red slick off the southern Maine coast last week, the state Department of Marine Resources said Monday.

The oily 20-mile slick reported Thursday extended from Cape Elizabeth to Wells and was up to two miles wide.

Scientists determined that "dense growth of naturally occurring microscopic plants" was the cause, said DMR spokesman Marshall Murphy.

A slick reported Sept. 18 also was found to be algae. It was tested after area fishermen voiced concern that Piscataqua River dredgings dropped near Kennebunkport might have contaminated the water.

Concern rises over Arundel dumping

PPH 9/11/89

- New route for Portsmouth dredgings awaits final government approval. Page 8.

By NEIL HARTSTEIN
Staff Writer

YORK — Concern about dumping polluted dredge spoils at the Cape Arundel open water disposal area has led to calls for the creation of a new regional dumping site, possibly off the New Hampshire coast.

Rep. Neil Rolde, D-York, and Sen. Stephen Estes, D-Kittery, said Saturday they will ask Maine's congressional delegation to file legislation to force the U.S. Army Corps of Engineers to find another suitable site for dumping.

About 100 southern Maine lobstermen, already upset about plans to transport 455,000 cubic yards of materials dredged from Portsmouth Harbor to Cape Arundel, were shocked Friday to learn the dump site is slated to receive spoils from other dredging projects over the next few years.

Some fear those spoils will be full of toxic wastes, and their accumulation at the Cape Arundel dump site will threaten southern Maine's lobster population and their own livelihoods.

Herb Poole, who runs a charter fishing boat out of York, reported seeing cusks with "disgusting tumors" running toward that area.

Army Corps spokesmen told the lobstermen that the Cape Arundel dump site has been used only seven times, and that 10 years of studies show contaminant levels there to be low. The same goes for the material to be dredged at Portsmouth Harbor starting this week, they said.

Nevertheless, state marine and environmental officials would likely want to examine the contaminated fish, said Lt. Joe Fessenden of the Maine Marine Patrol.

Aside from their concern about pollution, some lobstermen objected on principle to Maine waters being used as a dumping ground for another state's dredge spoils.

"How much longer are we going to take this crap from New Hampshire?" asked lobsterman William Bridges of York. "We're tired of taking everybody's stuff."

Francis Donovan, assistant area engineer for the Army Corps, said Cape Arundel was chosen to receive the Portsmouth Harbor dredgings because it's the closest of three regional ocean dumping sites approved by the Environmental Protection Agency. The others are located off Portland and Boston.

The decision to dump at Cape Arundel instead of in the Massachusetts Bay shaved $1.5 million off the Portsmouth Harbor project's price tag, Donovan said.

Lobstermen objected that the dredging company was saving money at their expense.

Donovan said they all would benefit as taxpayers since the $16 million Portsmouth Harbor project is funded in part by the federal government.

The lobstermen also argued that Maine has little to gain from a wider Portsmouth Harbor since no commercial ships dock on the Maine side of the Piscataqua River.

Ernest Connor, head of the N.H. State Port Authority, disagreed, saying both Maine and New Hampshire will benefit from the dredging project.

A deep water, emergency turning and holding area will be created to guard against oil tankers running aground and spilling their loads, which would affect both states, he said.

Also, large vessels will have greater maneuverability, which will lessen the risk of collision with the Memorial or Interstate bridges connecting Maine and New Hampshire, Connor said.

Donovan insisted there is no alternative to the Cape Arundel site at present. While another regional dumping area is a good idea to consider, he said, it could take 15 years to become a reality.

"They're making a cesspool of the Maine coast and these bureaucrats are worried about making another site elsewhere," charged Bridges. "We're worried about heavy metals and chemicals."

Estes and Rolde said they will contact Rep. Joseph Brennan, D-Maine, Sen. George Mitchell, D-Maine, and Sen. William Cohen, R-Maine, asking that they file legislation creating a new ocean disposal area.

"If they reopen a site off New Hampshire it would be cheaper all around," Rolde said.

Estes is concerned mostly about future plans to dump spoils dredged near the Portsmouth Naval Shipyard at the Cape Arundel disposal area. Once part of the original Portsmouth Harbor project, the shipyard dredging was postponed for two to three years because of a lack of funds.

The shipyard currently is working with state and federal environmental officials to identify and clean up 13 hazardous waste sites.

"There's a real environmental problem right off Henderson's Point" where the dredging will take place, Estes said. "That's one of the two major bad areas."

Portland, Maine, Press Herald, Monday, September 18, 1989

Concerns about ocean dump site persist

By NEIL HARTSTEIN
Staff Writer

Despite assurances that the Cape Arundel ocean dump site currently poses no toxic waste threat to nearby fish and lobsters, local fishermen are still concerned that dredge material from Portsmouth Harbor could contaminate the area.

The dump site, located 2.5 miles south of President Bush's Kennebunkport estate, has been at the center of controversy since the beginning of the Portsmouth Harbor dredging project that got under way last week.

The river dredgings are being dumped at the Cape Arundel site, and Southern Maine lobstermen concerned about interference with their traps had to scramble to get the original coastal route altered.

But the lobstermen also demanded that the dredge material be tested for toxic wastes, since that section of the Piscataqua River is so close to the Portsmouth Naval Shipyard, which has admitted to past dumping of hazardous wastes in the area.

The lobstermen voiced concern that hazardous wastes might accumulate at the Cape Arundel dump site, pointing to future dredging projects at the shipyard and sewage-polluted Rye Harbor in New Hampshire.

"They're looking at the future," said Rep. Neil Rolde, D-York. "These spoils might be OK, but what happens when they start dredging the Navy Yard?"

"They're concerned about what the dump site might do to their livelihood," added David Dow, executive director of the Lobster Institute at the University of Maine.

Herb Poole, who runs a charter fishing boat out of York, told Army Corps of Engineers officials at a meeting Sept. 8 that during one day last July he saw two or three cusks covered with tumors that were caught within five miles of the Kennebunkport dump site.

Lobstermen and industry observers interviewed recently said they know of no instance of lobster or fish contamination in the Cape Arundel area.

"There's not much of a contaminant problem there at Cape Arundel," said David Tomey, a biologist for the Environmental Protection Agency's Water Quality Bureau in Boston.

Dredge material that has been dumped at the Cape Arundel site since the mid-1970s has generally consisted of "relatively clean" sand and gravel, said Tomey.

"We've done quite a bit of sampling in the area of the (dredging) projects," and the tests showed the sites to be "generally low in toxic metals, organics and chemicals," he said.

The EPA and the Army Corps of Engineers have conducted several tests at the site itself since 1984, and results showed the disposal area itself "to have very low contamination in general, even though it was used the past few years by the harbors," Tomey said.

The Corps continues to monitor the area to study the effect of the dumping on the marine environment, officials said.

"For the last few years, we've been going out and looking at the bottom to see how much material is deposited, where it's going, and to make sure it's staying at the site," said Jeffrey Waugh, a marine analyst with the Corps of Engineers' New England division in Waltham, Mass.

But some lobstermen are reluctant to accept the Corps' assurances.

At the Sept. 8 meeting with Corps officials, lobstermen were stunned to learn that the Corps based its decision to allow the Portsmouth Harbor dredgings to be dumped at Cape Arundel on 10-year-old tests.

They insisted new samples be taken, and the Corps agreed. The results should be available soon.

Waugh said the Portsmouth Harbor dredgings "seem pretty much to be sand and gravel, shells and pieces of rock.

Tomey said he expects the new test results to be little different than those of previous tests that showed the levels of toxic wastes in Portsmouth Harbor to be acceptable for ocean dumping under state and federal standards.

Lobstermen have adopted a wait-and-see attitude, saying they won't object to using the Cape Arundel dump if the new tests prove Tomey right.

But if the tests show unacceptable levels of contamination, the lobstermen said they would attempt to block any attempt to continue dumping there.

Waugh said, however, that dredge material from any site with toxicity levels exceeding federal and state standards "will not be allowed to be deposited" at the Cape Arundel site or any other.

Cape Arundel picked because of low fishing activity

The Cape Arundel dump site was designated a regional ocean disposal area in 1977, along with dump sites in South Portland and Boston.

Federal agencies wanted to reduce the number of ocean dumping sites then in use in order to monitor them more effectively, said Jeffrey Waugh, a marine analyst with the Army Corps of Engineers. "The fewer sites, the better," he said.

Cape Arundel was picked because it was "one of the less active spots" for fishing in the area, and because it had been used in the mid-1970s for dredging projects in Cape Porpoise and Kennebunkport, Waugh said.

The Army Corps and Environmental Protection Agency also liked the site's undersea trough that runs between two large outcroppings. "We tried to pick the best site that would contain (the dredgings) and not spread it around," he said.

Cape Arundel actually wasn't used again as a dump site until 1985, when it received dredge material from a number of small coastal projects, said David Tomey, an EPA aquatic biologist.

Waugh said the Army Corps has records of seven projects whose dredgings were, dumped at Cape Arundel, five in Maine and two in New Hampshire.

The dump site is marked by a buoy so scows are never off target by more than 100 feet, and never dump outside the site itself, Waugh said.

The Cape Arundel dump site is considered "very small" as far as dump sites go, Waugh said.

The site has a total accumulation of about 500,000 cubic yards of dredge materials, and is considered half full, officials said.

The EPA wants to redraw the dump site's borders to increase its holding capacity to 2.5 million cubic yards, Tomey said.

"It should never have been designated a circle," he said, referring to the dump site's shape.

The dump site has a 500-yard diameter, and much of it lies over sloping ledges of rock, which make it possible for some dredge material to dissipate, Tomey said.

The EPA wants to narrow the dump site so the dredgings fall more in the middle of the trough, he said. The site would be thinner, but longer as it extends north following the path of the trough past its current boundary.

"It would be an ideal situation to confine the dump material so it does not escape," Tomey said.

The EPA also hopes to save the marine organisms that cling to the rocky ledge and "are susceptible to impact," like coraline algae or sea anenone, creatures related to jellyfish, Tomey said.

Worms, little shrimp and other marine organisms that live in the trough survive dumpings by burrowing into the sand, he said.

Other marine life, such as fish and lobsters, can see the dumpings as they occur, and flee the area before they are hit, officials said.

The EPA's proposal to redesign the dump site is contained in an environmental impact statement being prepared by the agency in an attempt to change the dump site's status from interim to permanent.

"It is environmentally preferable, and there will be more than enough capacity to satisfy the needs of the area for a long time to come," Tomey said. "It also will make a much better situation for monitoring."

— Neil Harstein

New dredgings route awaits approval

YORK — Southern Maine lobstermen and state lawmakers are waiting to find out if an alternate route for transporting dredge spoils to the Cape Arundel disposal area receives final approval from the U.S. Army Corps of Engineers.

The new route, which will take a tugboat and scow with dredgings from Portsmouth Harbor away from most lobster traps, was agreed to here Friday by Francis Donovan, assistant area engineer for the Corps of Engineers.

But Donovan told a meeting of local lobstermen that he would have to run the agreement by his superiors in Washington today. The new route is nearly twice as long as the original route up the coast, and will add considerably to the dredging project's cost, he said.

"It's a wait-and-see situation," Sen. Stephen Estes, D-Kittery, said Saturday. If the deal falls through, he said, "we could be back to square one."

If the route has to be changed again, Donovan said he would return to York to work out another arrangement with the lobstermen. Otherwise the alternate route will remain in effect until Jan. 15, at which time the tug and scow will revert to the original coastal route.

"I'm satisfied at the moment," said lobsterman Erice Bridges, after Friday's meeting.

"If (the tugboat skipper) does what we want him to do, there will be no problem," said Steve Lawrence, a Kittery Point lobstermen.

The Great Lakes Dredge and Dock Co., the firm hired to dredge Portsmouth Harbor, is the nation's largest dredging company and has a reputation for responsible behavior, Donovan said. Any lobsterman who loses gear due to the project will be compensated by the dredging company, he added.

Rep. Neil Rolde, D-York, said he wants the Army Corps to arrange for sediment samples to be taken during dredging to check contaminant levels.

Only a small percentage of the material to be dredged is silt or clay capable of accumulating toxic wastes, and tests taken 10 years ago show contaminant levels well below acceptable federal and state standards for open water disposal, according to Army Corps officials.

But Rolde complained that the tests cited by the Army Corps are a decade old.

"I think that's pretty sloppy," he said. "The Army Corps does not have a good environmental reputation."

Portland, Maine, Press Herald, Saturday, October 7, 1989

Corps: No new dredge test needed

Reports contaminants are at acceptable levels

By NEIL HARTSTEIN
Staff Writer

The Army Corps of Engineers sees no reason to conduct new tests for contaminants in Piscataqua River sediment, despite an order to do so by the state Department of Environmental Protection.

The corps Friday released the results of tests on samples taken from the river in September. They show contaminant levels to be within acceptable limits for open-water disposal.

"The results continue to show that this material is very suitable for ocean disposal under both federal and state guidelines. Therefore no further testing is deemed to be necessary," wrote Col. Daniel Wilson, head of the Army Corps' New England Division, in a cover letter accompanying Friday's test results.

Area lobstermen have voiced concern since Labor Day that Portsmouth Harbor river dredgings are polluted by toxic wastes from nearby Portsmouth Naval Shipyard, and might pose a threat to coastal marine life.

On Wednesday, the DEP modified its order on the dumping of dredgings off Kennebunkport, requiring additional sampling in areas of the river that have not yet been dredged.

The DEP claimed there is a "potential for contamination" in dredgings from some silty areas, and ordered Great Lakes Dredge and Dock Co. — which is doing the job for the Army Corps and the state of New Hampshire — not to dredge those areas until new tests are conducted. The agency gave the corps until the end of the month.

Maine's congressional delegation issued a statement Tuesday backing the DEP.

"Although special handling of the material is not justified by the test results, the corps will, through the normal scheduling of work, dredge the fine grain material early enough in the project to ensure its coverage at the disposal site by coarse grain materials," Wilson said in his cover letter.

"This methodology should provide assurance of the highest degree of environmental protection," he said.

The Army Corps was content to rely on 10-year-old tests, but agreed to take new samples at the urging of fishermen and state and local officials.

The corps tested for toxic heavy metals, PCBs, PAHs, organic carbons, pesticides, oil and grease, and all were found to be within acceptable limits for disposal at sea, corps spokeswoman Sue Douglas said Friday.

The corps' findings were similar to those released earlier this week by the DEP, and to those of Eastern Analytical Associates of Brooklyn, Conn., an independent laboratory under contract to the Army Corps, Douglas said. The results, she said, validate the corps' decade-old tests.

Local lobstermen are not satisfied with any of the test results because they don't believe the corps took its samples from the dredging site. The corps also provided the samples tested by the independent lab and DEP.

On Friday, lobsterman Erica Bridges and others collected their own samples, and will deliver them to a private lab in Arundel for testing. Results are expected in about two weeks, Bridges said.

The lobstermen tried last week to take harbor samples. They were chased off by the head of the New Hampshire State Port Authority, who said their divers were endangered by a swift undertow that would have carried them into the path of the dredging equipment.

On Friday, the lobstermen walked out on the Kittery mudflats as far as they could go, then used a dinghy to get within 100 yards of the dredging project, Bridges said.

"I think we got some choice samples," she said. Her lobsterman husband, Will, devised a tool used to collect the samples: a 3-inch-wide galvanized steel pipe connected to a 20-foot-long aluminum pole.

Like last week, project workers took an intense interest in the lobstermen's activities, Bridges said. "They kept sending a truck to check us out," she said. "They're definitely scared of something."

This time, however, no move was made to stop the lobstermen from collecting their own samples.

COMMERCIAL FISHERIES NEWS NOVEMBER 1989

Maine DEP orders more dredge testing

AUGUSTA, ME - The US Army Corps of Engineers is satisfied that the material being dredged from Portsmouth Harbor is suitable for disposal at the Cape Arundel disposal area off the Maine coast.

Not everyone entirely agrees.

The ME Department of Environmental Protection (DEP), which is responsible for issuing a dumping permit for use of the site, has called for additional testing. And area lobstermen, suspicious of the corps' evaluation, are doing their own sampling and testing.

"The testing confirmed our old data," said Fran Donovan of test results made public by the corps Oct. 6. "The evaluation shows contaminant levels that are acceptable for open-water disposal."

Donovan is the Portsmouth Harbor project manager and an army corps engineer.

The $16.6 million dredging project got underway in mid-September, but only after army corps representatives, the DEP, and southern Maine lobstermen hashed out a few problems. The project called for removing about 450,000 cubic yards of dredge material from the Piscataqua River and barging it to the Cape Arundel dump site situated about 2-1/2 miles off Kennebunkport.

Lobstermen objected on two counts: the route the tugs and scows would travel from Portsmouth Harbor to the disposal area; and the safety of the dredge materials which they felt could be polluted by toxic wastes from the Portsmouth shipyard.

The original hauling lane would have taken the tug through lobster gear set for fall fishing. An alternate route was worked out that sends the tugs and scows out to the Isle of Shoals before turning northward to the disposal grounds. While more costly to the project in terms of time and distance, the route does avoid lobster gear and has been satisfactory to lobstermen.

Donovan said the alternate route will stay in effect until Jan. 15, when use of the original route will take over.

The army corps had assured lobstermen before dredging began that its original testing in the late '70s of Piscataqua River samples had showed contaminants to be at levels acceptable for disposal at the Cape Arundel site.

But the DEP, which issued a dumping permit in 1984, requested additional testi of dredge materials, according to Deb Garrett, DEP public information director.

The corps took new bottom samples in late September, also turning over samples to DEP for its own testing. The state lab results correspond to the army corps' evaluation, Garrett said.

"There is a presence of heavy metals and arsenic," Garrett said, "but the army corps is correct in saying it is suitable for at-sea disposal."

The contaminant levels would not be acceptable for land disposal, she said.

The DEP has issued a modified order based on the new information. It requires additional testing and orders there be no further dredging in silty bottom until the testing is done. The dredge materials are mostly sand, gravel, and rock. But contaminants are most likely to be found in the silt.

"It's a very conservative, careful approach," Garrett said of the order. She also said DEP personnel would be present when the resampling is done. The DEP order sets an Oct. 30 deadline.

Susan Jones

D. Coastal Hazards

1. Which of the following hazards are of concern to your state? For each indicated hazard, briefly describe the magnitude of the problem and the specific areas of concern.

__X__ Coastal flooding and storm surge
__X__ Coastal erosion (short and long term)
__X__ Sea level rise
__X__ Subsidence
_____ Tsunamis
_____ Earthquakes
_____ Other (Identify)

Coastal flooding and storm surge

Coastal flooding and property damage are directly related to the combined effects of high tides and storm surge. Astronomically enhanced tides can raise ocean levels 3-4 feet above mean high water. Storms, such as winter northeasters, can cause surges of 1-3 feet. The combined effects of exceptional tides and storm surge can raise water levels 5 feet or more along the coast a few times each century. Coastal flooding of 5 feet in February 1978 caused about $2 million in property damages in York County alone.

Coastal erosion (short and long term)

Coastal erosion rates, both short and long term, are not well known for the various coastal environments in Maine. Coastal bluffs have been known to retreat 6 feet per year over the short term. Slumping and landsliding (such as the 1973 Rockland slide) may affect the long-term rates of bluff retreat. Detailed profiles of Maine's beaches are not available for determining erosion rates and a program is desperately needed to determine this hazard's severity. Erosion of dunes in 1978 storms has left a scar in many locations which has not healed in the last decade. These and other general observations suggest that in the long term Maine's coastal dunes and beaches are retreating. Erosion presently threatens coastal developments and, as it progresses, more areas will become adversely affected.

Sea level rise

Sea level has risen in Maine at a rate of about 1 foot per century, as measured by tide stations along the coast. If present trends continue, a sea level rise of 10 inches is expected by the year 2090. The Maine Geological Survey estimates (using National Academy of Sciences models) that the combined effects of coastal sinking and global warming may cause sea levels to rise 20 to 50 inches by the year 2090. Sea level rise will allow flooding and erosion to encroach on areas that are not subject to coastal hazards today.

Subsidence

Subsidence is recorded in the sea level rise trend mentioned above. Subsidence may account for about half the rate of local relative sea level rise. The remaining amount of sea level rise is probably due to global sea level changes. The coastal hazards related to subsidence are the same as those with sea level rise. Subsidence is expected to continue even if global sea levels cease to rise.

2. Which of the following traditional techniques is the state currently using to address each of the above indicated hazards? Briefly describe how the technique is used and assess its effectiveness.

- X Public education
- X Technical assistance to residents/businesses
- X Research on cause/effect/response
- X State or local planning (including disaster planning)
- X Policy development
- X Structural response (beach replenishment, bulkheads)
- X Restrictions on development or use of areas
- ___ Land/structure acquisition
- ___ Other (explain)

Each of the techniques checked is being used to one degree or another with regard to coastal flooding and storm surge, coastal erosion (short and long term), sea level rise and land subsidence. In the area of regulation, reflecting an assumed sea-level rise of 3 feet over 100 years, the State's Sand Dune Rules were recently amended to: (a) prohibit construction in the V-zone on or seaward of a frontal dune; (b) require one-foot freeboard for all single family residential structures in areas within reach of the 500-year flood; (c) create a four-foot freeboard above the 100 year flood elevation for multifamily dwellings; and (d) require removal of any structure encroached on by a wetland for over six months.

Hazard areas in the coastal zone were mapped and incorporated into the Sand Dune Rules as best available information for the location of frontal dunes, back dunes and flood hazard zones, unless an on-site survey indicates otherwise. These maps, prepared with Coastal Program support, provide an important basis for both technical assistance to residents/businesses and public education.

Local shoreland zoning ordinances under Maine's Mandatory Shoreland Zoning Law provide additional restrictions on the development and use of flood plains and other hazard areas. Recent changes in the Law include an increase in the minimum setback for coastal development in certain areas. A new set of mandatory more stringent guidelines for local ordinances prepared by the DEP is currently under review for adoption by the Board of Environmental Protection.

Technical assistance with regard to coastal hazards is routinely provided by the DEP Land Bureau, the Maine Geological Survey (which prepared the Sand Dune Hazard Maps), the DECD Office of Comprehensive Planning through its Coastal Planning and Flood Plain Management programs, and the Coastal Regional Councils. Research on coastal hazards is a key function of the Maine Geological Survey.

The State prepared a model local floodplain ordinance including minimum statutory provisions. Most towns have adopted an ordinance based on the model, which contains two significant additions to federally mandated requirements: a provision that all new or significantly improved structures be elevated at least one-foot above the base flood elevation, and procedures that place the burden for compliance on the applicant. A two-step procedure is required, under which construction is stopped at the first floor until a surveyor verifies the elevation. This eliminates the risk of a structure being completed without the required freeboard.

The first "Statewide Hazard Mitigation Plan" was completed in December 1987. The plan discusses hurricanes and other coastal hazards. It includes an action plan for addressing coastal hazards, identifies areas in need of improved management, and contains draft language for legislative changes to address the management issues identified. The plan also recommends the use of the sea, lake and overland surge (SLOSH) for hurricanes.

Public Law 794 of 1986, An Act to Enhance the Sound Use and Management of Maine's Coastal Resources, restricts development in flood risk areas and provides authority to the State to consider sea level rise and its implications in making management decisions: one of the nine coastal management policies adopted in PL 794 is to "discourage growth and new development in coastal areas where, because of coastal storms, flooding, landslides or sea-level rise, it is hazardous to human health and safety." Executive Order 3FY 86/87 required state agencies to align their activities and prepare plans to implement the nine coastal policies.

Finally, with regard to structural measures, the Board of Environmental Protection has adopted a policy against construction of new bulkheads and seawalls. On the other hand beach nourishment, though little used, is considered an acceptable technique, provided that sand budgets, sediment compatibility, public acceptability and costs are thoroughly investigated.

3. What innovative actions are the state undertaking to address the hazards mentioned above, e.g. new studies, policies, financial incentives/disincentives.

It is difficult to make a sharp distinction between "traditional" and "innovative," inasmuch as Maine has been among the first states to respond to sea level rise with legislative

changes, and a number of the techniques outlined above might be considered innovative use of traditional techniques.

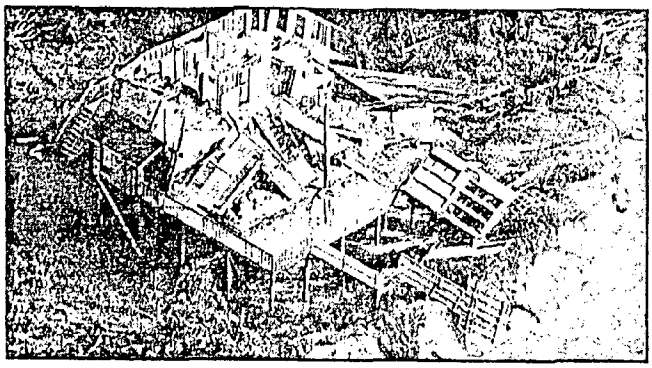
Chapter 21 of Public Law 794 of 1986 referred to above established a State Coastal Barriers Resources System paralleling the federal system created under the U.S. Coastal Barrier Resources Act of 1982. Similarly to the federal COBRA, the State law prohibits State expenditures or financial assistance for development activities within the coastal barrier resource system.

4. Which of the following levels of coordination is the state involved in or promoting to address the above identified hazards? Describe the administrative/organizational mechanisms to accomplish this coordination, and the role of the Coastal Management Program.

__X__ Federal - State
_____ Interstate
_____ Intrastate
__X__ State - Local
_____ CZMP - Floodplain managers
_____ Other (explain)

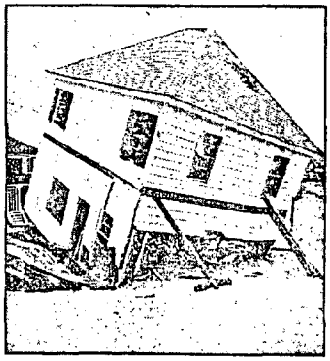
The primary means of federal-State coordination include Federal Consistency under the CZMA and a cooperative relationship between the DECD's Flood Plain Management Program and FERC. ??? State-Local coordination occurs as described above through DEP oversight of local shoreland zoning administration, through the DECD's local technical assistance and Flood Plain Management Programs, and through technical assistance by the coastal regional councils.

After the storm: Gone for good?



AP

Hurricane Hugo ripped the roof off this waterfront home in Charleston, S.C., and sent it leaning toward the water.



File photo

A 1978 blizzard toppled this Saco beach house, which sat on its corner for months.

Hugo brings focus on beach building

By ANDREW McCLURE
Staff Writer

When a storm the caliber of Hurricane Hugo hits the southern Maine coast — and state officials say it's inevitable — state regulations will limit the number of destroyed homes that can be replaced.

About 60 homes along the coast south of Portland are in areas where state law would prohibit their replacement if they washed away in a violent storm. The fate of hundreds of other homes would be in question if they, too, were destroyed by waves and tides.

If the storm proved fierce enough to wash away houses in Higgins Beach in Scarborough, many would be gone for good. If it washed away houses along Moody Beach in Wells, chances are the state would rule the area was too dangerous to rebuild on.

"It's very possible that houses that had been destroyed might not be replaced," Wells Code Enforcement Officer Michael Polakewich said.

One of the issues brought to light by Hugo's devastating effect on the South Carolina coast is whether that state's laws regulating coastal construction and reconstruction are to be taken seriously.

Maine officials, who have written similar regulations, are watching South Carolina closely to see whether its laws stand the test of public pressure.

While it is unlikely that a hurricane would hit the Maine coast with the ferocity that Hugo ripped South Carolina, winter northeaster storms can cause similar damage.

When a two-day blizzard hit New England in 1978, houses along the coast in York County sustained $16 million in damage because of high seas generated by the northeast wind that whipped across the Atlantic.

During that storm, the highest tide ever recorded in Portland washed ashore at more than 14 feet. The waves that followed returned to the sea with dozens of homes and cottages, a Kennebunk Beach Inn and the Old Orchard Beach pier.

"There must be another storm," Joseph Kelley, a marine geologist with the Department of Conservation, said. "We will suffer as we did in 1978 and there will be more damage. If '78 were to reoccur, and it must, we would lose more ... than we did. There's more invested than there was."

While states such as Maine and South Carolina are willing to let standing structures remain, both have adopted laws limiting construction allowed in coastal areas susceptible to storm damage.

They also have regulations that ban reconstruction of houses in such areas after they are significantly damaged by storms.

Donna Gress, spokeswoman for South Carolina's Coastal Council, said state has created a special zone that stretches from the ocean to an area 20 feet behind the sand dunes. If a building in that zone sustains damage to two-thirds of the structure or more, it cannot be rebuilt, she said.

There is no estimate yet how many houses in this so called "dead zone" were razed by Hugo, but their owners already have marshaled forces and plan a legal challenge of the law.

Maine watches S.C.

That challenge is of special interest to Maine's coastal officials. South Carolina's laws were partly based on similar rules adopted in Maine last year and the legal challenges posed in the South could occur here after a similar disaster.

Maine's laws are based on sand dune maps drawn up by the Maine Geological Survey, in the Department of Conservation. In part, they identify coastal zones where there is a high chance of flooding by waves. If at least half a house in that zone is damaged by a storm, it cannot be rebuilt.

Steve Dickson, a marine geologist with the Department of Conservation who drew the maps, said there are about 60 houses in the zone in southern Maine. Half are at Higgins Beach in Scarborough, and the rest are spread along the York County coast, including Ocean Park, Fortune Rock and 10 on Drake's Island.

Much of the oceanfront property on Moody Beach and other parts of the coast is in another zone that would allow reconstruction because it is protected by a sea wall.

But Kelley added that if a storm tore down the sea wall and leveled the houses, the property likely would be recategorized and reconstruction would not be allowed.

'You don't rebuild'

"In a sense, it doesn't matter what flood zone you're in," Dickson said. "If you were damaged 50 percent or more ... by an ocean storm, then you don't rebuild."

State environmental officials say the laws regulating beach construction are aimed at preserving what beach is left along the coast.

Ironically, people who build by the ocean so they can be close to the beach are planting the seeds for destruction of the beach that attracted them in the first place.

The theory is that with construction of sea walls, houses and condominiums on the beach, waves generated by rough seas have no place to disperse, according to Donald Witherill, director of the Division of Natural Resources in the Department of Environmental Protection.

Before the construction, the surges of ocean pushed ashore by a storm such as Hugo or the blizzard of 1978 would wash inland over the dunes and into the marshy areas just beyond the beach.

Construction along those dunes effectively erects a blockade between the rough seas and the low areas. When a storm hits, the fury of the waves cannot disperse over the marshes and is instead concentrated on the beach, eroding away the sand, Witherill said.

Kelly pointed to Wells Beach and Surf Street in Saco as examples of beach areas that are washing away, probably because of the presence of sea walls.

The construction also acts as a blockade preventing sand in the dunes and marshes behind the houses from migrating back toward the ocean to replenish the beaches.

"It's a classic man-versus-nature confrontation," Witherill said. "You got a beach resources threat by people building walls. Ultimately those walls accelerate erosion from the beach."

Working with nature

"Our philosophy is we have to work with nature," he said. "As erosion occurs, we have to retreat from it. (With sea walls) you're buying time, but when the storm hits, you're going to pay dearly. It's a postponement of the inevitable — that the ocean's going to reclaim that area."

The Maine and South Carolina laws are designed to ensure that beach development does not get worse and, if a storm comes along and washes some of the houses away, that the construction will not be replaced.

"The whole idea of these laws, if the house is destroyed, it is evidence it is in an unsuitable area," according to Daniel Belknap, associate professor of geology and marine biology at the University of Maine. "You can't keep rebuilding in these areas."

There are other rules and regulations controlling replacement of beach houses. Most of the buildings not directly on the beach could be replaced if damaged by a storm, but they would have to meet stringent federal guidelines aimed at preventing damage when future storms arrive.

Financial feasibility

Another control that probably would limit reconstruction in a beach area is whether it would be economically feasible.

"The DEP may allow it, the local ordinance may allow it, but (the federal government) is not going to insure you and the bank's not going to lend you the money," Polakewich predicted.

Many state and local officials say they have difficulty understanding why people in Maine and South Carolina want to build in areas known to be so susceptible to destruction.

"I'd say those people have to be pretty crazy if they are hit by a hurricane and then want to rebuild," said Barbara Gagnon, assistant codes officer in Wells. "But they'd probably do the same up here."

York's Cliff Path is falling apart

Portland, Maine, Press Herald, Wednesday, November 8, 1989

Homeowners place limits on public use

By NEIL HARTSTEIN
Staff Writer

YORK — Residents and tourists soon will have to be walk more carefully on the oceanfront trail known as the Cliff Path.

Homeowners along the half-mile trail that stretches from York Harbor Beach to Eastern Point warn that the path is dangerously worn by erosion, bicycles and too many footsteps, and that people who walk the scenic route do so at their own risk.

At the same time, the 15 homeowners are vowing to stop people from cutting across their property, sitting on their decks and partying on their lawns, even if it means closing the path to the public as a last resort.

For now, the homeowners' newly formed Cliff Path Association hopes to solve the problems by posting a sign at York Harbor Beach outlining rules for using the privately-owned path.

"We want them to realize the rights all these people have and honor them just like they expect people to honor their privacy and their homes. That's it in a nutshell," says Jim Riley, whose wife, Ann, co-chairs the new association.

The Rileys and group co-chairman Cynthia Raymond say that the path has taken a beating as record numbers of visitors walk the trail.

"We've seen an almost 300 percent increase in usage, if not more, in the past eight years," Jim Riley says.

Chartered buses blamed

Part of the blame goes to the chartered buses that make regular stops at York Harbor Beach as part of their New England leaf tours, the homeowners say.

In addition, they say other tourists are lured to the Cliff Path by travel book reviews and newspaper ads, as well as brochures put out by local inns.

Mark Foster, owner of the nearby Stage Neck Inn, readily admits to capitalizing on the walk's spectacular ocean view to attract and entertain inn guests.

"We offer it as a benefit . . . just like the beaches," he says. "We don't own that either, but it's part of York, and all things in York are nice. That's why people come here on vacation."

Ann Riley says the Cliff Path was not designed for such abuse, and is showing the ill effects.

The path, which shifts from asphalt to concrete to rock-studded dirt and varies in width from three feet to six inches, is crumbling in spots. One concrete section rests primarily on a single, large rock as the result of the ocean eroding the supporting soil.

One particularly sharp corner features an unstable edge where a running child could slip, trip and fall 20 feet.

Raymond says the "greatest menace" to the path is from bicycles that not only erode the trail, but pose a threat to walkers and the riders themselves as they hurtle around curves and careen down steep concrete stairs and stone steps.

Not all of the homeowners' safety concerns deal with the path itself.

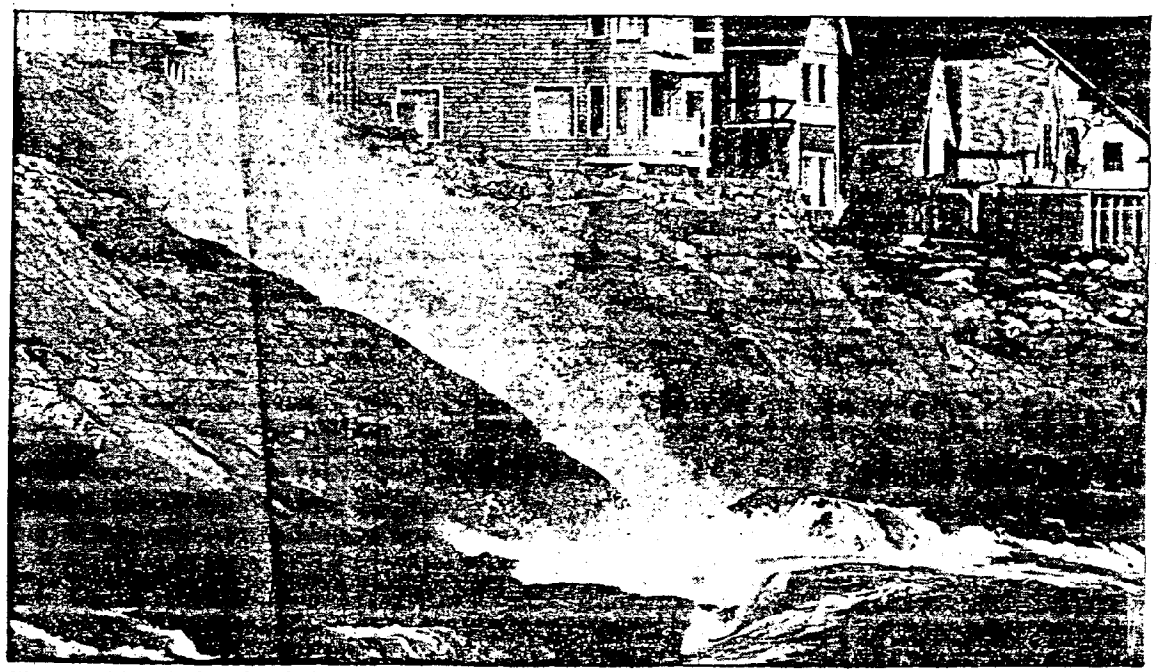
They also worry that tourists standing on boulders will be washed out to sea by huge waves during storms and drown, as three people did last year in York and Ogunquit.

Liability questioned

The homeowners' new sign cautions visitors to stay off the rocks, and notes the path will close to the public when there's snow, ice or high seas. It also prohibits bikes and tour buses.

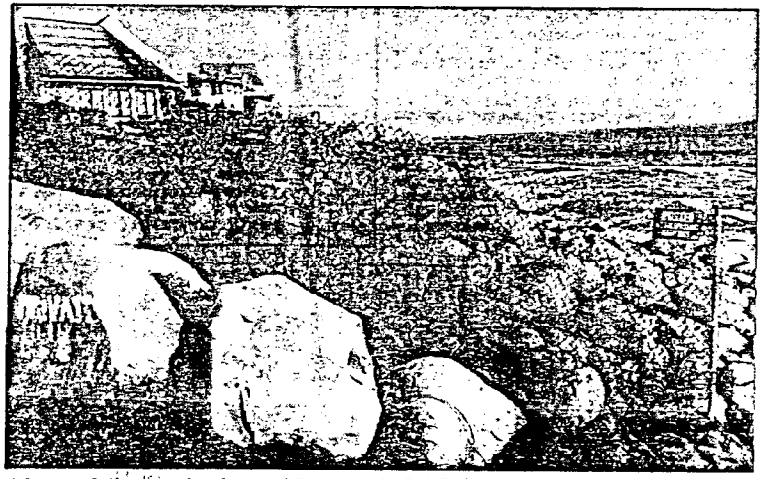
The residents feel the sign should reduce their liability in case of an accident.

"It's a gray area," Jim Riley says, noting the law should protect them because they haven't done anything to deliberately increase the risk to walkers. He concedes, though, that it's just a matter of time before someone gets hurt and decides to sue.



Waves pound the rocky shore along the Cliff Path at York.

Staff photos by David A. Rodgers



A fence and no trespassing sign stop hikers near the Cliff Path.

"It makes us very nervous," says Ann Riley.

Raymond and the Rileys say high costs prohibit homeowners from permanently fixing the path.

Ann Riley estimates homeowners have poured roughly $140,000 into various sections of the path over the past decade.

Homeowners feel a majority of people who walk the fragile trail "respect the path and treat it properly," but that some abuse it.

"It makes you nervous if you're not here and you have people climbing around the house," Jim Riley says.

The homeowners have tried to block direct access to their homes be erecting barriers along the path, ranging from a wire fence and bushes to wooden posts and sticks connected by bits of string.

In some cases, however, the winding path runs directly over a homeowner's lawn or within a few feet of a house.

At the town's suggestion, the homeowners bought individual "private property" signs that instructed walkers to stay on the path. All but two of the signs have been destroyed or stolen.

Decades of public access

The problem is compounded by the belief of many York residents that after decades of public use, people have a right to walk the path.

"It's a natural reaction," Jim Riley says. "When you've been using it for so long, you get a kind of proprietary interest in your own mind about it."

Again, the homeowners hope their new sign will solve their problems.

It prohibits nighttime walks, requires walkers to stay on the path and off the grass, and restricts anyone from entering or leaving the path from any point except York Harbor Beach. The new rules also ban picnicking, loud music, littering and vandalism.

Posting the rules will allow the homeowners to call the police whenever they suspect someone of trespassing or other transgressions, they say.

"We wish to continue to allow public use of the path but within these parameters," Jim Riley says. "If it can't be done, then probably we'll be forced to close it down."

The threat sounds similar to the one issued by Moody Beach property owners who went to court earlier this year and won the right to restrict public access to the beach fronting their homes. On the surface, the two cases do parallel each other.

For one thing, both groups of homeowners hired the same lawyer, Sidney Thaxter of Portland.

For another, both groups have complained about their property being abused by an uncaring public.

But that's as far as the comparison goes.

Thaxter told York selectmen at a workshop last month that the Moody Beach case did not involve youths on bikes or vandalism.

Further, he noted the Moody Beach homeowners were asking that the court recognize their ownership rights down to the low water mark.

In York, after studies, surveys and a ruling by the town attorney, it's been pretty much established that the Cliff Path is privately owned.

Most important, the homeowners said they differ from their Moody Beach counterparts in their reluctance to close the path to the public.

"We want to keep the thing open," Jim Riley says.

Water, Water Everywhere

The National Flood Insurance Program (NFIP) was established by the National Flood Insurance Act of 1968 and is currently administered by the Federal Insurance Administration (FIA) under the Federal Emergency Management Agency (FEMA).

From 1936 to 1986 Congress authorized and built 900 flood control projects including 400 dams, miles of levees, floodwalls, floodways and improved channels. In spite of these projects the cost for disaster assistance continued to escalate. The structural improvements in fact encouraged development in the floodplains and often created a false sense of security to those who thought they were forever protected.

The NFIP is a non-structural approach to the issue of development in the floodplains. The Program establishes a partnership approach between the Federal, State and Local units of governments. Congress provides subsidized flood insurance to individuals in the flood-prone areas if in return the local municipalities agree to regulate all future development in the floodplain. In Maine, 933 communities participate in the Program with approximately 1,483 policies in effect for over $92,635,400 in coverage.

In Maine the State Coordinating Agency is the Department of Economic and Community Development/ Office of Comprehensive Planning (DECD/OCP). The Coordinator is W. Louis Sidell, Jr., "Lou", a Senior Planner at OCP.

Each year the State enters into a Comprehensive Cooperative Agreement (CCA) with FEMA for funding to provide assistance to the communities.

In addition to model ordinances, the state is preparing a "Floodplain Management Ordinance Program Code Enforcement Manual"

Community assistance for floodplain management takes several forms such as contacts, visits, workshops, ordinance assistance and publications to mention a few.

Workshops are an integral part of the educational process for local officials and the public. The State tries to sponsor at least 4 workshops a year and often works closely with the Regional Planning Commissions. Efforts are made to balance the locations geographically as well as between riverine and coastal communities. The success of the Program depends on how much the local officials understand and correctly administer the local floodplain management ordinances. The ultimate sucess is measured in the amount of reduction in damage and claims that result from flooding.

As part of the educational process, an interactive video conference is scheduled for August 23, 1989 at six locations around the state. Please see the July 1989 issue of NEXUS for more details.

As communities convert from the emergency phase of the Program to the regular phase they need to revise or replace their ordinances to remain compliant. Occasionally Federal Regulations will change, necessitating ordinance revisions. The state has prepared several model ordinances to reflect the various needs of Maine's communities whether they be coastal, riverine, emergency or regular phase communities. The state coordinator is available to help the community through the amending process to be completed later this year. A publication for protecting homes from flood damage is slated for the first half of next year. The State also has numerous FEMA publications concerning floodplain management available for distribution. The majority of these are free to communities for distribution to their constituents.

In summary, the Program's success relies on the team effort of FEMA, the State, the regional planning commissions, and the communities. If you are in doubt as to why or how a particular aspect of the program should work please call Lou Sidell at 289-6800.

E. Ocean and Coastal Use Management

A. What primary uses of your state's waters most often come into conflict with one another? What innovative techniques is your state using to manage these use conflicts?

The increase in development along the coast together with increasing activity in the State's coastal waters has increased incidences of contamination and closure of shellfish beds. Traditional water and waterfront uses (e.g. recreational and commercial fishing and boating) are increasingly coming into conflict with each other and with non-water dependent uses (e.g. retail stores, condominiums, etc.)

Recently, a conflict arose concerning a proposal to dispose of dredge spoils from the Piscataqua River to an approved site in State waters. The problem is that the vessel-traffic route that the U.S. Army Corps of Engineers has proposed for the barges transporting the dredge spoils traverses lobstering grounds. The fishing community opposed the proposed route claiming the barges could destroy thousands of dollars worth of fixed lobster gear. The Department of Marine Resources (DMR) has served as a conduit of information between the affected fishing community and the Corps and has facilitated negotiations between the two parties. A tentative agreement has been reached on an alternative route which appears to have satisfied both parties for the time being.

Various other actions have been taken by State and local governments in Maine to resolve water use conflicts:

1. Water dependent uses were given priority consideration over non-water dependent uses by P.L 794.

2. Coastal locations suitable for water dependent uses were identified and mapped under the Coastal Program; non-water dependent uses may be prohibited in these areas.

3. The Coastal Program assisted with creation of the Maine Marine Alliance to help a group of diverse organizations to work in concert to resolve conflicts and protect and promote their common marine interests.

4. A number of municipalities currently are preparing harbor management plans which will be used as the basis for zoning land and water areas and uses.

5. The State Planning Office currently is conducting a multiple-use planning analysis of the State's marine waters with a view toward developing the framework for a comprehensive State marine policy. The initial objectives of the analysis are: (a) to provide a review and summary of the activities occurring in the State's marine waters and the State's role in managing those activities; (b) to identify multiple-use conflicts and management deficiencies in the existing structure; and (c) to

provide recommendations on improving the existing management structure and efficiently allocating benefits derived from the resources.

2. How is your state, and specifically how is the coastal program, involved in innovative means of managing uses in Federal waters, e.g., Federal review, issues-specific task forces, memoranda with Federal agencies?

The State, through the Coastal Program continues to participate in the Department of the Interior's Outer Continental Shelf Policy Committee and the Regional Technical Working Group to resolve any potential conflicts regarding the OCS.

A Corps of Engineers Maine State General Permit was renewed effective May 6, 1988 to run to May 1993 (reproduced below). The General Permit covers specified types of cases under Section 10 of the Rivers and Harbors Act and Section 404 of the Clean Water Act. Under it the Corps reviews permit application files at the DEP and LURC every month or six weeks to identify cases where the Corps has jurisdiction. It is then determined whether the Corps' Nationwide Permit or the Maine State Program General Permit applies, or whether an individual permit is required. No separate application or other action is required of the applicant unless notified by the Corps, for example if it should require additional information. (Previously the Corps and the DEP used a joint permit application form, but this is now superceded by the DEP's Natural Resource Protection Act application form and procedures under the General Permit.)

F. Public Access

1. Describe your State's CZM and non-CZM efforts to enhance coastal public access through land acquisition, construction projects, and planning during the past year. What innovative techniques have been used to increase public access? Please provide the CZM and non-CZM funding (federal, state, and/or local) used on coastal public access efforts. This should include at a minimum, the number of projects by project type and any quantitative information available. For example, public and/or private investment as a result of 306A and non-CZM projects, increased number of visitor days, acres or miles of shoreline acquired for public access should be provided if available.

Public access opportunities come in many shapes and sizes. For example, they can be coastal State parks, regional all-tide boat ramps, local boat slips or paths for local fishermen. The State of Maine's efforts in enhancing public access to the coast actually involve a variety of CZM and non-CZM funded programs, each designed to improve some type of coastal access opportunities. As a result there is actually a network of State coastal access programs which as a whole addresses access in a comprehensive fashion.

The State's involvement in coastal public access can be categorized into four general functions: public access planning; public access acquisition; institutional improvement of public access opportunities; and discovery of existing, but unused, access opportunities. The Maine Coastal Program, through its Coastal Access Coordinator (State-funded position) facilitates and provides for coordination of programs falling under these four categories in order to bring about an integrated and comprehensive approach to providing public access opportunities.

Coastal Public Access planning occurs at many levels in Maine including the following programs:

* Coastal Access Coordination Program at SPO provides statewide access inventory and resource data to local and regional planners and is responsible for access needs analysis over the entire coast.

* The Department of Economic and Community Development provides technical assistance and administers waterfront planning grants to support local coastal access planning (CZM funded) and administers the Comprehensive Planning Act which requires access components in local comprehensive plans (non-CZM program).

* The regional planning commissions who through the coastal access coordinators (CZM funded) provide assistance to local planners and provide localized input to State planning efforts.

Coastal Public Access acquisition activities occur through a number of State program activities including:

* The Federal Land and Water Conservation Fund administered by DECD.

* Waterfront Action Grants (CZM funded) administered by DECD.

* Federal Wallop-Breaux sport fishing access funds administered by the Department of Inland Fisheries and Wildlife.

* The Facilities for Boating Fund (non-CZM) Administered by the Bureau of Parks and Recreation.

* The Land for Maine's Future Board (non-CZM) which to date has committed to acquiring $ 6.1 million worth of land which will provide direct coastal access for the public.

Activities involving institutional improvement of public access opportunities are not attributable to any one agency program because they are more amorphous in nature and often involve only subtle day to day activities. While this can involve many State agencies, the Coastal Program primarily through its Coastal Access Coordinator approaches institutional arrangements across State government with an eye toward improving coastal access. Examples of such activities include:

* Periodic evaluation of laws and regulations to determine if they can be amended to improve public access opportunities.

* Efforts during legislative activities and rulemaking to support provisions in legislation, regulations and other policy statements that improve access opportunities. For example, the Coastal Program's input was involved in the recent formation of submerged lands leasing policies by the Bureau of Public Lands which affirmatively support and protect coastal public access opportunities.

Coastal access discovery programs are aimed at finding access opportunities that may exist legally but have been forgotten or unused. A number of coastal communities and regions have undertaken public access discovery efforts in the past, some funded by CZM through planning grants, but these programs were designed individually and so success was mixed. Recently the Coastal Program completed its own pilot right of way discovery program involving nine coastal communities. This program resulted in some important products including:

* A number of rediscovered ROW's (16 confirmed and 11 requiring further legal inquiry out of a total 37 sites investigated) which the towns can reclaim, plan for, and, if necessary, record.

* A demonstration to other towns of the value of such a program. Hopefully this program will show that finding and reclaiming current public holdings can be more efficient than buying new sites to satisfy access needs.

* The instructional handbook for communities who want to undertake ROW discovery projects in the future.

Four new boat launch sites (about 8 acres total) were acquired in the past two years through the Facilities for Boating Program, bringing the total number of the program's coastal boat launch projects to 53. Three new coastal sites totalling 25 acres were acquired through Waterfront Action grants. Through the Land for Maine's Future Fund a total of over 2000 acres was acquired with over 10,000 feet of combined coastal frontage.

2. What percentage of your State's coastal zone has been inventoried to determine existing public rights-of-way since the beginning of the CZM program? How many public rights-of-way have been identified? How has the state informed the public of the existence of these areas?

Essentially 100 percent of Maine's coastal zone has been inventoried. Last year, data from a 1978 coast-wide public access survey by the State Planning Office was combined with access site data from more current local and regional inventories to form a State data base file of coastal access sites. This past year the data was reviewed for accuracy by each coastal community. All resulting updates and changes have been made in the data base.

The access inventory identifies 682 publicly owned access sites in coastal communities. All access sites identified in the inventory have also been delineated on maps of each coastal municipality. With the inventory update, the maps also were updated and will be distributed to the towns, regional planning commissions, DECD and other relevant agencies before the end of this year.

3. Does the state have a recent coastal public access guide? If so, please attach a copy.

A comprehensive coastal public access guide is not available for Maine. However, major access sites are indicated in the Maine Atlas and Gazetteer recently published in a 1989 edition by DeLorme Publishing Company.

Wells again to seek public access to Moody Beach

By DIRK BEVERIDGE KJ
Associated Press Writer 8/25-7/89

PORTLAND — The town of Wells plans to try once more to persuade Moody Beach property owners to open the sandy shore to the public before making moves to buy the beach, town manager Jonathan Carter said Friday.

"We will be sitting down with homeowners, and we will be trying to negotiate the right to use that beach in 1990," Carter told a symposium on Moody Beach at the University of Maine School of Law.

The town last sought public access to the beach in the spring, shortly after the Maine supreme court ruled in March that the landowners could keep sunbathers and strollers off the mile-long stretch. Homeowners resoundingly turned down the offer and accused Wells of trying to act like the victor and not the loser at the end of the drawn-out legal battle.

Since then, Wells has hired an appraiser to place a value on the oceanfront property of 10 of the 126 lots on Moody Beach. Carter said Friday that the initial appraisals will be in by September.

After that, town officials will meet with the landowners. If no agreement is reached, the town will look into buying the beach next spring, Carter said.

One of the more vocal landowners, Dr. Warren Jones, said the property owners were being treated differently from people who own any other type of land.

"We, the owners of this land, have been deprived of our rights to use and enjoy our property," Jones said from the audience at an afternoon discussion that was part of the all-day symposium.

Carter said that the intense national publicity given the Moody Beach case has cut back much of the public's interest in the beach, although he said crowds of people have gathered this summer along three narrow access points owned by the town.

"We've got calls that want lifeguards on those three access points," he said.

Appraiser estimates Moody Beach would cost town $6.5 million

By BRENT MACEY PPH 11/15/89
Staff Writer

WELLS — The cost of purchasing a 790-foot section of beach in front of 10 separate private lots on Moody Beach is estimated at $516,000, according to appraisal figures released by Wells selectmen Tuesday.

The figures, compiled by appraiser Norman A. Gosline of Gardiner, suggest that purchasing the entire mile of sandy beach could cost the town as much as $6.5 million.

Because of the high cost of beach, selectmen suggested Tuesday they would favor negotiations with landowners along the beach with a view to obtaining public access to the beach.

The consensus followed a surprise announcement during the meeting as Selectman Chairman Wayne Chase revealed the town has been negotiating with a group of beachfront property owners since October.

Town Manager Jonathan Carter said those negotiations have included the possibility of the landowners granting the town a recreational license to use the beach.

The beach, long considered public, was declared private property by the state Supreme Court last March after 30 beachfront property owners sued the town in 1984, complaining town officials were not responsive to their complaints of unruly behavior on the beach.

That ruling, based on a 17th-century colonial ordinance, gives the public the right to fish, birdhunt and navigate along the seawall and low tide.

In hopes of gaining public control of the beach, but only in that portion between the seawall and low tide, the town hired Gosline to determine if the outright purchase of the beach would be feasible.

Chase said selectmen are obligated to bring the question of the beach purchase to voters at the next annual town meeting.

Selectmen suggested they would not recommend the purchase in light of the figures, which Chase said he was surprised to see.

"We're not prepared to comment (on what the next step will be) because the figures are as new to us as they are to you," Selectmen suggested they would prefer to negotiate with landowners over the possibility of obtaining a recreational license. None of the selectmen suggested the cease-None of the selectmen suggested the negotiations be stopped.

To close them down now would be premature at this point," said Selectman Paul Littlefield.

A group of property owners at the meeting also favored continuing negotiations.

"I think it's time that we get back to where we were before (the lawsuit) to open communications," said Cecil "Bill" Cad well of Newton, Mass.

Last summer, shortly after the town lost the lawsuit, a group of Moody Beach property owners met with selectmen and "steadfastly" refused to negotiate an agreement allowing the public to use the beach.

Since that meeting, occurred, a new group of property owners called the Friends of Moody Beach has formed.

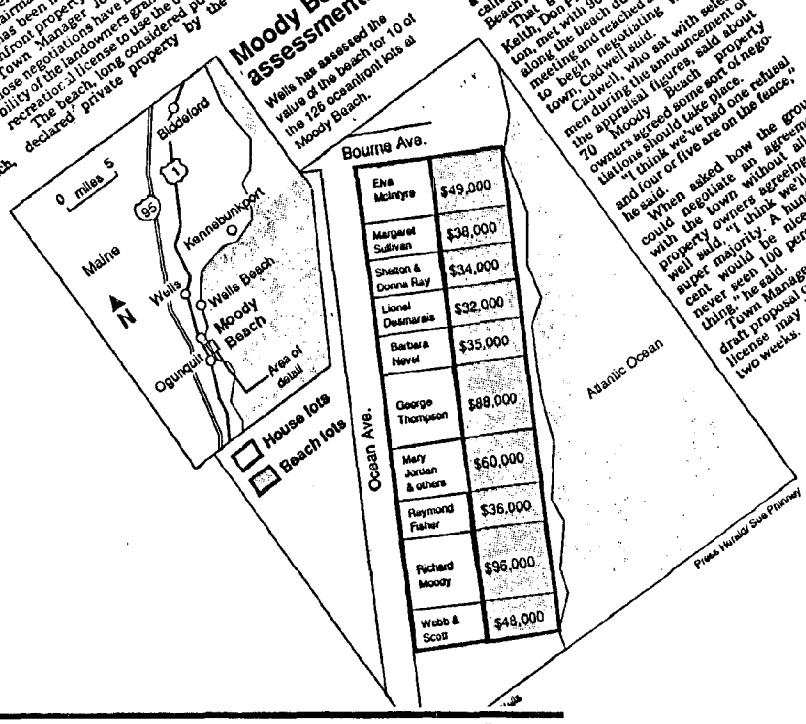
That group, started by Bill Keith, Don Platt and Mark Hazelton, met with 30 property owners along the beach during its initial meeting and reached a consensus to begin negotiating with the town, Cadwell said.

Cadwell, who sat with selectmen during the announcement of the appraisal figures, said about 70 Moody Beach property owners agreed some sort of negotiations should take place.

"I think we've had one refusal and four or five are on the fence," he said.

When asked how the group could negotiate an agreement with the town without all the property owners agreeing, Cadwell said, "I think we'll have a super majority. A hundred percent would be nice, but I've never seen 100 percent on anything," he said.

Town Manager Carter, said a draft proposal of the recreational license may be available with two weeks.



Ena McIntyre	$49,000
Margaret Sullivan	$38,000
Shelton & Donna Ray	$34,000
Lionel Desmarais	$32,000
Barbara Nevid	$35,000
George Thompson	$88,000
Mary Jordan & others	$60,000
Raymond Fisher	$36,000
Richard Moody	$96,000
Webb & Scott	$48,000

Moody Beach compromise sought in Wells

WELLS (AP) — It would cost the town $516,000 to buy property on Moody Beach and restore public access, but town officials hope a compromise with landowners will avoid the need to spend any money.

Town Manager Jonathan Carter told a news conference Tuesday night that efforts were underway to reach agreement with property owners to allow public access to the sandy shore as long as the privilege is not abused.

More than 50 property owners have joined the Friends of Moody Beach and begun negotiations on a "recreational license" for the town, Carter said. There are 126 landowners with frontage on the Beach.

A state supreme court ruling earlier this year restricted public recreational rights to the mile-long strip of sand.

The town then hired an appraiser to study the value of 10 beachfront properties and develop estimates, in case the town were to buy the land, perhaps through eminent domain.

Appraiser Norman Gosline of Gardiner said the properties ranged in value from $400,000 to $1.1 million. The beach is worth 8 percent of the property value, and that is the amount the town would pay, Carter said Tuesday. KJ 11/15/89

But he added that, "We're kind of playing down the appraisals and playing up the cooperative nature" of the compromise. "Many of these people, as well as the board of selectmen, want to move forward with this and put the past behind us."

In a decision based on a 17th-century colonial ordinance, the divided court ruled this year that public rights in the area of the beach between the seawall and low tide are limited to fishing, bird hunting and navigation.

The court rejected the appeal that the rights be updated to include swimming and sunbathing, favorite pastimes of tourists who converge on Wells each summer.

2,100 Acres Offered to Land for Maine's Future Board

Conservation Group to Purchase 12,100 Acres of Downeast Property

ELLSWORTH AMERICAN 11/9/89 P.1

By Mary Anne Clancy

For the third time in as many years, a conservation group has intervened to protect a piece of the Cutler coastline from possible development.

The Conservation Fund of Virginia and the Maine Coast Heritage Trust (MCHT) announced this week that the Virginia-based group will purchase 12,100 acres of Cutler and Whiting, including four miles of shoreline, from the Hearst Corporation's Down East Timberlands Division.

"The property, consisting of two adjacent parcels is one of the largest privately-owned undeveloped tracts in Washington County," stated MCHT and the Conservation Fund in a joint press release. "It is located on a piece of shoreline stretching from Cutler to Lubec. Often referred to as the Bold Coast, the parcels contain a unique variety of geological and ecological features including coastal cliffs, cobble beaches, unusual volcanic formations, raised peat bogs, rare plant species and has uncommonly large populations of whales, bald eagles, ospreys, and other birds and mammals."

If all goes according to plan, the Fund will sell 2,100 of those acres, including the shoreline, to the State of Maine through the Land For Maine's Future Board (LMFB) and MCHT will lease the remaining acreage from the Fund.

The Land for Maine's Future Board will vote on the acquisition at its Nov. 13 meeting in Augusta.

The Fund's announcement ends months of speculation that began when the Hearst Corporation decided to sell its Maine timberlands last spring.

According to Jay Espy, the president of MCHT, his organization approached the Virginia conservation group when it learned of the Hearst decision.

"At that time, we had purchased Boot Head and Western Head (in Cutler) and we were aware that this (Hearst) piece was the largest and perhaps the best," said Espy.

The Hearst announcement also caught the attention of the staff of LMFB, according to staff planner Lissa Widoff.

"We have been interested in more than just the Cutler piece, but that is the best," said Widoff, referring to Hearst's holdings in other parts of Washington County. "I went out and looked at the property and developed a proposal for the board."

Widoff said that, because MCHT and the Conservation Fund had initiated conversations with the Hearst Corporation and LMFB knew that a conservation entity was interested in purchasing it, it did not compete.

She is hopeful, however, that the LMFB will accept the Fund's offer to sell 2100 acres to the state for $2.5 million.

"If the state owns it, the state must respond to the needs and desires of the people of Maine," she said. "The Fund is responsible to its constituents. We are in a better position to integrate state ownership with a local or regional perspective."

Widoff says that if LMFB approves the purchase from the $35 million bond approved for such purchases by voters in 1987, the land "will be available for all of the people of Maine to enjoy."

"This is the kind of property that people voted for in the first place," she said.

The Washington County Alliance (WCA), a group organized in the spring of 1988 to fight the possible designation of the Cutler-Lubec coastline as a national park, sees it differently.

"A very large parcel of land, including half the town of Cutler and part of Whiting, is being acquired by the state and out-of-state environmentalist interests," states the WCA in a Nov. 6 news release. "There has been no public involvement by local residents or town officials."

The release goes on to say that "by using MCHT and the Conservation Fund to arrange the acquisition, LMFB has evaded public accountability for the proceedings."

"Local aproval is required for such large (LMFB) acquisitions, but town officials have not been consulted or even notified," states the WCA.

The alliance also charges that the head of the Conservation Fund "has a history of secretly buying up large tracts of land in rural areas for federal park development, acting as a front man for the Park Service" and gives, as an example of this charge, Washington County, Maryland.

Both Widoff and Espy are perplexed by the WCA's reaction.

"You don't negotiate a sale in public,"says Espy referring to the Fund's discussions with Hearst.

Espy says that the MCHT management plan for the 10,000 acres it leases will be developed with Cutler residents and Washington County and state officials as well as MCHT and the Conservation Fund.

The MCHT piece, according to Espy, lies to the west of Route 191 behind the town of Cutler and extends north to the Cutler-Whiting line.

The piece proposed for state purchase runs from Route 191 to the water.

MCHT's current plans include use of the acreage for recreation and continued timber harvesting, according to the Down East Timberlands harvesting plans.

The company has been harvesting the area on a regime that continues through 1993, according to Espy.

"The 10,000 acres will be held in private hands," he said. "If the Hearst Corporation sold to a private developer, would the town of Cutler have input into use of that land? I think not."

When asked if MCHT or the Fund would consider the area as a possible federal park, Espy said "unequivocally, no."

"MCHT's stated intention has been to manage our lands there (in Cutler) for the people of Washington County," he said. "Boot Head and Western Head both have three miles of shore frontage and both are available for low-impact recreation. As far as I'm concerned, the quality of life of Washington County is tied to the land base and if that land base is no longer available to Washington County residents, that quality of life is doomed."

Widoff is also adamant when questioned about the possibility of a federal park.

"I can say that for many, many reasons, we agree that it should not be a national park," she said. "With state ownership, we have the ability to control that and the arrangement between MCHT and the Conservation Fund is specifically based on looking at that control."

Widoff says that the WCA is mistaken when it charges that LMFB must obtain local approval before proceeding with a purchase.

"There's provision in our law that requires, if an assessed value of an acquisition is one percent or more of a town's valuation, we must have municipal approval. Since that land has been in tree growth, its assessed value is less than one percent of the valuation."

According to state figures, Cutler's 1989 valuation is $12,550,000.

Widoff says that Cutler residents will have the opportunity to comment at the Nov. 13 LMFB meeting or in writing to the board before that meeting.

During that meeting, LMFB will also consider the purchase of Mount Kineo on Moosehead Lake and Sandy Point Beach in Stockton Springs.

Should the board approve the purchase of the 2,100 acres in Cutler, it will mark the second purchase of Washington County property by the LMFB.

In August, LMFB purchased the 90-acre coastal headland of Shackford Head in Eastport.

That property is managed by the Bureau of Parks and Recreation and Widoff said that the Cutler piece, if approved, will also be managed by the Department of Conservation's Bureau of Public Lands.

Town favored in dispute over fences at Old Orchard Beach

PORTLAND (AP) — The state Supreme Judicial Court sided Monday with Old Orchard Beach in a dispute over fences put up to protect dune grass on the town's popular sandy shore.

Beachfront property owners who were angered when the town put fences around the grass seedlings, limiting access to the beach, had no legal cause to stop the fencing, the unanimous justices ruled.

"I don't think the people in Old Orchard got a fair shake from the town," said attorney James L. Audiffred of Saco, who represented the property owners. "I'm disappointed in the outcome, but I did my best."

The town in April began the fencing and the seeding of the dune grass as part of its beach management plan. The seeding was done on an area four-tenths of a mile long and 50 feet wide.

Property owners Claudette Trautvetter, Carl Trautvetter, George Ouellette, Thomas Donovan and Odette Dubuc complained that their access to the beach, which previously was unrestricted, was limited to 10 pathways through the fenced area.

A York County Superior Court judge threw out the complaint. The unanimous supreme court justices upheld that decision Monday.

The court said that the property owners were trying to claim superior access rights to those enjoyed by other property owners in Old Orchard Beach, but the justices wrote that as a general rule, municipalities are "not required to provide abutting owners access to a public park different from that provided to the general public."

The attorney for the town, Catherine O'Connor of Portland, said the sand dunes, which are designed to retain sand and make the beach bigger, will be vital to Old Orchard Beach.

"It's in the long-term best interests of the town to protect the beach, which is its greatest asset," Ms. O'Connor said.

But Audiffred said there might have been better ways to protect the beach, and he said some experts believe there is no way for humans to influence beaches in the long run anyway.

G. Urban Waterfronts and Ports

1. What are the major problems (both environmental and economic) concerning harbors and urban waterfronts in your coastal zone? How have you addressed the problems? Please give examples.

Maine's major problems concerning harbors and urban waterfronts are: maintaining and improving water quality as the number and diversity of users continue to grow; balancing traditional water dependent uses and non-water dependent uses; conserving the State's coastal heritage (promoting urban waterfront revitalization in a manner which will maintain the unique Maine flavor which is a primary impetus for tourism, a major component of the State economy); and managing growth and diversity in the face of escalating costs of waterfront real estate.

As population and usage of Maine's harbors and ports have increased over the past decades, water quality has declined. Casco Bay in highly populated and industrialized southern Maine was recently reported to have serious water quality problems. Levels of bacteria, toxic and nutrient agents have been identified along with sources, such as industrial discharges, boating and related toxic materials, petroleum conveyance, stormwater runoff, combination storm and sanitary sewers, overboard discharges, etc. Similar problems been reported elsewhere along the Maine coast.

The demand for coastal waterfront for all types of purposes is growing, especially in southern and mid-coastal Maine where increasing population and development are occurring. High-value non-water dependent uses such as condominiums are tending to displace traditional water dependent marine industries, the so-called "gentrification" of the waterfront.

The existing marine infrastructure all along the coast is ageing, new facilities are needed, channels and anchorages need improvements made as well as maintenance dredging. Federally assisted projects require a larger local cost share than formerly. Maine's commercial fishing and marine industries are divided up between many small towns rather than a few large affluent harbors. The result is that diminishing federal assistance is putting needed facilities out of their individual financial reach, and State assistance is needed.

These issues are being addressed through a wide variety of methods. Recommendations have been made for improving Casco Bay water quality, for example, including its nomination to the National Estuary Program, and a specific action program is underway.

The Coastal Program is helping to support the Marine Monitoring Program established by the 1988 legislature in the DEP's Bureau of Water Quality Control, which developed the Casco

Bay action plan, and which is examining heavy metals and organic compounds in mollusks, fish tissues and sediments from Maine's marine waters, in an effort to identify and ultimately control their land based sources. A marine pollution baseline is being established for coastal Maine by obtaining and analyzing sediment samples for Kittery, Casco Bay, Boothbay Harbor, Machias Bay, Jonesport and other areas.

To help prevent further displacement of water dependent operations the State passed legislation establishing the policy that marine uses -- such as boat yards, commercial fishing operations, marinas and waterborne commerce -- should receive priority in shoreline siting decisions over uses such as condominiums and restaurants which do not depend on the water. This policy is reflected in proposed new mandatory guidelines for Shoreland Zoning ordinances, and in the leasing of State-owned submerged lands by the Bureau of Public Lands. The policy is supported by a cooperative SPO/DECD project under which maps were prepared showing existing and prime water dependent use sites in all coastal cities and towns (see Protecting Prime Sites for Water Dependent Uses, SPO and DECD, March 1989).

The City of Portland has highly diverse waterfront uses, including commercial shipping, cruise ships, pleasure boats, fishing vessels, oil terminals, drydocks and other ship-repair facilities. The City established a marine zone in its zoning ordinance to reserve a large portion of its harbor frontage exclusively for such water dependent uses.

Efforts to revitalize waterfronts have included State and local funding for seven new fish piers to land and process Maine's growing fishing industry, planned with Coastal Program support. The Portland Fish Pier became home of the Portland Fish Exchange, the first of its kind in the nation, which has greatly enhanced the quality of fish available to consumers and improved prices for fishermen. Other waterfront facilities such as parks and access facilities also have been funded through the Coastal Program.

In April, 1989 the Governor issued an Executive Order to Establish an Interagency Task Force on Marine Infrastructure (No. 11 FY88-89). The Task Force is charged with recommending methods to protect that portion of the marine infrastructure that is essential to survival of commercial marine industries, particularly from the standpoints of project permitting under the State's environmental laws and the leasing of State-owned submerged land.

The Task Force complements a comprehensive coastwide Marine Infrastructure Needs Study currently underway under the aegis of the Coastal Program. The Needs Study will recommend project priorities and funding sources; it will be the basis for providing State funding assistance for deserving local harbor and waterfront projects, hopefully to be backed up by a voter-approved bond issue.

The State recently passed its Comprehensive Planning and Growth Management Law, under which are required to plan for appropriate waterfront land uses and develop implementing ordinances. Under the new Harbor Management Act specific water areas can be zoned and supporting harbor ordinances adopted.

The DECD Office of Comprehensive Planning has an aggressive program of local technical assistance for harbor and waterfront planning and zoning. It also supports the coastal Regional Councils for the same purpose, together with administering local planning and Waterfront Action Grants. In November it hosted a two-day waterfront conference which drew over 200 local officials to explore the full range of waterfront and harbor issues and solutions.

John R. McKernan, Jr.
Governor

C. Edwin Meadows
Commissioner

DEPARTMENT OF CONSERVATION
Telephone (207) 289-3061

November 7, 1989

Dear Harbormaster or Town Official:

In 1988, the Maine State Legislature enacted several changes in the State Harbor Master Law, 38 M.R.S.A. Chapter 1. One provision of this law, Section 7-A, has led to some confusion about mooring allocation requirements. As a result some towns have come into conflict with requirements of the Army Corps of Engineers over assignment of moorings on the basis of residency.

The Harbor Master Law directs that, if the available mooring spaces are not assigned, the harbor master must assign a mooring to any boat owner who requests one for personal use. Section 7-A states that if the harbor master (or other town official) has to turn the applicant down, that person must be put on a waiting list.

Section 7-A also describes how to allocate moorings to nonresidents to insure that nonresidents will not be denied access to Maine's harbors. The Law indicates that a harbor should have at least 10% of its moorings assigned to nonresident commercial boaters and an additional 10% assigned to nonresident pleasure boaters. These figures were not intended to serve as caps or limits on the number of nonresident moorings in a harbor.

A recent informal survey of Maine harbors by the State's Department of Economic and Community Development found that a majority of Maine's harbors already have more than 10% of their moorings in use by nonresident pleasure boaters. Only a few have 10% or more in use by nonresident commercial boaters, but apparently demand by non-resident commercial operators is quite low.

It appears that very few of Maine's harbors need to take any special action to increase the number of nonresident moorings in their harbors; either they are already there, or there is not a high enough level of demand by nonresidents.

However, even if your harbor already meets the state requirement of 10% or more of its moorings assigned to nonresidents, you should be aware that discrimination against new nonresident applicants is potentially a violation of the U.S. Constitution, which guarantees equal rights and privileges to all citizens of the United States. To discriminate on the basis of residency opens your community to the possibility of denial of

Thomas A. Morrison, *Director*, Bureau of Public Lands
State House Station 22, Augusta, Maine 04333 — *Offices Located at* AMHI, Harlow Building

assistance or funding from Federal agencies, and perhaps even a lawsuit from an aggrieved applicant.

The simplest, safest, and most equitable solution is to make sure your harbor ordinances do not discriminate on the basis of residency. You may charge higher fees for nonresidents in lieu of local tax payments for harbor services, up to a maximum of 5 times the amount charged to residents, but you cannot exclude nonresidents from your harbor or your harbor waiting list. You can develop ordinances that are designed to protect your harbor; for example, you may want to favor certain types of uses, such as commercial fishing, or limit boat size in certain areas. As long as you can demonstrate that there is justification for your actions, local ordinances can be tailored to meet the needs of your waterfront community and businesses.

For those towns whose harbors are large enough or not yet crowded enough, moorings are not a problem at this time. For others though, limited harbor space is already a major concern. The solution may be a harbor management plan that deals with this and other important harbor management issues.

Through harbor management planning you can determine how to safely accommodate the needs of all boaters in your harbor, the most efficient distribution of moorings, and the best ways to protect your harbors valuable resources, such as commercial fishing, scenic beauty, fish and shellfish stock, wildlife, and safe navigation. Many of these issues will be discussed at a workshop for local officials, Managing Maine's Harbors and Waterfronts, to be held at the Samoset Conference Center in Rockport on November 20-21. To learn more about the workshop, or to find out more about harbor planning, contact the Maine Department of Economic and Community Development, Office of Comprehensive Planning, at 289-6800.

Attached for your information is a brief summary of the mooring allocation requirements of Maine's Harbor Master law. An 85 page handbook that examines and explains the entire law is available for $5.00 from the University of Maine Cooperative Extension, 9 Coburn Hall, University of Maine, Orono, ME 04469.

If you have any questions about the Harbor Master Law or Maine's Submerged Land Law, please contact me or Carol DiBello at the Bureau of Public Lands, State House Station #22, Augusta, Maine 04333, Telephone 289-3061.

Sincerely,

Stephen Oliveri

STEPHEN OLIVERI
Resource Administrator

MOORINGS AND RESIDENCY

A brief explanation of the mooring allocation requirements of Maine's Harbor Master Law:

If your harbor has room for additional moorings, you must assign a mooring to any boat owner who applies for one unless there are valid reasons for denial. You cannot decline to issue a mooring without a good reason. An applicant's place of residence can not be a basis for denial.

If your harbor does not have room for additional moorings, you must place the applicant's name on a waiting list.

When spaces become available, they must be assigned to persons on the waiting list. If there are less than 10% nonresident moorings in your harbor, and there are nonresidents on your waiting list, you must assign any available moorings to the nonresidents on your list until you reach the 10% level. This applies to both commercial and pleasure boaters.

However, to be in compliance with Federal requirements, once you have achieved the level of 10% nonresidents, you must assign moorings to persons on your waiting list in a nondiscriminatory fashion. You cannot refuse a mooring to a nonresident just because your harbor has 10% or more of its moorings already in use by nonresidents.

This summary is intended for general information only, for complete details refer to the Harbor Master Law, 38 M.R.S.A. Chapter 1, Subchapter 1.

For more information on Maine's Harbor Master Law or Submerged Lands Law contact the Bureau of Public Lands, State House Station #22, Augusta, Maine 04333, telephone (207) 289-3061.

An 85 page guide to the State Harbor Master Law is available for $5.00 from the University of Maine Cooperative Extension, 9 Coburn Hall, University of Maine, Orono ME 04469.

Mooring Assignment Policies Under Attack by Feds

The U.S. Army Corps of Engineers has been taking particular exception to mooring assignment policies adopted by Maine municipalities which give arbitrary preference to residents. One example of such a policy would be an unguided priority system giving preference to residents owning either commercial or noncommercial vessels. Ironically, another example of an arbitrary assignment policy would be a quota system established pursuant to 38 MRSA § 7-A, which requires harbor masters to issue mooring assignments to nonresidents, either in the commercial or noncommercial vessel category, when nonresidents are on a waiting list for a mooring assignment and less than 10% of the harbor's moorings are presently allocated to nonresidents. One problem with this law is the *implication* that it is permissible to limit nonresident mooring assignments to 10% of total assignments. Despite this implication, any system which would arbitrarily restrict nonresidents from gaining access to moorings would be legally suspect.

The Legislature's attempts to prohibit arbitrary discrimination against nonresidents in the allocation of public resources began with PL 1985, chapter 259 (effective date September 19, 1985), which amended 12 MRSA § 6671 to require the reservation of 10% of available shellfish harvesting licenses to nonresidents. The stated purpose was "to guarantee the access of nonresident clam diggers to the soft-shell clam resource of the State." Shortly thereafter, the Legislature established the 10% minimum nonresident mooring assignment quota with PL 1985, Chapter 692 (effective date April 15, 1986). It is clear that these amendments were enacted as "affirmative action" laws to curb municipalities from reserving public resources for town residents only. The laws were not enacted to establish arbitrary quota systems.

While protectionism may be understandable from a political point of view, both the U.S. and Maine Constitutions guarantee equal protection under law. It is because of the constitutional equal protection clause that ordinances which might have the effect of discriminating against one person or group of people over another must be able to articulate a rational basis for such discrimination. There is no apparent rational basis for a 10% nonresident mooring assignment quota system.

Available evidence suggests that only a fraction of Maine harbors have waiting lists for moorings, and that all of those harbors have substantially more than 10% allocated to nonresidents. Therefore, MMA is advising municipalities to review their mooring assignment policies or ordinances to ensure that there is a rational basis for all provisions which have the effect of discriminating against nonresidents. The 10% nonresident allocation should be construed as a minimum and not a maximum.

Federal and state authorities and MMA are continuing to discuss the various mooring assignment policies which would not have the effect of unfairly discriminating against nonresidents. One would be simply "first come/first served"; the allocation process would be blind as to residency, though separate waiting lists could be established for commercial and noncommercial vessels. Another possibility is a priority system based on type of vessel; commercial fishing vessels, other commercial vessels, noncommercial vessels, rental moorings, etc. could be given priorities up to a certain percentage of mooring spaces per type. Both allocation policies would necessarily discriminate against some applicants, but the regulation would have some rational basis. Until 38 MRSA § 7-A is amended or repealed, however, these assignment policies would also have to be monitored to ensure that there is minimal conformity to the 10% nonresident allocation system described in 38 MRSA § 7-A.

Another component of the mooring assignment issue concerns resident versus nonresident mooring permit fees. Again, 38 MRSA § 7-A requires that nonresident fees "shall be reasonable in relation to the costs involved in providing that mooring and shall not exceed 5 times the amount charged to residents." As with the mooring assignment policy generally, this limitation is arbitrary and should not be construed as permission to charge nonresidents 5 times the fee charged to residents. While it is clear that municipalities may charge higher fees to individuals who are assessed no property taxes when the local cost of managing a harbor is financed in whole or in part through property taxes, the degree of disparity between resident and nonresident fees should be directly linked to the degree harbor management is financially supported by taxation. If the local cost of harbor management is supported entirely by permit fees, there would be no rational basis for charging nonresidents higher rates.

The Army Corp of Engineers has recently developed a statement which it intends to incorporate into future navigation reports used to evaluate its harbor improvement projects. That statement reads:

> A management system shall be considered acceptable provided that it:
>
> — Makes no arbitrary distinction or requirement of any kind in allocating use of the project and ancillary facilities and services to the public except as may be consistent with the purpose for which the project was constructed.
>
> — Does not impose arbitrary fees or arbitrary variations in fees among users. The cost of providing necessary management and ancillary facilities and services may be offset through equitable user fees based on the actual costs incurred.
>
> Information pertinent to harbor management—including but not limited to rules and regulations, lists of mooring holders, waiting lists and fee schedules — shall be readily available to the public at all times.

One local process where the foundation for any priority allocation system might be articulated would be the local harbor management plan. This planning effort could be accomplished as part of the municipality's comprehensive plan, or it could be accomplished separately.

The Department of Economic and Community Development (DECD), in its capacity as overseer of the Maine Coastal Program, is willing and interested in assisting municipalities in the adoption of local harbor management plans. In fact, the overall issue of mooring assignment policy and many other issues pertinent to harbor management will be reviewed in depth at a Harbor Management Conference sponsored by DECD's Office of Comprehensive Planning and the University of Maine Cooperative Extension Service. This 2-day conference is scheduled for November 20 and 21 at the Samoset Conference Center in Rockport.

For more information about that conference, contact the Office of Comprehensive Planning at 289-6800.

Sears Island is the answer to Maine's cargo-port problems

Guest Column BDN 10/10/89

By William G. Wadman

Anyone with a concern for the economic state of Maine's maritime industry would do well to spend an hour or two with Bill Fraser at the Mack Point Marine Terminal in Searsport. Fraser is vice president of I.T.O. Corp. of New England and oversees the stevedoring operations of all dry cargo moving across the Bangor and Aroostook Railroad pier at Mack Point.

Today it's a small operation, "hanging on by a thread," according to Fraser, who clearly recalls the boom days of 1976-77 when exports of Maine potatoes saw nine gangs of longshoremen — 180 to 200 workers — toiling seven days a week, making good money that circulated through Maine's coastal economy from Hancock to Washington counties.

That's all changed now. I.T.O.'s permanent staff, including Fraser, numbers three. Vessels come and go, three or four per month, providing sporadic employment for stevedores who handle the newsprint and tapioca powder that continue to be Mack Point's usual commodities. Fraser hires his gangs by seniority and has no problem filing his crews. "They are plenty ready to work," he says.

But work has not been plentiful. Dry cargo across the B&A pier this year has totaled just under 35,000 net tons and generated payrolls of just over $313,000. Tanker traffic at the pier for Irving Oil and the U.S. Air Force continues but provides no employment for dry cargo handlers.

The problem, Fraser points out, is not location; not lack of work force or lack of materials for import and export. The problem is the pier facility itself. The B&A pier was built in the 1920s when ships were smaller, cargoes were smaller and material handling technology consisted of a strong back, small wheels, a cargo net and a donkey engine.

Modern ship-loading facilities, both finger piers and parallel wharves, offer huge storage areas, covered and open, accessibility to rail and truck haulers and shore-based cranes of suitable capacity to handle all types of cargo. At Mack Piont only the rail service is there.

The pier itself is sturdy and is reasonably well-maintained but the limitations are obvious. Long, narrow sheds cover most of it, and when loaded with paper for shipment allow only a narrow center passageway for the specially equipped forklift trucks that handle giant rolls of newsprint. The side aprons of the pier are restrictively short and installation of a crane on the pier would preclude the necessary rail-car use for unloading activity.

Fraser's operation is doubly symied because of storage problems. Manufacturers of the bulk products that are Searsport's bread and butter often require storage at the shipping terminal as they await favorable markets and available ships. At Mack Point the nearest storage area of suitable size is three-quarters of a mile away, meaning that cargo would have to be handled twice, an added cost that shippers avoid whenever possible.

Fraser tells of a recent visit to Canada to see a new cargo facility on the St. Lawrence River at Cacouna near Riviere-du-Loup, financed by the provincial government of Canada. At this half-mile long pier, dimension lumber, some produced by Maine's Great Northern Nekoosa, is delivered to the dock, stored ship-side and loaded with no added transfer or cost. Great Northern, long one of Searsport's best customers, has told Fraser that they now ship as much tonnage through the New Brunswick and Nova Scotia ports of Saint John and Halifax as they do through Searsport. The problem, once again, is lack of storage at Mack Point. Fraser notes that the capacity of his sheds is barely enough for a transfer operation, let alone storage.

Ironically, the solution to all these problems lies just over Fraser's left shoulder as he sits in his World War II Army barracks office at the head of the Bangor and Aroostook pier. It is, of course, the state of Maine's deep-water cargo port on Sears Island, proposed nearly 10 years ago, approved twice by Maine voters and still incomplete because of continued legal action by an environmental group with a very small Maine constituency, the Sierra Club.

Bill Fraser is frustrated. Just over the horizon are ships carrying Maine products loaded in Canadian ports and in Boston. Out there too is the container shuttle vessel Yankee Clipper that stops in Halifax, Saint John, Portsmouth, N.H., Boston and New York. Searsport lacks not only the shoreside crane needed to handle the ships' containers, but also the pier strength to support the crane.

Fraser is willing to hazard educated guesses about operations if and when dry cargo operations move to Sears Island. He sees a four-fold increase in tonnage during just the first year of operation, moving to 200,000 tons from the 50,000 predicted for 1989. Added to the current newsprint and tapioca cargoes would be dimension lumber and very likely wood chips being sought for papermaking in Europe and the Far East.

Employment, predicts Fraser, would be steady and payrolls the first year could reach $2 million, a tremendous shot in the arm not only for I.T.O. longshoremen but for the entire coastal area. As Fraser points out, prosperity in the shipping industry echoes throughout the local economy, from banks to barbershops, from groceries to garages.

He studies Sears Island with its newly built access causeway and remarks that the most disappointing job he'd taken all year was the one that returned to the mainland 2,900 tons of steel purchased for construction of the island terminal. It's stored well inland at Searsport, making no contribution to the Maine economy.

"I just wish," says Bill Fraser, "that everyone in Maine knew what was going on here, what the potential is, and how we could be helping nearly every major manufacturer in Maine with a modern deep-water port. I just wish we could get on with it."

William G. Wadman is administrator of The Maine Advancement Program, a research and public information organization founded and supported by the Maine construction industry. He is also a member of the Maineport Council, a broadly based support organization for the Sears Island Terminal.

Dispute over mooring rule jeopardizes Wood Island dredging

By ERIC WICKLUND JT 7/9/89
Staff Writer

BIDDEFORD — A proposed dredging project near Wood Island is being jeopardized because the city and the U.S. Army Corps of Engineers can't come to an agreement on mooring policies.

City officials say they are adhering to state laws in charging different fees for residents and nonresidents and in establishing prioritized waiting lists for moorings.

But those state laws don't meet with the approval of the Corps, which has a policy of free access to moorings for everyone, regardless of residency.

"It's not something that is consistent with our policy," said Corps spokesman Carl Boutilier. "There is somewhat of a misunderstanding here as to what's open and available, and our policy is clear."

The problem Biddeford faces is not unique; several coastal towns in the state have challenged the Corps policy, which allows the federal agency to cancel dredging projects if the towns have prioritized mooring lists even though the state permits them.

"The state and federal laws do not coincide," said City Solicitor Ed Caron. "Our (policy) is consistent with what the state allows."

"It makes it pretty tough to put us in the position where the state requires one thing and the feds require something else," Caron added. "That's unfair to the city."

The City Council recently revised its ordinance to meet the state's Harbormaster Laws, which were passed in 1987. Caron said the city currently charges $50 per mooring for residents and $250 for nonresidents and keeps a waiting list for moorings which gives priority first to residents.

In order to appease the Corps and many summer residents who own boats, Caron said, the city changed its definition of "resident" to include anyone who owns land in the city or maintains a summer rental.

Caron and City Planner Donald Simard said the city is willing to work with the Corps to come up with a compromise. That may even mean adjusting the ordinance further, Caron said.

"They (Corps) have already said that they'd work with us," he added.

Christopher Hatfield, the Corps planner in charge of the Wood Island project, agreed.

"Right now we're just trying to determine where we want to go," he said. "The city's new harbor management plan does have certain preferences that tend to bother some here, but they can be worked out."

Boutilier maintains the Corps' position will not change. He said the Corps answer to the city — expected sometime this month — "will be a clarification of the Corps policy."

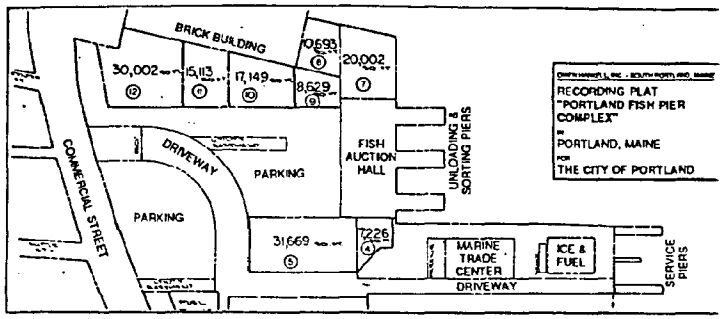
"The state's requirements may be different, but they're not our policies. We would be remiss in not presenting our case," he said.

The Wood Island project calls for the dredging of some 16,000 feet of sand and silt to clear a 10-foot deep channel into Biddeford Pool. City officials say the channel is needed to enable larger fishing boats access to the Pool area, which is a natural harbor.

City and Corps officials, meanwhile, agreed that a maintenance dredging of the Saco River won't be affected by the dispute. Both Caron and Boutilier noted the dredging must be done because the river is an important commercial route between Biddeford/Saco and the Atlantic.

But the Wood Island Harbor project is another matter.

"I know that we're both moving in the right direction," said Hatfield. "I just don't know how much farther we have to go."



City plans speculation building on pier

PORTLAND, ME - A new 50'x80' building could soon be going up on Parcel 11 of the Portland Fish Pier (see diagram). What is unique about the construction is that the building is being built on speculation.

The project was initiated by city officials to draw more fish processing capacity to the pier, which still has at least six sites available for leasing. The state of Maine is lending the city money for construction.

The 4,000-sq-ft building would be nothing more than a shell: a metal skin, two truck bays with roll up doors, a roof, heavy insulation, three-phase electrical service, six double-glazed openable windows, four insulated exterior passage doors, and a graded gravel floor.

Five contractors submitted bids to construct the building. The city's new Fish Pier Authority has until early November to act on those bids. But first, it must hash through questions on how the speculation project should be set up. A Sept. 25 meeting has been scheduled to discuss options.

Up to $250,000 is being made available for the building from the ME Department of Economic and Community Development. But the money is a loan, not a grant. As a stipulation to obtaining the money, the city must sell the building.

The non-profit Greater Portland Public Development Commission is being approached to purchase the building, which would leave open the option of leasing the space to processors who did not want or did not have the financial capability to purchase the building outright.

For more information contact Tom Valleau, the city's director of transportation and waterfront facilities, at (207) 773-1613. ■ CFN 10/89

Boaters not happy with proposed $50 dock fee in Portland

By CLARKE CANFIELD
Guy Gannett Service KJ 11/17/89

PORTLAND — Marina operators and recreational boaters are steaming over a proposal under consideration to charge recreational boaters who dock their boats in Portland Harbor.

A fee schedule has yet to be determined, but a committee of the Board of Harbor Commissioners is looking closely at charging $50 per 50 feet of dock space next year.

Critics say the fees are unfair because only recreational boaters — but not fishermen or commercial vessel operators — will be required to pay to keep their boats at slips or docks in the harbor.

They also question the need for the fees and say boat owners may stop using slips or go elsewhere to rent dock space when the fees go into effect.

"It certainly will influence people's decision on whether to put their boat in a slip or launch it," said Paul Jenson, manager of Spring Point Marina.

Tony Theriault, manager of Channel Crossing Marina, said, "It's discriminatory for one thing. The second thing I'm concerned about is how they're going to spend that money and why."

Harbor Commission Gerard St. Cyr said when the user-fee proposal was initially written, it included provisions to assess fees on all vessels, commercial and recreational, that use the harbor. But when the proposal came out of the Legislature giving the commission the authority to assess user fees earlier this year, only recreational boaters were included.

St. Cyr agreed it is unfair for only recreational boaters to be charged an extra fee for slip or dock space, but said it is the only system in place now.

A Harbor Commission user-fee committee has been meeting with marina operators and others to determine what the fee schedule should be.

"We're tying to work with them as closely as we can to make a bad situation livable," St. Cyr said. "It's the inequality that upsets me."

Steve Hasson said the user fee committee, of which he is chairman, will make a recommendation by the end of the year on what the fees should be, but that they will not be greater than $50 per 50-foot increment of dock space.

He refused to label the new user fee law as unfair.

"I don't know if it's inequitable. . . the powers that be decided the ones who will pay will be recreational boaters," Hasson said.

State Sen. Barbara Gill, R-South Portland, said commercial boats were taken off the list of boats to be assessed because of the "supposed hardships" that now exist in the fishing industry.

The issue of user fees began last year when city officials from South Portland and Portland asked the Harbor Commission to find new ways to generate revenue to fund its growing budget, said St. Cyr. The commission is in charge of regulating the harbor and pays for the office of the harbormaster.

The commission's 1989-90 budget is $99,699, with each city paying $35,500. The remainder is raised through existing permit and mooring fees.

The commission's budget this year is up from about $80,000 in 1988-89. Since 1985-86 the commission's annual spending has more than tripled.

Earlier this year the commission wrote a proposal to assess fees on all boaters who used slips or dock space in the city.

The proposal was then submitted to the Legislature, but by the time it got out of the Committee on Marine Resources and in front of the Legislature as a whole, only recreational boaters were included in the bill.

There are now 958 slips for recreational boats in the harbor, Trefry said. If each slip were assessed $50, the commission would collect $47,900 in fees each year.

The Harbor Commission was created by the Legislature in the first place, so legislators had to vote to give the commission the power to assess fees.

Promoting the port of Portland

Redone marketing study makes new suggestions

PPH 10/26/87

By CLARKE CANFIELD
Staff Writer

To attract more business to the port of Portland, the city should budget $140,000 to $200,000 per year for marketing, establish a waterfront visitors center and perhaps develop a slogan such as "Gateway to Northern New England."

A port marketing study done for the Waterfront Task Force makes those recommendations and others as ways for Portland and South Portland to lure more business to the harbor.

The study, done by Martin O'Connell Associates of Wellesley, Mass., was sent to city officials on Wednesday, two months after an earlier marketing report was criticized by task force members as biased, amateurish and incomplete.

The revised study will be discussed at the task force's meeting next Wednesday morning.

"I think this report is a great improvement over the first draft and that it has useful information," said Portland waterfront director Thomas Valleau. "We've got a pretty good product and I'm interested in seeing what kind of discussion we have at the meeting next Wednesday."

'I think this report is a great improvement over the first draft and that it has useful information.'
— Thomas Valleau

O'Connell was hired last winter for $25,864 — $6,000 of which was paid by South Portland — to develop a plan to promote marine-related services and activities in the port. The revised study is not costing any additional money.

The 62-page report looks at six different aspects of the port: commercial cargo, commercial fishing, passenger ships, tour boats, shipbuilding and repair, and recreational boating.

The study places most of its emphasis on commercial cargo, fishing, passenger ships and tour boats, and concludes that marketing those things will in turn help shipbuilders and recreational boating.

Valleau said he thought the section on commercial cargo was the strongest part of the study.

The study says that to attract container-ship feeder service to Portland, the port must provide the right facilities and develop an image as being competitive in both cost and service. The port also must educate shippers to the benefits of using Portland and must convince one of the two feeder services in New England to start using the port.

The image could be enhanced, the study says, by adopting a slogan that "indicates the port's role in serving Northern New England." Among the slogans suggested in the report were, "personal service to Northern New England"; "serving Northern New England"; "Northern New England's international business partner"; and "your gateway to the world."

The study said a secondary slogan could be developed that "indicates the port's interest in serving Maine companies." Among those were "Maine's own port" and "Maine's link to the world." It also suggested a campaign to educate Maine shippers that "using the port of Portland creates economic benefits for the state of Maine."

The commercial fishing aspect of the study contains no surprises, Valleau said. The study recommends promoting the Portland Fish Exchange throughout the Gulf of Maine and to continue improving the berthing facilities available to fishermen.

The passenger ship section of the study says the port must sell itself to cruise ship operators as an efficient and profitable call that passengers like. The study does not contain a list of cruise ships that stop in other New England ports that might be lured here in the future, but Valleau said a list would probably be compiled soon.

Two cruise ships, the Bermuda Star and the Yorktown Clipper, made stops in Portland last summer.

The study's tour boat section says that nearly 20 tour and charter boats now use the port. The marketing thrust for tour boats should be to increase the utilization of the existing boats rather than attracting new boats to the port, the study says.

The city should consider leasing space for a waterfront visitors' center, the study adds, to increase visitors' awareness of the the different boat services that are available.

Concerning shipbuilding and repair, the study says that Bath Iron Works should continue marketing itself for big ships. The small shipyards and repair services will benefit from other marketing efforts that result in increased use of the harbor.

To help recreational boating, the study suggests more berthing and mooring for pleasure craft.

When the Waterfront Task Force met in late August, members blasted the first report for criticizing the city's ban on non-marine related development, which was approved by voters in a referendum in 1987. Members also complained that the first report offered opinions that were not asked for, such as recommendations that the city create a port authority and buy vacant waterfront land.

The report also failed to document several things that the committee had asked for: data on cargo and fish landings, marketing cost estimates, and strategies to market the port.

The updated report provides data on fish and cargo, and estimates that the city will have to spend between $140,000 and $200,000 a year to properly promote the different areas of the port.

The estimated budget for each port segment, according to the study, would be between $50,000-$70,000 to attract container cargo business; $30,000-$40,000 for commercial fishing; $30,000-$50,000 to attract passenger ships; and $30,000-$40,000 for rent and staff costs for a waterfront visitors' center to promote the harbor tour boat industry.

"This budget could be reduced after the first year or two as the marketing effort would become even more directed," the study concludes. "The exception is for commercial fishing; if efforts to promote the Portland Fish Exchange to buyers are successful, it might be attractive to expand the promotional budget available to increase the geographic coverage."

Marketing the waterfront

• **Commercial cargo:** The marketing of bulk and neobulk commodities should be left to private interests such as Merrill's Marine Terminal. Containerized cargoes should be marketed by attracting a feeder service to the port.

• **Commercial fishing:** The marketing emphasis should be on promoting the Portland Fish Exchange to fishermen in the Gulf of Maine. A secondary emphasis should be to develop new berthing in Portland and South Portland.

• **Passenger ships:** The city should continue to market on an individual basis to cruise lines that already operate in New England. The city should attend cruise industry seminars and conferences and make cosmetic improvements to the International Marine Terminal.

• **Tour boats:** The city should consider creating a waterfront visitors' center to promote available tours. Tour boats should continue to be promoted by local and state tourism agencies.

• **Shipbuilding and repair:** Marketing of major shipbuilding and repair should be left to Bath Iron Works, although the city should assist when needed. Small shipyards will benefit by any efforts that results in increased vessel traffic.

• **Recreational boating:** Portland and South Portland should provide more recreational boat berths and moorings, but should also discourage marine development that will conflict with commercial development.

H. Permit Simplification

1. Identify actions taken by your CZM program to simplify the permit process or other decision-making processes. If possible, quantify any time or cost savings associated with simplification efforts.

Maine's 1988 Natural Resources Protection Law consolidated four resource management laws with overlapping standards -- Coastal Wetlands; Freshwater Wetlands; Great Ponds; and Alteration of Rivers, Streams and Brooks -- in one statute. Administration of the latter was transferred to the DEP from the Dept. of Inland Fisheries and Wildlife. One application form is now submitted to the DEP in place of separate applications previously required under each law, thus minimizing confusion and streamlining review procedures.

To make it possible to conduct certain activities under the Natural Resources Protection Act without the time and expense of filing permit applications, and to help reduce a large backlog of applications at the DEP, the Board of Environmental Protection adopted Permit-by-Rule Regulations, effective February, 1989. The Regulations identify activities that should not significantly affect wetlands and waterbodies if carried out according to prescribed standards, such as minor disturbance of soil adjacent to a wetland or water body or installation of intake pipes or water monitoring devices. They require only that a notice be filed with the DEP. (See "DEP Issue Profile" reproduced below.)

The DEP Land Bureau also developed procedures for pre-application meetings between applicants for DEP permits under the Site Location of Development Act or the Natural Resources Protection Act and Land Bureau staff. (See "DEP Fact Sheet" reproduced below.) The pre-ap meetings promote better project planning and minimize waste effort by both the applicant and the DEP.

See also the discussion of the Corps of Engineers' Maine State Program General Permit under "Ocean and Coastal Use Management."

DEP ISSUE PROFILE
Permit by Rule (NRPA)

revised: March 1989 contact: (207) 289-2111

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Background
Permit-by-rule regulations became effective on February 15, 1989, for certain activities covered under the Natural Resources Protection Act (NRPA). The regulations identify activities taking place in or adjacent to wetlands and waterbodies that should not significantly affect the environment if carried out according to standards contained in the regulations. A person proposing to do work that qualifies for permit by rule is required only to file notice with the Department of Environmental Protection (DEP).

What is the intent of permit by rule?
Permit by rule is intended to save applicants the time and expense of filing a permit application with DEP, while at the same time providing direction in the form of standards as to how a work activity must be carried out.

What activities may be eligible for permit by rule?
The following activities may be eligible:

- disturbance of soil material adjacent to a wetland or waterbody
- placement of intake pipes and water-monitoring devices
- maintenance, repair, and replacement of structures
- placement of moorings
- movement of rocks or vegetation by hand
- placement of outfall pipes (including ditches and drain tile)
- placement of riprap
- construction of crossings (utility lines, pipes, and cables)
- construction of stream crossings (bridges, culverts, and fords)
- maintenance, repair, and minor modification of state transportation facilities

If I propose one of the activities listed above, how do I know if I qualify for permit by rule?
First, you should obtain from DEP copies of the NRPA and the Permit-by-Rule Standards (DEP Rule Chapter 305) and turn to the section for your proposed activity in the Permit-by-Rule Standards.

Second, read the applicability section at the top of the page, which describes in further detail *what* activities are included and *where* they are included. For example, the movement of rocks or vegetation by hand (Section 6) applies only to work using nonmotorized equipment and does not apply to work in coastal or freshwater wetlands.

Third, read all the standards contained in the section pertaining to your activity as well as all the standards in the "All Projects" section beginning on page 5. If you can meet *all* of the standards, you are eligible for permit by rule.

If I am eligible, what's the next step?
You must file notice of your proposed activity on a form provided by DEP. The two-part form enables you to submit one copy to DEP and to keep one copy for your records.

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Is any additional information required by DEP?
Yes. A location map of the project site is required and, in the case of maintenance, repair, or replacement of a structure, one or more photographs documenting the condition of the existing structure must also be submitted.

Is there a fee for permit by rule?
No.

When can I begin work?
Upon DEP's receipt of a complete and accurate form, you may begin work unless the timing is restricted by one of the standards. (For instance, soil disturbance is not allowed between March 1 and April 15.) You may wish to send the notice certified mail/return receipt requested, but this is not required.

If the notice is found to be deficient, DEP will contact you within 10 days of receiving the notice. Work begun within that 10-day period is at risk in such cases. Therefore, you may wish to wait until the end of the 10-day period before starting work.

DEP will *not* contact you unless the notice is deficient. However, a staff member from DEP, the Department of Inland Fisheries & Wildlife, or the Department of Marine Resources may inspect the site to determine if the work was carried out in compliance with the rule.

How long is the permit valid?
The permit is valid for 2 years, provided you comply with all the standards. If your activity is not complete at that time, you may file another notice provided the regulations have not been revised to exclude your activity.

If I qualify for permit by rule, do I need other permits?
Perhaps. Permit by rule does *not* take the place of any other local, state, or federal approvals you may need. In specific instances, activities may require a shoreland zoning permit from your town, a lease from the Bureau of Public Lands (207-289-3061) if your work extends onto state-owned submerged lands, or a permit from the U.S. Army Corps of Engineers (207-623-8367).

What if I don't qualify for permit by rule?
If your activity does not qualify for permit by rule, you must file a complete application form under the NRPA. These forms are available from DEP's Bureau of Land Quality Control.

Where can I get additional information?
For additional information, contact a Land Bureau staff member at the DEP office closest to you:

- South Portland -- 21 Vocational Drive, South Portland, ME 04106
  (207) ~~776~~ 767-4763 (changing location in spring 1989)
- Augusta -- State House Station 17, Augusta, ME 04333
  (207) 289-2111
- Bangor -- 106 Hogan Road, Bangor, ME 04401
  (207) 941-4570
- Presque Isle -- 1235 Central Drive, Presque Isle, ME 04769
  (207) 764-2044

DEP FACT SHEET
Land Bureau Pre-application Meetings

revised: March 1989 contact: (207) 289-2111

Background
The Department of Environmental Protection's Bureau of Land Quality Control has developed procedures for pre-application meetings between applicants for DEP permits under the Site Location of Development Act or the Natural Resources Protection Act and DEP Land Bureau staff.

Purpose
The purpose of pre-ap meetings is to examine a project -- *before* a final design is committed to and *before* a great deal of money is spent -- to make sure that it is designed to minimize environmental impacts. Specifically, pre-ap meetings are intended (1) to encourage information exchange about the project early in project planning; and (2) to help the applicant understand the process, his/her responsibilities, and areas of particular concern relative to the project. Pre-ap meetings also provide an opportunity to identify and discuss potential trouble spots in a project and allow DEP staff to request necessary data or studies.

Process
(1) Determine which law and regulations govern your application and obtain copies of both from DEP.
(2) Forward to the appropriate division director (Site Location OR Natural Resources) three copies of the following documents: preliminary site plan, soils information (where relevant), a regional map with the site marked, and a brief project description.
(3) Prepare for a meeting with DEP staff. Following receipt and review of your documentation, a DEP staff member will contact you to arrange a mutually convenient meeting time.

Applicants initiate this process and play an important role. To ensure that a meaningful two-way dialogue takes place and that the pre-ap meeting is fruitful, you must come to the meeting fully prepared to describe your project. Furthermore, you must be familiar with the applicable law and regulations before the meeting so that you know what your responsibilities are and what questions to ask.

Contact
For more information, phone DEP's Land Bureau at (207) 289-2111 or write to: Department of Environmental Protection, Bureau of Land Quality Control, (Division of Site Location OR Division of Natural Resources), State House Station 17, Augusta, ME 04333.

Note
If you wish to schedule a pre-ap meeting with another DEP bureau, contact that bureau directly. If your project requires a permit from more than one DEP bureau and you wish to schedule a pre-ap meeting, contact the Office of the Commissioner at (207) 289-2812.

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DEPARTMENT OF THE ARMY

Permit No: GP-39 Reissue Date: May 6, 1988

Name of Applicant: General Public Expiration Date: May 6, 1993

DEPARTMENT OF THE ARMY GENERAL PERMIT
STATE OF MAINE

Referring to a Public Notice dated 4 February 1988 to reissue the Maine State Program General Permit to perform the following work, upon the recommendation of the Chief of Engineers, pursuant to Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act of 1899, The General Public is hereby authorized by the Secretary of the Army, subject to the conditions contained in this permit, to perform work that involves the following activities in Maine, without obtaining individual approval from the Corps of Engineers: (1) the discharge of dredged or fill material into waters of the United States; and (2) work or structures in or affecting navigable waters of the United States.

Procedure:

Work in Maine that receives all required Federal and non-Federal permits/licenses and that meets all of this permit's other conditions may proceed without an individual permit from the Corps of Engineers, unless the Corps exercises its case-by-case discretionary authority under Condition 2. By eliminating the need for individual Corps approvals in appropriate cases, this general permit is designed to relieve the public of unnecessary delays and paperwork, while allowing more Federal regulatory resources to be directed toward the review of work that has more than minimal consequences for the aquatic environment.

The Corps of Engineers will periodically review all applications received by the State of Maine's Department of Environmental Protection and Land Use Regulatory Commission. During these reviews, all work subject to Corps jurisdiction--including any work found exempt under State programs--will be categorized by the Corps as to (1) work that is clearly eligible under this general permit and requires no further action by the Corps; (2) proposals that warrant further study by the Corps (the applicant might be contacted for additional information); (3) projects that are obviously ineligible under the terms of this general permit--either because the type of work is one of those described in Condition 3 of this permit, or because the work fails to satisfy one or more other conditions; and (4) projects over which the Corps should exercise the discretionary authority described in Condition 2 of this permit to require an application.

Individuals who are planning work within Corps jurisdiction that is obviously ineligible under this general permit should submit an application to the Corps at the earliest practical

date--waiting for a request from the Corps in such cases only serves to delay the Corps decision making process. (This includes individuals who are proposing work that does not require a State permit.)

Copies of the reports prepared by the Corps following each periodic review of the State's regulatory agencies' files, as well as copies of each application reviewed, will be sent by the Corps to the U.S. Fish and Wildlife Service, the Environmental Protection Agency and the National Marine Fisheries Service. The Corps will rule a project ineligible under this general permit and will begin its individual permit review procedures if any one of these three agencies, within 10 working days of their receipt of of this material, expresses concern within their area of expertise, states the species or resource that could be impacted by the project and describes the impacts that, either individually or cumulatively, will be more than minimal. This notice within 10 working days may be verbal and is not required to be fully documented. It will be confirmed within 10 additional calendar days from the date of the verbal comment, with a written response. The written response need not be fully documented. The intent of the 10 working day verbal notification is to allow the Corps to give timely notification to the applicant that an individual Corps permit may be required and that the work should not proceed until further notice. (An individual that fails to heed this notification runs the risk of being directed to remove the work or structures, as well as other penalties.) If the Federal agency subsequently notifies the Corps that the concern has been saisfied, either through the review of additional information submitted to the Corps by the applicant or through other means, the Corps may elect to reinstate the project's eligibility under the general permit and terminate its review.

Conditions:

1. That no work may be performed under this general permit unless and until all required local, State and Federal permits, licenses and certifications are obtained; this includes, but is not limited to, State Water Quality Certification and written concurrence from the State as to the work's consistancy with the State Coastal Zone Management Program, whenever applicable.

2. That, irrespective of whether a proposal meets the other conditions of this permit, the Corps of Engineers retains discretionary authority to require submission of an application and to subject the proposal to all individual permit review procedures, whenever the Corps of Engineers determines that the potential consequences of the proposal warrant this review.

3. That Corps approval procedures for the following work are not altered by this general permit: this work will continue to require submission of an application to, and written authorization from, the Corps of Engineers before the work may proceed:

a. Work within the Saint John and Saint Croix River basins that requires approval of the International Joint Commission. This includes any temporary or permanent use, obstruction or diversion of international boundary waters which could affect the natural flow or levels of waters on the Canadian side of the line, as well as any construction or maintenance of remedial works, protective works, dams or other obstructions in waters downstream from boundary waters, when the activity could raise the natural level of water on the Canadian side of the boundary.

b. The discharge of dredged or fill material into any inland wetland where the wetland is separated from a nontidal pond, lake, river or stream by a man-made dike, natural river berm, or other barrier; and is not regulated by the State.

c. Discharges of dredged or fill material for river crossings and dam projects that are exempted from Maine Department of Environmental Protection jurisdiction by Maine's Stream Alteration Act. This includes crossings associated with public works projects which do not alter more than a total of 300 feet in any mile of shore; and private crossings or dam projects that alter not more than a total of 100 feet (including both banks); i.e. discharges for this State exempted work still require individual Corps approval.

d. The discharge of any dredged or fill material into any other waters or wetlands not regulated by the State, as well as any structures or work not regulated by the State which are located in or which affect navigable waters of the United States (this latter category of waters includes all tidal waters, the Kennebec River inland to Moosehead Lake, and the Penobscot River to the confluence of its east and west branches at Medway).

e. Any activity associated with new boating facilities or with the extension of the areal limits of existing boating facilities. For the purpose of this condition, "boating facilities" are marinas, yacht clubs, boat clubs and other entities that rent or sell mooring space.

f. Any activity within the horizontal limits of any Corps' navigation project (see attached map for locations of these projects), as well as any activity that will cause vessels to be docked or moored within these limits.

g. The discharge of dredged material into waters oceanward of the baseline from which the territorial sea is measured (see p. 10)

h. Improvement dredging projects: This includes dredging that exceeds the depth of prior dredging or that occurs in an area not dredged before.

i. Breakwaters, groins, artificial reefs and jetties.

j. Any activity that would impinge upon the value of any National Wildlife Refuge, National Forest, or any area administered by the National Park Service of the Department of the Interior.

k. Any activity that, as determined by the Corps of Engineers, may affect a threatened or endangered species, as identified under the Endangered Species Act, or the critical habitat of such species. This exclusion will enable the Corps to initiate the formal consultation with the U.S. Fish and Wildlife Service or National Marine Fisheries Service that is required under Section 7 of the Act.

l. Any activity that would adversely affect the Allagash Wilderness Waterway or occur in a component of any National Wild and Scenic River System.

m. Projects that require an Environmental Impact Statement which will either be prepared by the Corps of Engineers or for which the Corps is to be a cooperating agency.

n. Projects of national concern. This exclusion is invoked on a case-by-case basis and represents, in essence, a special class of projects that receive particular attention in Corps' decisions on whether to exercise discretionary authority (Condition 2) to require individual applications for work that otherwise meets all of this permit's conditions. While a precise definition is not possible, this category of work normally includes but is not limited to, the following examples: projects that could cause an unreasonable interference with navigation; significant wetland fills; major power plants, shipping facilities and oil refineries; work that could affect New Hampshire or Canadian waters; major commercial, residential or industrial developments; and work that could adversely affect historic, cultural or archeological sites listed or eligible for listing in the National Register of Historic Places or sites listed or eligible for listing in the National Registry of Natural Landmarks.

4. That whenever the Corps of Engineers notifies an applicant that an individual Corps' permit may be required, all authorization under this general permit is voided and no work may be started unless and until the individual Corps permit is obtained and the Corps notifies the applicant that further review has shown that the work may proceed under this general permit.

5. That any structure or work which extends closer to the horizontal limits of any Corps navigation project than a distance of three times the project's authorized depth (see attached map for the locations of these projects) will be subject to removal at the owner's expense prior to any future Corps' dredging.

6. That existing unauthorized fill, structures or work will be evaluated at the time of discovery, for eligibility under this general permit. Applications will be required for any such fill, structures or work found ineligible under the general permit; these applications will be processed under standard Corps permit procedures.

7. That this general permit cannot be used for piecemeal dredge or fill activities or other piecemeal work, nor is this general permit valid for any activity that is part of an overall project for which the Corps has determined an individual permit is required.

8. That all temporary fill such as that used for access roads and/or cofferdams must be placed on geotextile fabric laid on existing wetland grade. The slope of all temporary fills must be stabilized to prevent erosion, through such means as placing weighted geotextile fabric on the slope. The temporary fill shall be removed completely upon completion of the project, and shall be placed upland in a matter that will prevent its later erosion and transport to a waterway or wetland. The temporary fill area shall be restored to its approximate original contours (but not higher).

9. Adequate sedimentation and erosion control devices, such as geotextile silt fences or other devices capable of filtering the fines involved, shall be installed and properly maintained to minimize impacts during construction. These devices must be removed upon completion of work and stabilization of disturbed areas. The sediment collected by these devices must also be removed and placed upland, in a manner that will prevent its later erosion and transport to a waterway or wetland.

10. That all areas of wetlands which are disturbed during construction by excavation and/or temporary fill shall be restored to their approximate original elevation (but not higher) and condition by careful protection, and/or removal, and replacement of existing soil and vegetation.

11. That all crossings, whether temporary or permanent, of waterbodies must be suitably culverted, bridged or otherwise designed to prevent the restriction of and to withstand expected high flows.

12. That all activities authorized herein shall be consistent with the terms and conditions of this permit; and that any activities not authorized herein shall constitute a violation of the terms and conditions of this permit which may result in the modification, suspension or revocation of this permit, in whole or in part, as set forth specifically in Condition 20 hereto, and in the institution of such legal proceedings as the United States Government may consider appropriate, whether or not this permit has been previously modified, suspended or revoked in

whole or in part.

13. That all activities authorized herein shall, if they involve, during their construction or operation, any discharge of pollutants into waters of the United States, be at all times consistent with applicable water quality standards, effluent limitations and standards of performance, prohibitions and pretreatment standards and management practices established pursuant to the Clean Water Act of 1972 (P.L. 92-500; 86 Stat. 816) or pursuant to State and local law.

14. That when the activity authorized herein involves a discharge during its construction or operation, of any pollutant (including dredged or fill material), into waters of the United States, the authorized activity shall, if applicable water quality standards are revised or modified during the term of this permit, be modified, if necessary, to conform with such revised or modified water quality standards within 6 months of the effective date of any revision or modification of water quality standards, or as directed by an implementation plan contained in such modified or revised standards, or within such longer period of time as the Division Engineer, in consultation with the Regional Administrator of the Environmental Protection Agency, may determine to be reasonable under the circumstances.

15. That the permittee agrees to make every reasonable effort to prosecute the construction or operation of the work authorized herein in a manner so as to minimize any adverse impact on fish, wildlife and natural environmental values.

16. That the permittee agrees that he/she will prosecute the construction of work authorized herein in a manner as to minimize any degradation of water quality.

17. That the permittee shall permit the Division Engineer or his authorized representative(s) or designee(s) to make periodic inspections at any time deemed necessary in order to assure that the activity being performed under authority of this permit is in accordance with the terms and conditions prescribed herein. In addition, for maintenance dredging work, the permittee may be required, at the Division Engineer's discretion, to submit post-dredging survey drawings.

18. That the permittee shall maintain the structure or work authorized herein in good condition.

19. That this permit does not convey any property rights, either in real estate or material, or any exclusive privileges; and that it does not authorize any injury to property or invasion of rights or any infringement of Federal, State or local laws or regulations.

20. That this permit may be either modified, suspended or revoked in whole or in part pursuant to the policies and procedures of 33 CFR 325.7.

21. That if the Government, in making a determination regarding any work's eligibility under this permit, has relied on the information and data which a permittee has provided, and if, subsequent to that determination, such information and data prove to be false, incomplete or inaccurate, the permittee's authority to perform the work under this permit shall be invalid and the Government may, in addition, institute appropriate legal proceedings. All work described on the application and drawings submitted to the State, including any revisions requested by the Corps of Engineers, must be performed for the authorization under this general permit to be valid.

22. That any modification, suspension, or revocation of this permit shall not be the basis for any claim for damages against the United States.

23. That if the activity authorized herein is not completed on or before the expiration date of this permit, this authorization, if not previously revoked or specifically extended, shall automatically expire.

24. That this permit does not authorize or approve the construction of any structures which require authorization or approval by the Congress.

25. That if and when the permittee desires to abandon the activity authorized herein, unless such abandonment is part of a transfer procedure by which the permittee is transferring his interests herein to a third party, he/she must restore the area to a condition satisfactory to the Division Engineer.

26. That there be no unreasonable interference with navigation by the existence or use of the activity authorized herein.

27. That if the permittee, during prosecution of the work authorized herein, encounters a previously unidentified archaeological or other cultural resource that might be eligible for listing in the National Register of Historic Places, he/she shall immediately notify the Division Engineer.

28. That this permit does not authorize the interference with any existing or proposed Federal project and that the permittee shall not be entitled to compensation for damage or injury to the structure or work authorized herein which may be caused by or result from existing or future operations undertaken by the United States in the public interest.

29. That no attempt shall be made by the permittee to prevent the full and free use by the public of all navigable waters at or adjacent to the activity authorized by this permit.

30. That if the display of lights and signals on any structure or work authorized herein is not otherwise provided for by law, such lights and signals as may be prescribed by the United States Coast Guard shall be installed and maintained by and at the expense of the permittee.

31. That the permittee, upon receipt of a notice of revocation of this permit or upon its expiration before completion of the authorized structure or work, shall, without expense to the United States and in such time and manner as the Secretary of the Army or his authorized representative may direct, restore the waterway to its former conditions. If the permittee fails to comply with the direction of the Secretary of the Army or his authorized representative, the Secretary or his designee may restore the waterway to its former condition, by contract or otherwise, and recover the cost thereof from the permittee.

32. That the permittee hereby recognizes the possibility that the structure permitted herein may be subject to damage by wave wash from passing vessels. The issuance of this permit does not relieve the permittee from taking all proper steps to insure the integrity of the structure permitted herein and the safety of the boats moored hereto from damage by wave wash and the permittee shall not hold the United States liable for any such damage.

33. That heavy equipment working in wetlands shall be placed on mats.

34. That the activity shall not "take" a threatened or endangered species, as identified under the Endangered Species Act, or destroy or modify the critical habitat of such species. 16 U.S.C. 1532 (18) states that the term "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in such conduct.

The following additional conditions apply to any discharge of dredged or fill materials into waters of the United States:

35. That discharges of dredged or fill material into waters of the United States shall be avoided or minimized through the use of other practical alternatives.

36. That any such discharge will be carried out in conformity with the goals and objectives of the EPA Guidelines established pursuant to Section 404 (b) of the FWPCA and published in 40 CFR 230.

37. That any such discharge will consist of suitable material free from toxic pollutants in toxic amounts.

38. That the fill created by any such discharge will be properly maintained to prevent erosion and other non-point sources of pollution.

39. That discharges in spawning areas during spawning seasons shall be avoided.

40. That discharges shall not restrict or impede the movement of aquatic species indigenous to the waters or cause the relocation of the water (unless the primary purpose of the fill is to impound waters).

41. That if the discharge creates an impoundment of water, adverse impacts on the aquatic system caused by the accelerated passage of water and or the restriction of its flow, shall be minimized.

42. That discharges in wetland areas are not permitted whenever other practical alternatives exist which would have less adverse impact on the aquatic ecosystem and which would not have other significant adverse environmental consequences.

43. That discharges into breeding areas for migratory waterfowl shall be avoided.

William D. Seuler
DISTRICT ENGINEER

May 6, 1988
DATE

Enclosures:

"Notes on the Territorial Sea Baseline and the Attached Maps"
Maps of the Territorial Sea Baseline (5)
Location Map -- Corps of Engineers Navigation Projects

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