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THE MAINE RIVERS POLICY, 1983~85 A Progress Report to the Governor and Legislature



Maine Land and Water Resources Council December 1985

MAINE LAND AND WATER RESOURCES COUNCIL

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The Land and Water Resources Council was created by Executive Order of Governor James B. Longley in March of 1976, and recreated by Governor Joseph E. Brennan in May of 1979. The basic purpose of the Council is to advise the Governor, the Legislature, and State agencies in the development of a comprehensive, integrated land and water resources planning and management program for Maine. In 1981, Governor Brennan directed the Land and Water Resources Council and its member agencies to undertake a series of initiatives that resulted in the Maine Rivers Policy.

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STATE OF MAINE EXECUTIVE DEPARTMENT STATE PLANNING OFFICE

JOSEPH E. BRENNAN GOVERNOR RICHARD E. BARRINGER DIRECTOR

December 15, 1985

The Honorable Joseph E. Brennan, Governor The Honorable Charles Pray, Senate President The Honorable John Martin, Speaker of the House The Honorable Members of the 112th Maine Legislature

Dear Governor Brennan, President Pray, Speaker Martin, and Members of the Legislature:

The Second Session of the 111th Maine Legislature enacted Public Law Chapter 458, "AN ACT to Promote the Wise Use and Management of Maine's Outstanding River Resources". The Maine Rivers Act, signed into law by Governor Joseph E. Brennan on June 17, 1983, directs the State Planning Office to report to the Legislature no later than December 1, 1986, "detailing the status of policy accomplishments" pursuant to this Act (12 MRSA **\$**406). On October 4, 1985, Governor Joseph E. Brennan directed me, as chairman of the Maine Land & Water Resources Council, to undertake a critical review of accomplishments under the Maine Rivers Policy, and to report by December 15 the Council's findings and recommendations for needed improvements in the law.

I am pleased to submit the following report in fulfillment of both these requirements. On behalf of the members of the Council, I should like to express our gratitude to those hydropower developers and others who took the time to respond to our inquiries about their experience with the State's permitting agencies; and, especially, to the members of our staffs who labored diligently to produce this report in timely fashion. They include Betsy Elder of the Office of Energy Resources, Alec Giffen of the Land Use Regulation Commission, Dana Murch of the Department of Environmental Protection, Mark Sullivan of the Department of Conservation, and Karen Massey of the Land & Water Resources Council.

This Administration, the Maine Legislature, and the people of Maine can be justly proud of achievements under the Maine Rivers Policy in its first two years of operation. As this December 15, 1985 Page 2

report documents, policy implementation is well underway, and the accomplishments are many. The legislation that constitutes the Maine Rivers Policy has proven a sound, workable framework to accomplish its stated purpose. Wise management of the State's valuable river resources is a reality in Maine today, as a result.

On behalf of the members and staff of the Land & Water Resources Council, I am grateful for the opportunity to be of service to you and to the people of Maine.

Sincerely,

ax Richard E. Barringer, Chair Land & Water Resources Council

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The Maine Rivers Policy, 1983-1985

A Progress Report to Governor Joseph E. Brennan and the 112th Maine Legislature from the Maine Land & Water Resources Council

December 15, 1985

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EXECUTIVE SUMMARY

Two years have passed since the 111th Maine Legislature enacted the four laws that comprise the landmark Maine Rivers Policy. In this time, much activity affecting Maine's rivers -some highly publicized, but most largely unnoticed -- has transpired. Because these laws originated as proposals from his Administration, Governor Joseph E. Brennan, in October 1985, called upon the Maine Land & Water Resources Council to conduct a timely assessment of the effectiveness of the Maine Rivers Policy, and to make any recommendations needed to improve the laws and procedures established to assure the greatest benefit for Maine people from use of their rivers.

Summary of Findings and Recommendations

The Council finds that:

- Traditionally, Maine's environmental laws have been designed to protect the public health, safety, and welfare from the potentially harmful effects of private activity on private property. The Maine Legislature went beyond this traditional conception when it created the Maine Rivers Policy, the purpose of which is to provide not only environmental protection, but also a wise and careful means of allocating to private use and profit a scarce public asset -- Maine's valuable river resources.
- o Overall, the Maine Rivers Policy is accomplishing its objectives, and doing so efficiently and effectively.
- o The Policy has resulted in many substantial accomplishments, including:
 - The establishment of special protective zoning along some 1300 miles of Maine rivers in cities, towns, and the unorganized territory;
 - The granting of State permits under the Maine Rivers Act for 21 hydropower projects that will produce 75.8 MW of new generating capacity;
 - The registration with the Department of Environmental Protection of 716 dams throughout the State; and
 - The award of more than \$11.5 million to Maine cities and towns for waterfront improvement and community development projects along Maine rivers.

- As with any innovative public policy, especially one involving the coordinated efforts of many agencies with diverse interests and responsibilities, there are areas where improvements are called for in its implementation.
- As public attention has focused largely on the unique Big
 "A" hydropower proposal, the issues raised by this project
 deserve the most careful review and response, particularly
 that involving the legitimacy of considering "alternatives"
 to a proposed project under during permitting proceedings.

The Council recommends that:

- o The laws that constitute the Maine Rivers Policy not be amended at this time.
- o The Board of Environmental Protection and Land Use Regulation Commission adopt regulations pursuant to the Administrative Procedures Act to govern administration of the hydro permitting procedures of the Maine River Act.
- Alternatives to a proposed hydropower project be considered under certain, carefully defined circumstances where significant public economic costs or environmental harms are involved; and the regulations should so specify, in order to resolve the confusion surrounding this issue.
- o The terms "existing dam" and "redevelopment," as used in the 1983 Maine Rivers Act, be defined in regulations.
- The Governor designate LURC as the certifying agency under
 \$401 of the federal Clean Water Act for hydropower
 development projects in the Unorganized Territory.
- Procedures needed to integrate compliance with \$401 of the Clean Water Act into issuance of permits under the Maine Waterway Development and Conservation Act be fully clarified in the regulations.
- o Procedural issues regarding such matters as attendance at hearings by decision-makers, opportunities for intervention and public participation in permitting proceedings, etc., be resolved through general administrative regulations applicable to all permitting procedures for the respective boards, and not by amendment to, or regulation under, the Maine Rivers Act.

A simple list of accomplishments is insufficient to convey the full benefits of improved rivers management to the people of the Maine in their daily lives. The four case studies in Appendix A tell the stories of the Androscoggin, the Kennebec, and the Crooked Rivers and the Belgrade Lakes to illustrate more fully the scope of accomplishments under the Maine Rivers Policy.

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INTRODUCTION

In 1983, as the culmination of several years of study on various aspects of rivers planning and policy development, Governor Joseph E. Brennan made a series of far-reaching statutory and budgetary proposals to the Maine Legislature. Together, these measures constitute the Maine Rivers Policy.

Two of the laws enacted assure the authority of Maine's fisheries agencies to require fish passage facilities in dams where needed to restore and maintain important sport and commercial fisheries. These laws stem from the <u>Statewide</u> Fisheries Management Plan,¹, completed in 1982.

A third statute gives authority to the Maine Department of Environmental Protection (DEP) for registration and inspection of most existing dams in Maine. This law also enables the Department to establish water levels in the impoundments behind these dams to assure water quality, to protect public safety and property, and to abate floods.

1. Maine Department of Inland Fisheries & Wildlife, 1982.

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The fourth and most comprehensive law, became known as "The Maine Rivers Act." It is the keystone of the Maine Rivers Policy. The Legislature enacted it in its role "as trustee of the public waters," declaring:

> That the best interests of the State's people are served by a policy which recognizes the importance that their rivers and streams have for meeting portions of several public needs, provides guidance for striking a balance among the various uses which affords the public maximum benefit, and seeks harmony rather than conflict among these uses.

Traditionally, environmental regulation is based on the protection of public health, safety, and welfare from the effects of private activity. With the Maine Rivers Act, however, the Maine Legislature recognized that decisions regarding Maine's rivers must move beyond traditional regulation of private uses of private property, because such decisions involve the allocation for private use and profit of a limited and valuable resource that belongs to all the people of Maine. Accordingly, the public trust demands that these decisions result in the "maximum benefit" to the public. The Legislature specified that this benefit was to be determined by seeking a balance among nine goals identified in the Act.

The far-reaching provisions of the Maine Rivers Act include:

o A prohibition new dams on 1100 miles of eighteen Maine rivers, unless specifically authorized by the Legislature;

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A "one-stop" permitting procedure for hydropower projects that will result in significant public benefits, as defined by statutory criteria;

o Additional protection from incompatible development along 700 miles of river shoreland in Maine cities and towns, through special amendments to the State's subdivision and shoreland zoning laws;

o Authority for Maine cities and towns to form river corridor commissions to manage their river shorelands jointly; and

o Authority for private, non-profit corporations to hold conservation easements along rivers, to protect outstanding natural features identified in the <u>Maine Rivers</u> Study.

The Governor's budget requests provided funds to administer the new laws; to develop intensive fisheries management programs on ten outstanding rivers; and to assess additional recreational access and conservation easement needs along rivers identified in the 1982 <u>Maine Rivers Study</u>². In June 1983, the Governor issued an Executive Order targeting State and federal grant monies to revitalize Maine's deteriorated river waterfronts.

A fifth component of the Maine Rivers Policy, the Water Classification Act, was held over for further Legislative consideration of its complex provisions. The 112th Maine Legislature is currently deliberating on a revised version of

2. U.S. Department of the Interior and Maine Department of Conservation, 1982.

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this bill. When enacted, it will ensure protection of the recent improvements in water quality, which have greatly increased the value of Maine's rivers and facilitated the renewal of their many uses.

During the debate on the Maine Rivers Act, much attention focused on ways to encourage development of our hydropower resources, consistent with the continuation and further development of the other important uses of our waterways. As the State's <u>Comprehensive Hydropower Plan</u>³ demonstrated, Maine can secure the hydropower it needs without new dams on the rivers protected by the Maine Rivers Act; but until the Legislature provided clear guidance about those Maine rivers where hydropower is clearly undesirable, developers had wasted valuable time and money on projects that would never be built. Today, developers can focus their efforts where hydropower is unlikely to present insurmountable problems.

As the following discussion will indicate, full implementation of the Maine Rivers Policy is well underway and appears to be successful in all of its aspects, including facilitating hydropower development. One hydropower developer, who obtained a permit for a major redevelopment in 1984, offered the following comment on the operation of the Maine Rivers Act:

3. Maine Office of Energy Resources, 1982.

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"Contrary to my expectation, the system did work as advertised. The process did place real demands on us and extract real concessions from us as developer, but it was also fair, efficient and truly one-stop."

The statistics bear out the assertion that the State's one-stop hydropower licensing system is working well. To review some of the more important facts:

- -- Maine ranked fifth among all the States in the nation for small-scale hydropower development on line for the period 1980-1984.
- -- Although activity nationwide is now slowing down significantly, due to factors noted below, applications for FERC licenses and exemptions in Maine actually rose in 1985 over 1984.
- -- For the 21 projects approved to date, processing times (calculated from the date of acceptance of application to the date of permitting action) have ranged from 39 to 216 working days, with an average processing time of 83.5 working days.

While the Maine Rivers Act has facilitated the permitting process, it should be recognized that much of the increased hydropower development activity is attributable to other important factors. These include: overall economic climate, high oil prices, the federal Public Utilities Act of 1978, and Central Maine Power's development of mechanisms to encourage self-generators. Falling oil and power prices, withdrawal of tax incentives, and higher development costs may adversely impact

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Maine's current rate of hydropower development. Nevertheless, Maine now has the advantage of a streamlined permitting process -- an improvement over the complex of environmental permits required for hydro development in other states, and in Maine, before the enactment of the Maine Rivers Act.

The major dissent from the view that the State's hydropower law is working well comes from participants in the permitting proceedings for Great Northern Paper Company's Big Ambejackamockamus, or Big "A", Dam. It is important, however, to put these controversial proceedings in perspective, and not to see all questions surrounding the implementation of the Maine Rivers Act, or the entire Maine Rivers Policy, through the prism of Big "A".

For, the Big "A" project is proposed to be built on one of only two Maine river stretches classified as "A" by the 1982 <u>Maine Rivers Study</u> where construction of a new dam was not specifically prohibited without the Legislature's approval. The Big "A" project, like the proposed Bangor Dam hydropower development, was highly controversial at the time of the Legislative debate on the Rivers Act. The Legislature could have dealt with this project directly in the law, but chose instead to leave it to the regulatory process. Accordingly, the complexity and stress of what followed in the Big "A" permit proceedings was to be expected.

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One might argue today that Maine's citizen environmental boards and regulatory system have not been put to a comparable test since their creation in the 1960's, except in the case of the Pittston Oil Refinery. As in the case of Pittston, there are federal proceedings and court cases to follow; but the State's Land Use Regulation Commission has issued a timely permit for the Big "A" project, with conditions designed by the Commissioners to ensure significant public benefits from construction of the dam.

At the same time, the Big "A" proceedings have served to define instances where sharp differences in interpretation point to the need to clarify a few key issues concerning implementation of the Rivers Act. These issues are addressed in the final section of the report.



ACCOMPLISHMENTS

In the two years since passage of this legislation, through the efforts of many individuals and public agencies, significant progress has occurred toward implementation of the Maine Rivers Policy:

- o The Land Use Regulation Commission (LURC) has adopted special protective zoning districts for over 600 miles of rivers in the unorganized territory of Maine. This zoning implements legislative policy, prohibiting new dams and protecting the natural features found along the shorelands of these rivers (see Figure 1).
- As of October 26, 1985, shoreland zoning ordinances for 36 municipalities had been amended to include special land use protections for an additional 150 miles of rivers (see Table 1). New restrictions have also been placed on new subdivisions along 700 miles of rivers in Maine cities and towns.
- No dams have been proposed at new sites on the approximately
 1100 miles of 18 rivers that were specially protected by the
 Maine Rivers Act from incompatible hydropower development.

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- o The Board of Environmental Protection (BEP) and LURC have granted permits under the MWDCA for 21 hydropower projects that will produce a total of 75.8 MW of new generating capacity. These projects range in size from Foss Mill on Marsh Stream, which can produce 15 kilowatts of power, to the proposed Big Ambejackamockamus Dam ("Big A") on the West Branch Penobscot River, which will generate up to 40.5 megawatts of power. The permitted projects represent nearly 700,000 barrels of oil displaced, and an increase of 15% over the State's total 1979 installed hydroelectric generating capacity (see Table 2).
- o No applications for hydropower permits have been denied.
- Conditions have been placed on hydropower permit approvals to assure continued protection of important river resource values, consistent with hydropower development. These include the following:
 - -- upstream and downstream fish passage facilities to allow migration of anadromous fish from Brunswick to Lewiston by 1988;
 - -- new fishways on the Presumpscot River, Pleasant River, and Souadabscook Stream;

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- increases in minimum flows on the Penobscot, Saco, and Sebec Rivers to protect and enhance fisheries;
- -- canoe portage facilities at four existing dams; and
- -- studies of the recreational potential at four existing and proposed new dams.
- o No applications for hydropower permits have been denied.
- o In 1984, indigenous hydropower produced 3,573,284 MWh of electricity for use in Maine. This is more than three and a half times the amount of hydroelectricity we will be purchasing from Hydro-Quebec in 1990.
- o Nine projects are currently pending before the BEP and LURC representing an additional 81 MW of capacity. These projects will generate an additional 368,000 megawatt hours of electricity annually, and displace another 748,000 barrels of oil annually.
- If all Maine hydropower projects with preliminary permits granted or currently pending before the Federal Energy Regulatory Commission are actually constructed, they will provide 199 MW of new generating capacity, displacing nearly 25 percent of the oil-fired energy used for electricity supply in the State in 1984.

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- BEP and LURC have cooperated to draft joint hydropower permitting regulations pursuant to the Maine Rivers Act. The draft regulations, currently undergoing APA comment, review, and revision, have served to catalyze discussions and clarify issues in the permitting process.
- o The DEP has developed a computerized statewide registry that now includes 716 dams; the agency has also begun to establish lake levels to protect public safety and property (see Table 3), to conduct dam safety inspections, and to initiate proceedings to transfer abandoned dams to new owners.
- The Department of Inland Fisheries & Wildlife has completed river fisheries plans for Grand Lake Stream and the Presumpscot and Kennebago Rivers, and has issued a fourth plan, for the East Machias River, jointly with the Department of Marine Resources. Six additional management plans are in preparation and will be issued soon. Both Departments have also advised and assisted dam owners in developing fish passage facilities where needed.
- The Bureau of Parks & Recreation within the Department of Conservation has completed an assessment of public access, campsite needs, and the potential for additional conservation easements on 26 outstanding river segments

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- identified in the <u>Maine Rivers Study</u>. The Department has established a State Rivers Coordinator position to improve the management of river recreation facilities and to encourage the protection of river resource values throughout Maine. The Coordinator will also administer a special Maine Rivers Grants program, created by the 112th Legislature, to be funded primarily from the sale of promotional decals to boaters and canoeists. Its purpose is to help cities and towns acquire, develop, and manage public access to the State's rivers.
- Pursuant to a 1983 Executive Order, the State Planning
 Office has awarded 37 State and federal grants, totalling
 almost \$10,000,000 for waterfront improvement and community
 development projects in communities along Maine rivers (see
 Table 4). In addition, the Department of Conservation has
 awarded \$1,687,000 for waterfront parks and boating
 facilities in the communities of Augusta, Gardiner, Bath,
 Bangor, and Hampden.

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Communities with Revised Shoreland Zoning Protections Under the Rivers Act*

Amherst Ashland Aurora Bancroft Beddington Brownville Centerville Charlotte Cherryfield Columbia Columbia Falls Cooper Crawford Crystal Danforth Deblois Dennysville East Machias

East Millinocket Fort Kent . Great Pond Havnesville Island Falls Machias Masardis Mattawamkeag Meddybemps Medway Northfield Oakfield Portage Lake Upton Wesley Weston Whitneyville Winn

*The 1983 Rivers Act required 36 municipalities to amend their shoreland zoning ordinances for designated protected river stretches, effective October 26, 1985, to provide for a setback of 125 feet for structures and to place restrictions on the location of roads and gravel pits in those zones.

State of Maine Hydropower Project Permits Issued (September 1983 through November 1985)

Project Name	Waterbody	Location	Capacity (MW)
Foss Mill	Marsh Stream	Brooks	0.015
Hackett Mills	Little Androscoggin R.	Minot & Poland	0.470
Noisy Brook	Noisy Brook	Roxbury	0.050
Lockwood	Kennebec River	Waterville & Winslow	1.750
Sevey Hydro	Ripley Pond	Ripley	0.016
Abbots Mills	Concord Stream	Rumford	0.070
Stony Brook	Stoney Brook	Newry	0.018
Aziscohos	Magalloway River	Lincoln Plt.	5.400
Sparhawk	Royal River	Yarmouth	0.270
Morgans Mills	Mill Stream	Union	0.020
Thurston Mill	Swift River	Mexico	0.338
Pioneer	Sebasticook River	Pittsfield	0.220
Starks	Lemon Stream	Starks	0.050
Seabright	Megunticook River	Camden	0.094
Cumberland Mills	Presumpscot River	Westbrook	1.800
Ledgemere	Little Ossipee River	Limerick	0.200
Pejepscot	Androscoggin River	Topsham	11.380
Worumbo	Androscoggin River	Lisbon Falls	13.100
Crocker Pond	Crocker Pond	Dennistown Plt.	0.050
Bangor WWTP	Discharge Stream	Bangor	0.032
Big "A"	West Branch	T13 R11	40.500
		TOTAL	75.8MW

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Department of Environmental Protection Water Level Orders (September 1983 through November 1985)

Water Body	Dam I.D.	Location
Allen Pond	148	Green
China Lake	470	China & Vassalboro
Foster's Pond	1336	Bridgton
Great Moose Lake	464	Hartland, St. Albans, & Harmony
Great Pond	455	Belgrade
Long Pond	456	Mt. Vernon
Salmon Lake	457	Belgrade
Little Sebago Lake	1319	Gray & Windham
St. George Lake	4105	Liberty
West Pond	1653	Parsonsfield

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List of Riverfront Communities that have Received Grants for Planning and Revitalizations through State Planning Office Program (1983-1985)

> Augusta Biddeford Brewer Calais Fairfield Fort Fairfield Fort Kent Gardiner Gorham/Windham Hallowell Lisbon Machias Mechanic Falls Randolph

FEDERAL EFFORTS

In October of 1982 Governor Joseph Brennan directed the Maine Office of Energy Resources to submit the <u>State of Maine</u> <u>Comprehensive Hydropower Plan</u> to the Federal Energy Regulatory Commission (FERC). Section 10(a) of the Federal Power Act requires FERC to approve those hydropower projects that are "best adapted to a comprehensive plan for the use and development of the nation's waterways." Maine hoped to receive FERC acceptance of its plan as a guide for federal hydropower licensing decisions.

FERC has responded to Governor Brennan that it does not adhere to any single plan, and that the State of Maine's official plan will be but one piece of evidence it will use in making its licensing decisions. Federal court decisions have held that FERC may override a State's decisions and issue federal licenses for projects that have not received the necessary State permits. This situation raises grave concerns about the efficacy of the Maine Rivers Policy and similar policies of other States in federal proceedings.

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In February, 1984, Maine Senator George Mitchell, at Governor Brennan's request, introduced the "State Comprehensive River Planning Act" to the 98th U.S. Congress as an amendment to the Federal Power Act. This bill would clarify the comprehensive planning provision of the federal law to require FERC compliance with a federally-approved State hydropower plan, except for clear reasons of national interest. The National Governors Association has endorsed the concept embodied in Senator Mitchell's bill. On April 3, 1985, Senator Mitchell re-introduced this legislation in the 99th Congress. Other federal legislators have introduced amendments to the same or similar effect, currently under active consideration by both houses of Congress.

Governor Brennan best stated Maine's position on federal rivers policy when he wrote to FERC in 1983:

"I believe that, after 62 years, it is time to amend the Federal Power Act to allow States an effective voice in the fate of their river resources, subject to the national interest. A comprehensive plan for hydro development would be of value to the hydropower industry as well as the public, by directing developers away from outstanding recreational and scenic rivers to those which may be developed without the delays that heated controversy engenders. Within the bounds set by federal interest, people at the State level are fully able to make judgments concerning the best use of their water resources." Pending legislative resolution of this issue, the State has intervened in all hydropower permitting proceedings before FERC to represent the State's position. Most recently, in response to a motion filed by intervenors in the FERC licensing proceedings on the Big "A" dam, the State reiterated its position that FERC should adopt the State's plan and permits to satisfy the Section 10(a) requirements.

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ANALYSIS AND RECOMMENDATIONS

The Maine Rivers Act recognized that "the surface waters of the State constitute a valuable indigenous and renewable energy resource," and declared it to be State policy "to support and encourage the development of hydropower projects" (38 MRSA \$631). The Maine Rivers Act also acknowledged the value and opportunity that outstanding, free-flowing rivers provide. Maine's clean, undeveloped rivers are an important economic asset to our people. In addition, our outstanding rivers provide recreational opportunities and aesthetic values that are integral to the quality of life in Maine.

The thread that unites the many diverse planning and implementation actions under the Maine Rivers Policy is the concept of balance. The Policy does not call for sacrificing economic growth for the sake of preservation, or the reverse. Instead, by assessing Maine's long-range need for hydropower, carefully weighing the competing demands upon Maine's rivers, identifying the best uses for individual river segments, and providing the means to resolve conflicts, this Policy recognizes that all the beneficial uses may be integrated harmoniously on Maine's vast and diverse river resources. As the preceding pages illustrate, the Policy is achieving this objective.

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Recommendation: Because the various components of the Maine Rivers Policy are working effectively, there is no reason or need to amend the statutes at this time.

The Need for Regulations

At the same time, certain issues and problems have arisen in the course of hydropower proceedings that need to be addressed. These issues (addressed below) can, and should, be resolved through regulations, in order to assure predictability and consistent treatment for permit applicants.

Recommendation: The BEP and LURC should proceed to adopt regulations to govern administration of the Maine Rivers Act.

Consideration of Alternatives

The issue of considering "alternatives" to the Big "A" project was one of the most divisive issues in the recent proceedings before the Land Use Regulation Commission. After careful consideration, we conclude that the law, logic, and justice to the people of the State all dictate that alternatives to a proposed hydropower project be considered in certain cases.

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We reject the argument made by some that by protecting 1100 miles of river from hydropower development, the Legislature intended that all projects be approved on the other 31,000 miles of Maine rivers and streams. Had this been the Legislature's intent, they would not have given the decision-making boards the authority to deny permits. This authority was given, however, with guidance on how it is to be exercised in accordance with seven criteria. The precise method for making that determination is not specified in the statute, but is left by the Legislature to the judgment of the citizen board members.

In our judgment, two of the seven criteria (the public economic benefits test of criterion three and the balancing of environmental and energy considerations of criterion seven) require consideration of alternatives to projects where economic or environmental costs to the public are significant.

Criterion three of the hydro permitting provisions of the Maine Rivers Act requires that an applicant prove that "the project will result in significant economic benefits to the public including, but not limited to, creation of employment opportunities for the workers of the State." The Legislature did not say that every hydropower project is by definition beneficial; it asked BEP and LURC to judge whether the applicant has met its burden of proof. An applicant must, in the simplest terms, prove that the people of Maine will be better off

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with the dam than without it; critical to such a finding is a judgment that the public cannot have the benefits offered without committing a public resource to the exclusive use of the developer.

To fulfill their responsibilities, the board members must analyze fully the contentions of the applicant as to what will happen if the dam is not built. If there is a feasible alternative to building a dam that achieves the same or greater benefits without expenditure of limited public resources, then the "benefits" offered are not truly beneficial to the public. Other agencies and courts have included analyses of alternatives in making decisions under other statutes, where the precise content of general standards such as "public benefit" were in question.

Alternatives to a proposed dam logically become a consideration of the board where circumstances indicate that all of the following conditions are met: 1) the proposed project will cause the people of the State to forego significant benefits they are receiving or are likely to receive from the waterway without the dam; 2) an economically feasible alternative to the energy generating facility exists that will result in benefits comparable to those attributed to the proposed dam; and 3) without the dam the applicant would, in all likelihood, develop some other energy generating facility.

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The gist of this rationale applies as well to the balancing of environmental harms against hydropower benefits in criteria seven.

Thus, the Council agrees with the LURC Commissioners who decided six to one in favor of considering alternatives in the Big "A" case. We agree with all of the major newspapers in the State who editorialized in favor of the consideration of alternatives. And we believe that allowing for the consideration of alternatives in these circumstances strengthens the State's argument to FERC that the federal government should accept State plans and decisions in fulfillment of the comprehensive planning requirements of the Federal Power Act.

Recommendations:

-- <u>The Board and Commission should make clear in their</u> regulations that, as part of their efforts to assess public economic benefits (Criterion 3) and whether the advantages of the project outweigh the adverse impacts (Criterion 7), alternatives will be considered for new dams that will result in significant public economic costs or significant environmental harms. - Agency staff should notify the applicant during the standard, pre-application consultation process if they intend to recommend to the BEP or LURC that alternatives be considered as part of the permitting process.

Existing Dams

In establishing special protection for 1100 miles of outstanding rivers, the Maine Legislature allowed the additional development or redevelopment of existing dams along them, so long as it will result in no diminishment of significant resource values. The Bangor Dam proceeding has raised the question of just what constitutes an "existing dam" and "redevelopment" for these purposes.

Recommendation: The terms "existing dam" and "redevelopment" should be defined in the regulations. The DEP should then develop and publish a definitive list of existing dams on outstanding Maine rivers.

Water Quality Certification

Before the passage of the Maine Waterway Development and Conservation Act, the Governor designated the Board of Environmental Protection as the State agency responsible for water quality certification to federal agencies in accordance with \$401 of the federal Clean Water Act. Some confusion arose in the Big "A" proceedings over the proper way to implement the provisions of the Maine Rivers Act regarding water quality certification.

To clarify this issue and expedite the one-stop hydropower permitting procedure, the Governor should designate LURC as the agency to issue water quality certification for hydropower developments within the Unorganized Territory. The Department of Environmental Protection will continue its coordination function by presenting evidence on this matter in all permitting proceedings before both the BEP and LURC.

Recommendations:

- -- <u>The Governor should designate LURC as the \$401 certifying</u> agency for hydropower development projects in the <u>Unorganized Territory.</u>
- -- Appropriate procedures to integrate compliance with \$401 of the federal Clean Water Act into issuance of a hydropower permit should be specified in the regulations.

Maintenance and Repair

There is confusion regarding which activities, particularly those classified as "maintenance and repair," require a permit under the Maine Rivers Act and which do not.

Recommendation: The regulations should clarify this issue.

Procedural Matters

The Big "A" proceedings prompted many to raise questions regarding such matters as attendance at hearings by decision-makers, opportunities for intervention and public participation in permitting proceedings, and LURC's powers of discovery. These are matters not governed by the Maine Rivers Act, but by the Maine Administrative Procedure Act (MAPA). They are not unique to hydropower permits, but may arise in any permitting proceeding. The Board of Environmental Protection is presently developing regulations under MAPA, applicable to all of its permitting proceedings.

Recommendation: Procedural issues regarding such matters as attendance at hearings by board members and opportunties for public participation in permitting proceeding should be resolved through general administrative regulations applicable to all permitting procedures for the Board and Commission, and not by amendment to, or regulation under, the Maine Rivers Act.

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CONCLUSION

Comprehensive resource management legislation inevitably needs fine-tuning after a few years of experience, and the Maine Rivers legislation is no exception. The perceived need for some adjustments in the hydropower permitting provisions under the Maine Rivers Act has come sooner, rather than later, because it has been so heavily tested in the past two years.

However, with the exception of the issues identified above, which would benefit from regulatory resolution, we recommend that other changes can and should wait. Problems that have arisen in the Big "A" proceedings may never arise again, because it is a unique, and uniquely controversial, case.

The Maine Rivers Act remains landmark legislation that has shaped and will continue to shape the way the State and its citizens view and manage our rivers. The people of Maine can be justly proud of what has already been accomplished under the Maine Rivers Policy. As implementation continues and regulations are developed, our ability to fairly and effectively resolve the management issues that arise will improve with experience.

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APPENDIX

Case Studies

To provide a more indepth look at some of the accomplishments of the Maine Rivers Policy as the users of the State's rivers are experiencing them, the Appendix of this report sets out four case studies addressing policy implementation on three rivers: the Androscoggin, the Kennebec, and the Crooked; and on the Belgrade Lakes, which are benefitting from management of water levels under the Dam Registration Act. 1. The Androscoggin River: An Unlikely and Unheralded Success Story

Although public attention in recent months has focused on the heated controversies surrounding two hydropower projects on the Penobscot River -- Great Northern Paper Company's proposed new dam on the West Branch ("Big A"), and Swift River Company's plan to redevelop the Bangor Dam -- this attention has overshadowed developments on the Androscoggin River which provides an improbable, yet compelling case study of the past and the future of Maine's rivers.

On June 12, 1985, the Maine BEP approved permits for two hydroelectric development projects on the Androscoggin River below Lewiston Falls. Together, the Pejepscot and Worumbo projects will generate 24.5 megawatts of additional hydropower to help offset Maine's dependence on more costly imported oil.

Closer examination of the Androscoggin's history, the background to these projects, and the provisions of the BEP's action reveals that the significance of these two projects greatly exceeds the value of the energy to be produced. In many ways, they represent the culmination of a 25 year effort by Maine people to integrate the conflicting uses of their river resources harmoniously for the greatest public good.

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At the onset of the 19th century, the Androscoggin supported major runs of anadromous fish, including salmon, shad, and alewives. In 1807, however, a dam at Topsham obstructed fish passage above that town; the last documented salmon catch below Lewiston Falls occurred in 1815.

In addition to the construction of other dams upstream of Topsham, industrial and municipal waste discharges into the Androscoggin over the ensuing 150 years further diminished the river's value. Newspapers across Maine and the country reported one period in 1941 when offensive fumes from the river literally peeled paint off buildings in Lewiston and Auburn and left a rotten-egg stench from Berlin, New Hampshire to Brunswick. The Androscoggin had become so polluted, it was widely regarded as a public nuisance, classified as one of the ten dirtiest rivers in the nation.

Beginning in the mid-1960's, the enforcement of new laws and the investment of hundreds of millions of public and private dollars in wastewater treatment plants dramatically restored water quality in the Androscoggin and other Maine rivers. Coupled with an aggressive State fisheries management program, these pollution abatement efforts began a revival of the Androscoggin. One major impediment to the full realization of the Androscoggin's recreation potential remained: the obstruction of fish passage caused by the dams between Lewiston Falls and

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Merrymeeting Bay. Ironically, it was renewed interest in the river's hydropower potential, engendered by the energy shortages of recent years, that would lead ultimately to the removal of this final obstacle.

In June 1981, Governor Joseph E. Brennan announced a Maine Energy Policy that clearly acknowledges the importance of hydropower to meet a portion of the State's future energy needs. This policy called for the removal of unnecessary administrative roadblocks to sensible hydropower projects. At the same time, this policy recognizes the many other values rivers hold for Maine's people, initiating a series of steps to protect and encourage commercial and recreational uses of the State's river resources.

The Governor directed the State's two fisheries agencies, DMR and IF&W, to develop a statewide fisheries management plan, including a clear policy for fish passage facilities in dams where needed. He also directed DOC to identify the outstanding natural and recreational value of Maine rivers. DOC's 1982 <u>Maine Rivers Study</u> classified the lower Androscoggin as a "C" river. Though not of statewide or national significance, its historic anadromous fishery, its contribution to the world-renowned Merrymeeting Bay estuary, and its accessibility to much of the State's population clearly warranted recognition of the Androscoggin's regional importance for Southern Maine.

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The new authorities established under the 1983 Maine Rivers Act enabled the BEP to include fish passage provisions in the permits for the Pejepscot and Worumbo Projects. These requirements will ensure that anadromous fish will be able to pass freely in the 31 miles of river between Brunswick and Lewiston Falls for the first time in over 175 years.

More tangible evidence of the cumulative effects of the combined efforts on the Lower Androscoggin in recent years occurred on September 3, 1984. On that date, DMR reported the first catch of an Atlantic Salmon -- an eight pounder -- in Auburn since 1815. This event would not have occurred but for the fish passage facilities installed in the redeveloped Brunswick/Topsham dam, completed in 1983. The total salmon run through the Brunswick fishway in 1984 was 93 -- up from 20 in 1983.

The comparative figures for passage of alewives were even more dramatic. Based on habitat available between the Brunswick/Topsham dam and Lewiston Falls, the Androscoggin River Anadromous Fish Restoration program estimates that the long term yield of alewives produced above Brunswick in the Androscoggin and its tributaries should range from approximately 700,000 to 1,400,000 pounds annually, valued at \$49,000 to \$98,000 (1983 landed value). The statistics indicate that this restoration program is well on its way to achieving its goals. In 1983, 601

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alewives passed the Brunswick fishway. In 1984, this figure increased more than four-fold to 2530 alewives. As of December 1, 23,895 alewives had been trapped at the Brunswick fishway for 1985. The observed emigration of large numbers of juvenile alewives in 1982 and 1983 promises even more substantial returns in 1986 and 1987.

The Androscoggin has become a productive, living river once again, generating significant new hydropower while providing other valuable commercial and recreation benefits to Maine's people. 2.... The Belgrade Lakes: Water Level Management under the Dam Registration Act

The biggest problem with regard to water level management is the lack of management by private dam owners. This mismanagement has often resulted in unresolved problems and protracted disputes among the interested parties. Even slight water level changes can greatly inconvenience a shorefront owner. Water level fluctuations can affect domestic water supplies, recreational uses, and public safety; cause private property damage (e.g. docks) and erosion; eliminate wildlife habitat; and disturb historic water levels and downstream water uses.

The water levels provisions of the Maine Dam Inspection, Registration and Abandonment Act, one of four laws that constitute the Maine Rivers Policy, have assisted water level management in several ways. The Act has provided the DEP with a mechanism for resolving problems among property owners. It allows lakeshore residents a forum in which they can communicate their concerns. In the process of a water level hearing, the interested parties become educated to the needs of the entire watershed system. This forms the basis for the establishment and implementation of active management programs that attempt to balance all of the competing needs and uses that have been identified.

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One example of successful water level management is the Belgrade Lakes case. In this instance, the Belgrade Area Dams Committee (BADC) took the initiative to communicate their concerns to the DEP. On May 30, 1985, the DEP received a petition from the Selectpersons of Belgrade to establish a water level regime for Salmon Lake, Great Pond, and Long Pond. In response, DEP held a public water level hearing in Belgrade. The DEP attributes the BADC's success, in large part, to the effort the group made to communicate their concerns to the agency.

Since taking over the operation and maintenance of the dams, the BADC has developed a Comprehensive Water Levels Management Plan for the three lakes. The BADC developed its plan after reviewing historical water levels data, flow discharge curves, flood studies, precipitation and evaporation data, and related information and after consultation with the DEP, IF&W and others. The Plan was discussed at three public meetings, including the DEP sponsored public hearing, and has received almost unanimous public support.

The BADC then sought and received approval from the BEP to implement a responsible water level management regime involving more extensive drawdowns during the fall/winter period, providing for minimum flow out of Salmon Lake, managing summer water levels, and setting minimum level summer goals. Benefits from less fluctuation in water levels will accrue to camp owners, who

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should experience less flooding; recreationists, who will have more consistent access to shallow area docks; and to fish and wildlife, as their needs were also considered in establishing the water levels and the schedule for achieving the various established levels and flows.

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3. The Kennebec: Downtown on the River

Until the water pollution control legislation of the 1960's and 70's, many of Maine's historic riverfront communities had deteriorated along with the quality of the water and the decrease in the river transportation. As Maine's waterways have become cleaner, those communities that originally located along the river for waterpower and transportation have seen a revitalization of downtowns. In the 1980's, these waterways have become amenities for their recreational and scenic values. As people became attracted to the river, so did commercial establishments, and buildings that had not seen a major renovation since they were built in the early years of the century, or before, suddenly became desirable properties again.

The redevelopment of the downtowns on the Southern Kennebec is a good example. With over \$2,000,000 in State, local and federal funds, and with the confidence and investments of the private business owners who chose to commit to these reemerging community centers, communities along the Kennebec from Augusta to Bath have made major efforts to revive their waterfronts for a mix of recreational and commercial uses and to improve the adjacent downtown areas. Riverfront parks have been built, or are under construction in Augusta, Hallowell, Gardiner, Randolph and Bath, and river access for boaters has been improved. These communities and Richmond all have extensive downtown improvements planned or underway.

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The dollars spent for improving riverfront access, recreational opportunities and local development are paying off in revitalized community spirit as well, as is evidenced by the formation of the Kennebec River Council. This Council was formed at the instigation of the Southern Kennebec Regional Planning Commission. It is now a self-sustaining organization of interested representatives from local communities working together to promote the Kennebec River as a natural and economic resource of regional importance. The Council coordinates dissemination of information on the river and schedules educational events for the public and for governmental officials. 4. The Crooked River: The Dams and the Fish

The Crooked River was classified by the <u>Maine Rivers Study</u> as a "B" river. This means that it has a composite of natural and recreational resource values of outstanding statewide significance. But one of its values, its inland fishery, is identified as being one of the State's most significant, having greater than statewide or national significance. Indeed, the Crooked River provides the spawning run for Sebago Lake's internationally famous landlocked salmon. This fishing activity, in turn, provides commercial benefits to many communities around the Lake and in the Crooked River corridor.

Until the early 1970's, this salmon population was provided primarily by IF&W stocking; but in the early seventies, two of the three dams on the Crooked, those at Edes Falls and Scribner's Mills, were breached, making the river free-flowing from Bolster's Mills to the Songo River. IF&W installed a fish passageway at Bolster's Mills providing fish passage to the upper reaches of the river, all the way to the headwaters at Songo Pond. As an estimated 75-80 percent of the landlocked salmon spawning and nursery area on the Crooked River is above Bolster's Mills, this opened the possibility for a wild salmon run.

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In 1975 and 1976, IF&W stocked the upper river habitat. From a few fish running and spawning in the lower reaches in the early 1970's, the wild stocks have climbed to well over 500 adults above Bolster's Mills on this year's run, in addition to many adults in the lower river. The fisheries biologists predict that by 1990, as much as 60 percent of the salmon in Sebago could be wild fish.

These predictions depend, however, on continuation of the status quo at Edes Falls and Scribner's Mills and on replacement of the fishway at Bolster's Mills, which has been badly damaged and may not provide any passage for next Fall's run. IF&W is examining options for resolving financial and other problems with fishway repair at Bolster's Mills, with the possibility that the agency will conduct its first adjudicatory proceeding under the Fishways Act. This Act assures that fish passage will be provided -- by court order and sale of the dam, if necessary to raise the resources -- wherever "habitat anywhere in the watershed above the dam or obstruction is sufficient and suitable to support a substantial commercial or recreational fishery for one or more species of anadromous or migratory fish."

Thus the Fishways Act, another statutory component of the Rivers Policy, provides important protections for the State's most valuable migratory fisheries resources.

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APPENDIX B

To assist us in consideration of some of the issues that have arisen in implementation of the Maine Waterway Development and Conservation Act, the Council solicited comments from the persons listed below who have participated in the permitting process under the statute. Underlining indicates those persons who responded to our request. Their letters are on file with the Council at the State Planning Office, and copies are available on request.

The letters were read with great interest and considered thoroughly in reaching our conclusions. Obviously, there were disagreements on important issues among respondents; in our own analysis, conclusions, and recommendations we have respectfully disagreed with the strongly held beliefs of some. In the body of the report, we have offered what we consider the best approach to assure continued, effective implementation of the Maine Rivers Policy.

Peter Graham, Foss Mill Hydro Project

Hackett Mills Hydro Associates, Hackett Mills Hydro Project

Jim Sysko, Small Hydro East

Ernest Sevey, Sevey Hydro Project

Milstar Manufacturing Corp., Lockwood Hydro Project

Ralph Bean, Central Maine Power Co.

P. Andre Lemaistre, Old Sparhawk Mill Co.

Jenness Buck, J.K. Inc.

Richard Morgan, Morgan's Mills Project

Murray Thurston, Thurston Mill Project

Chris Anthony, Pioneer Dam Project

Joe Sawyer, Seabright Hydro Project

Don Hopkins, Androscoggin Water Power Co.

Herb Miller, Miller Hydro Group (Marc Isaacson responding)

John MacGregor, S.D. Warren

Lawrence Smith, Ledgemere Project

Julie Ardell, Islandia, Inc.

City of Bangor, Bangor Waste Water Treatment Plant Project

Dale Phenicie, Great Northern Paper

Paul Quinn, Quinn Hydrotech

Everett B. Carson, Natural Resources Council of Maine (Ron Kreisman responding)

Charles Hewett, the Maine Audubon Society

David Allen, Sportsman's Alliance of Maine

Richard Ruhlin, Friends of Penobscot River

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