STATE OF MAINE
Department of Environmental Protection

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JOHN R. McKERNAN, JR.
GOVERNOR

DEAN C. MARRIOTT
COMMISSIONER

MEMORANDUM

DATE: November 30, 1989

TO: Board of Environmental Protection

FROM: Stephen W. Groves

SUBJ: Reclassification

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Attached are all the final comments received by the staff in regards to reclassification. As a result of these comments the staff is suggesting a few amendments to the proposal presented on 29 November 1989. We request that the Board consider this proposal and make a recommendation to the Legislature at the December 13th meeting so that legislation can be prepared for this session.

1. West Branch of Penobscot River - Great Northern Paper Co. and the Natural Resources Council of Maine have each submitted comments with respect to the segment below Ripogenus Dam proposed for upgrade to Class AA. The GNP Co. recommends this segment remain Class B, the NRCM comments support the Class AA designation. Great Northern's concerns center around continued operation of its generation facility at the McKay Station (Ripogenus). The staff proposal carefully took into account this facility (and many others including facilities on the East Branch, Saco, and Crooked where Class AA segments are proposed) and did not intend to interfere with the continued benefits of these hydropower facilities. Presently there are a number of dams and generating facilities upstream of existing Class AA segments and it is the staff's opinion that the free flowing and natural characteristics of Class AA can be compatible with upstream generating facilities. We do agree, however, that there are potential legal problems surrounding the issue of regulated flows and plan to discuss our ideas for a solution to these problems with the Attorney General's Office. The staff, therefore, continues in its recommendation to upgrade this segment to Class AA.

2. Penobscot River-Comments were received from Bangor Hydroelectric (through their legal counsel, Preti, Flaherty, Beliveau and Pachios), the Penobscot Nation and the City of Bangor. Bangor Hydro is concerned that the reclassification does not address the application of aquatic life criteria in impoundments and recommends statutory revision to clarify the use of these criteria. This is not a reclassification issue but one of implementation of standards. The staff anticipates through its regulation development to satisfy this concern in the near future. Bangor Hydro is

is to improve dissolved oxygens conditions sufficiently to attain Class C standards. The three paper corporations and Central Maine Power may cooperatively share responsibility for the oxygenation system. Federal regulations allow this use of a non-treatment technique only if technology-based treatment requirements are not sufficient to achieve the standards and the discharger demonstrates that the technique, after consideration of alternatives, is the preferred environmental and economic method to achieve the standard.

Dioxin Contamination

EPA has concluded that bleached kraft pulp mills discharge environmentally significant levels of dioxins and furans in treated process wastewaters. The Department should implement effluent limitations and special conditions to control and abate the discharge of dioxin within the treated process wastewaters from the 7 different bleached kraft pulp and paper mills in Maine. Dioxin is a highly toxic substance that readily bioconcentrates in the food chain. Waters downstream of the kraft mills were listed as non-attainment reaches due to dioxin levels in wastewaters and presence of dioxin in fish tissue. The Maine Department of Human Services (DHS) issued a health advisory which recommends limiting consumption of fish taken from portions of the Androscoggin, Penobscot, Kennebec, and Presumpscot rivers.

Chapter 584 of the rules cite general statewide water quality criteria to control ambient instream levels of toxic pollutants, including dioxin. The rule also authorizes the Board to adopt site specific criteria for toxic pollutants. The DHS is currently developing a recommendation for maximum levels of dioxin within fish tissue and waters of the State. BC requested that the Board adopt site specific criteria for instream levels of dioxin in the Androscoggin River.

The potential water quality-based dioxin wasteload allocation may require that the maximum concentration in the wastewater be less than the analytical detection level of approximately 5 parts per quadrillion The criteria is lower than the detection level primarily because of the non-threshold cancer risk assumption and organism bioconcentration factors.

Best Practicable Treatment

BC is obliged to provide the best practicable treatment (BPT) to reduce, treat and control the discharge of pollutants to the river. The Department's responsibility is to specify effluent limitations which require application of BPT. Technology-based license limits for the existing BC license were based on National BPT guidelines developed in 1977 by EPA.

Compliance

Maine law prohibits issuance of a waste discharge license for a discharge of pollutants which cause fish for human consumption to be injurious to human health as determined by the US Food and Drug Administration or the DHS. In addition, the license decision must require the discharger to control its wastewater quality to ensure that the applicable water quality standards are attained in the river.

BC may be unable to immediately comply with the water quality-based dioxin effluent limitation. Significant industrial process modifications may be necessary. Moreover dioxins already present in the river system may require continuation of the health advisory, which will restrict fish consumption for years to come. BC may be unable to immediately construct and operate the oxygenation facilities required to the dissolved oxygen standard in Gulf Island Pond.

Justification for Public Hearing

Staff anticipates significant public interest regarding our license decision on the BC application. The dioxin issue has affected the pulp and paper industry worldwide and involves 106 mills in the United States. The following groups have already submitted comments on the dioxin issue or the BC application: The Paper Industry Information Office, individual Maine pulp and paper manufacturers, James River Corporation of Berlin, NH, Central Maine Power, EPA, Natural Resources Council of Maine and the Androscoggin River Committee.

Due to the level of public interest and challenging new technical, legal and policy issues linked to this application, the Department requests that the Board act on this application. Staff is prepared to advise you an all aspects of these issues. However many of the issues are controversial and will be hotly contested. In order to provide full opportunity for consideration of all viewpoints and cross examination, staff recommends that the Board post the application to a public hearing under Chapter 20, Regulations for Hearings on Applications. I suggest the hearing be held on Tuesday, January 30, 1990, in Augusta. The hearing could be lengthy, so you may want to budget time for a second day if needed. Staff proposes to help Board members prepare for the hearing by presentation of a briefing paper to provide background and to focus on the major issues at a regularly scheduled Board meeting (1/10/89) prior to the hearing.

NM/sl
BCHEARING

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Great Northern Paper
a company of
Great Northern Nekoosa Corporation

File No. 205.00

November 28, 1989

Dean C. Marriott, Commissioner
Department of Environmental Protection
State House Station 17
Augusta, Maine 04333

Dear Dean:

This letter, and the detailed comments enclosed, constitute the response by Great Northern Paper to the Staff proposal for upgrade of stretches of the West Branch of the Penobscot River from Class "B" to "AA" and "A". Simply put, we are astonished that the Staff would propose "free flowing" and "natural" classification on a regulated waterbody which by virtue of its operation likely cannot meet such classifications. This proposal would have very serious impacts on existing Great Northern Paper operations. These impacts would come as a result of the fact that "A" or "AA" classification of any river segment below Ripogenus would jeopardize continued operation of the hydroelectric facilities at McKay Station and North Twin Dams. Obviously, without the power from these stations, operation of the existing mills would have to seriously be curtailed or halted altogether.

Additionally, the highly regarded recreational opportunities on the West Branch which this proposal seeks to protect would, if the "A" and "AA" standards are imposed on these stretches, cease to exist.

The detailed discussion regarding these conclusions appears in the enclosed comments. Briefly, these conclusions are drawn because:

- Designated uses for Class "AA" waters DO NOT include hydropower generation.

- Class "AA" waters must provide habitat which is "free flowing and natural." The fact that an upstream dam controls the flow means that the habitat can be neither free flowing nor natural.

- Class "AA" waters must provide aquatic life as "naturally occurs." The aquatic life below McKay Station is anything but "as naturally occurs" because of the consistent flow regime present due to operation of the dam and powerhouse. Actually, aquatic life below McKay is enhanced, in the estimation of many, by the flow regime which is in place. Class "AA" standards would not allow for this.

Millinocket, Maine 04462. (207) 723-5131

- Class "A" waters must provide habitat which is "natural." As described above, this is not the case below McKay and for the same reason is not the case below North Twin Dam. We would be forced to curtail operations in order to meet this standard.

- Class "A" waters must also provide aquatic life as "naturally occurs." As explained above this is not and cannot, with continued operation, be the case below McKay, nor can it be below North Twin.

- Direct discharges are prohibited from "AA" waters and nearly so from "A" waters. Should licensing of any flows from these facilities be deemed necessary in the future, it essentially could not be done.

- While the remote nature of the countryside in the Ripogenus/McKay region make industrial development unlikely, such is not the case in the lower stretches of the West Branch. Neither Great Northern Paper nor the Town of Millinocket is willing to rule out future industrial or commercial development of a type which would require some sort of discharge. From the public hearing held in Millinocket regarding this subject, it is clear that holding future development to Class "A" discharge standards is unwanted, unwarranted, and unfair.

- The Staff's desire to protect recreational uses in conservation easement lands is not appropriately accomplished by misuse of the water quality classification system. In any event, the easements negotiated with and accepted by the state, are the means already in place to deal with recreation.

- The Staff recommendation ignores the preponderance of testimony at the Millinocket hearing.

I must remind you and the Staff that water quality in this river is not in danger, nor will it be if the classification remains, at what it must, Class "B". Class "B" waters in our state are very high quality and provide for excellent recreational and aesthetic values as well as wise use as a vital resource for preservation of our economic base. There seems to be no disagreement that acceptable water quality in these stretches already exists. No change is needed to insure the continued value of these river stretches since any development proposal must be licensed by your Department and probably LURC, who will see to it that antidegradation standards are enforced.

Great Northern Paper
a company of
Great Northern Nekoosa Corporation

File No. 205.00

Finally, while the focus of this letter has been primarily on the proposals for the West Branch, given the potential serious effects, we have the same concerns for the same reasons with the proposed changes further upstream, below Seboomook Lake, and those proposed for the East Branch. These stretches are controlled by dams or storage impoundments which supply water to the hydroelectric facilities downstream and provide valuable flood control capability. Their functionality should not be destroyed by the recommended changes in classification either.

Similarly, the proposal to classify any tributary to the West Branch as "AA" if it flows through Baxter Park is also seriously flawed. For example, interfering with dam operations at Nesourdnahunk Lake would destroy the excellent and highly unusual brook trout fishery within the lake and certain sections of the stream.

This has been a quick discussion of the ramifications of these sweeping classification change proposals, and has been supplied in an effort to respond within the extremely short time frame given us. (I received my copy of the proposal on November 20, 1989 with instructions to respond by November 27, 1989.) We are working to develop additional technical information for supply to the Board prior to their deliberation on the matter. I trust that you will pass it on to the Board after it has been supplied to you.

Sincerely,

Dale K. Phenicie
Manager of Environmental Affairs

DKP/bv

Enclosures

November 27, 1989

COMMENTS REGARDING PROPOSED RECLASSIFICATION OF THE WEST BRANCH OF THE PENOBSCOT RIVER BY GREAT NORTHERN PAPER

Great Northern Paper ("GNP") strongly opposes the Department of Environmental Protection ("DEP") Staff Proposal to reclassify the Class B waters of the West Branch of the Penobscot River from the Ripogenus Dam to the T.3, R.11, W.E.L.S. - T.3, R.10, W.E.L.S. boundary (38 M.R.S.A. Section 467(C)(1)(c)). The DEP Staff proposes to reclassify the waters below the Ripogenus Dam to a point located 250 feet below McKay Station from Class B to Class A, the segment from a point located 250 feet below McKay Station to its confluence with the Debsconeag Deadwater from Class B to Class AA, and the segment from Debsconeag Deadwater to the outlets of Ferguson and Quakish lakes from Class B to Class A. GNP believes that the Staff Proposal is not consistent with the requirements of the statute or the goals of the Conservation Easement granted to the State by GNP to assure protection of recreational uses as well as the existing integrated management of this working hydropower river. GNP believes that, in addition to not meeting the statutory requirements for Class A or Class AA waters, the proposal would threaten the existing hydroelectric power generation facilities at McKay Station. The specific grounds for GNP's opposition to the proposed reclassification include:

1. The affected river segment presently contains a major hydroelectric facility and is properly considered a single working hydropower river segment which does not qualify as Class AA or A waters under the statutory criteria of 38 M.R.S.A. Section 465.

2. The proposed reclassification would threaten existing hydroelectric power generation facilities owned by GNP at the Ripogenus Dam and McKay Station by providing the potential for denial of necessary water quality certification and by creating the potential for the raising of dangerous water quality permitting issues.

3. The Maine Legislature has, by statute, determined those water bodies where hydropower is to be disfavored, and the river segments in question were not included on that list.

4. The Maine Legislature appropriately classified these waters as Class B, and there has been no change in circumstances or water uses to warrant a classification upgrade.

5. The upgrade in classification is not necessary to achieve the stated purpose of the Staff Proposal or the protection of recreational uses of the area, because the Conservation Easement granted by GNP to the State of Maine and the LURC Resource Protection Plan already assures the protection of these same recreational interests, while preserving GNP's right to continued hydroelectric power generation at the Ripogenus Dam and McKay Station.

6. The Staff Proposal overstates the public comments favoring a classification upgrade on the basis of recreational uses, while failing to reflect the majority of public comment favoring retention of the existing Class B classification.

These issues are examined briefly below. The time constraints imposed by the short comment period between GNP's receipt of the November 13, 1989 DEP proposal, and the November 27, 1989 deadline for written comments, preclude more extensive written comments at this stage. Additional technical information is being assembled and will be supplied prior to the December 13, 1989 Board meeting if possible. GNP will plan on appearing to address the Board at the December 13, 1989 hearings on the proposal in light of the critical importance of this issue to GNP and the magnitude of the threat to GNP continued operations at McKay Station, the North Twin power station, and Millinocket and East Millinocket mills, should this proposal be accepted.

1. WATER QUALITY STANDARDS OF CLASS AA AND A WATERS ARE NOT ATTAINED IN THE AFFECTED RIVER SEGMENTS

A. Ripogenus Dam to McKay Station

The segment of the West Branch of the Penobscot River located between the Ripogenus Dam and 250 feet below McKay Station does not meet the water quality standards for Class A waters established in 38 M.R.S.A. Section 465(2). Class A waters must have a "natural" habitat, and the aquatic life must be "as naturally occurs." In addition to strict dissolved oxygen standards, anyone wishing to maintain a direct discharge to Class A waters must demonstrate that the discharged effluent will be equal to or better than receiving water quality. Finally, the Board must also find that no other reasonable alternative exists to a discharge in order to grant such a license.

The existence of the Ripogenus Dam and associated impoundment of water, as well as the diversion and regulation of the water flow necessary for hydroelectric power generation at McKay Station, make this portion of the West Branch a highly regulated river. In fact, GNP is required by law to maintain a certain flow level, thereby artificially altering the naturally existing flow patterns of the river and the associated river aquatic communities. The flows maintained in this highly regulated river, and the altered aquatic communities these artificial conditions foster, disqualify this river segment from meeting the test of "natural" habitat or aquatic life designation. Furthermore, it is not clear that the water chemistry requirements for Class A waters could be met within this segment at all times of the year and the DEP Staff Proposal does not reference any data to support such a finding. Therefore, the proposed Class A designation is, by definition, improper, and should be rejected.

B. McKay Station to Debsconeag Deadwater

The segment of the West Branch of the Penobscot River located 250 feet below McKay Station to its confluence with Debsconeag Deadwater does not meet the water quality standards for Class AA waters established under 38 M.R.S.A. Section 465(1). Class AA waters, the highest designation, must have a habitat which is "free flowing and natural" and have aquatic life, dissolved oxygen and bacteria content "as naturally occurs." Class AA designation absolutely prohibits any direct discharge of pollutants to such waters. The Class AA "free flowing" requirement, combined with the omission of hydroelectric power generation from the list of designated uses, indicates the Maine Legislature's understanding that Class AA designation is inconsistent with hydropower uses.

By virtue of being part of a regulated flow controlled river system, the aquatic community in the river segment immediately below McKay Station is not "as naturally occurs" nor is the river habitat "natural" and, therefore, a Class AA designation is, by definition, improper. Furthermore, it is not clear that the strict water chemistry requirements of Class AA designation can be attained in this river segment, nor is there any data referenced by the Staff to support such a finding.

Although the Maine Act does not define "free flowing," reference to the definitions of that term as used in the federal Wild and Scenic Rivers Act, 16 U.S.C. Section 1271 et seq., demonstrates that the river must be in its natural condition, without impoundment, diversion, straightening, or any other modification of the water way.[1] Similarly, to the Federal Energy Regulatory Commission (FERC), the terms "free flowing and natural" connote instantaneous run-of-river operation, a condition long since altered by artificial impoundment and release in this river segment.

Similarly, the DEP takes a very strict interpretation of the Class AA water classification. At the July 25, 1989 public hearing on the reclassification, DEP's representative explained the classification:

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* [1] 16 U.S.C. Section 1286 provides in relevant part:

"[f]ree-flowing," as applied to any river or section of a river, means existing or flowing in natural condition without impoundment, diversion, straightening, rip-rapping, or other modification of the water way.

> The new classification system that we devised, we thought that it made sense to have one class which was pristine, meaning that it would be handed down to future generations; that river and the water in it would be handed down to future generations basically unchanged. That's Class AA. Class AA, no discharges are allowed of any kind and no dams are allowed. The water quality in it is basically as is there, as naturally occurs. No discharges, therefore, no impact. (emphasis added)

Comments of Steve Groves, DEP Director of Water Bureau at July 25, 1989 Public Hearing RE: Maine Water Quality Penobscot River Basin, pp. 8-9; See generally, March 1986 Water Reclassification Report of the Joint Standing Committee on Energy and Natural Resources, 112th Legislature, p. 9 (Class AA is the highest classification and waters are characterized as "free flowing." Activities which would cause Class AA waters to be other than a free-flowing habitat for fish and other aquatic life cannot be granted a license).

Class AA designation is inappropriate to this working hydropower river segment. The hydropower structures immediately upstream actually control the river segment below McKay Station through flow regulation. It is not possible to draw an artificial boundary in this highly regulated river segment between the hydropower structures and the regulated river immediately below: the entire segment must be regulated as an integrated unit. GNP's hydropower structures and associated mandatory flow regulation are the "impoundment, diversion, and modification" of the water way which disqualifies the river from "free flowing" status. Similarly, the aquatic habitat of this regulated segment cannot be "as naturally occurs," since the river is not in its natural state. The regulated river flow has altered the natural aquatic communities of this river segment. The beneficial effects of the dam impoundment are the creation of artificially stabilized river flows, which in turn enable establishment of aquatic communities which could not survive in the natural conditions of drought and flow disruptions. For instance, Maine regulators have used these artificial conditions to assure the continued viability of the man-introduced landlocked salmon population.[2] Therefore, there can be no doubt but what this segment of the Penobscot River is not a "natural" (albeit desirable) aquatic community, and Class AA designation would be incorrect.

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[2] Ironically the very goal Inland Fisheries and Wildlife seeks to achieve by supporting Class AA designation, protection of Landlocked salmon, is undermined by the Class AA designation, which might prohibit the existing dam structure, and associated protection for the landlocked salmon.

2. THERE HAS BEEN NO CHANGE IN WATER QUALITY TO JUSTIFY RECLASSIFICATION

In the original water quality legislation, the Legislature recognized that the existing hydropower uses required that the portion of the Penobscot River from the Ripogenus Dam to the T.3, R.11, W.E.L.S.-T.3, R.10, W.E.L.S. boundary be managed as a single unit, with Class B waters designation. Similarly, in the Maine Rivers Act, 12 M.R.S.A. Section 403(12), the Legislature again considered this river segment as an integrated management unit and specifically excluded the segment from outstanding river areas afforded special protection under the Maine Rivers Act, 12 M.R.S.A. Section 403, again in recognition of existing hydropower uses of the area and the regulated water flow and artificial aquatic habitat. There have been no significant changes in river uses since the Legislature last reviewed the water quality and river classification for this segment, and it remains a working hydropower river. The Staff Proposal to divide the management unit into two segments with different water quality designations does not refer to any change in river uses as explanation for its plans to abandon the Maine Legislature's management plan, but instead refers to the need to preserve existing recreational uses of the area as the justification for its proposal. (Staff Proposal, p. 7). The Board and Staff should be aware that this was the intent of the Conservation Easement granted by GNP and accepted by the State of Maine. However, given the present use as a hydropower river, the Easement contained mutual protections for both recreation and hydropower. The proposal would, in affect, unilaterally amend the carefully constructed and negotiated Conservation Easement.

From the fisheries point of view as well, the West Branch is far from free flowing if free flowing means run of river conditions, i.e., pristine or before man's activities. The West Branch is highly regulated and runoff is stored and distributed to optimize hydroelectric generation. Fortuitously, this management also creates habitat conditions for salmonids that are much improved over habitat that would be present without man's activities. The West Branch is not natural compared to pristine, for the same reasons it is not free flowing compared to pristine.

The other relevant proposed Water Classification Standard is that aquatic life (plant and animal) and dissolved oxygen shall be as naturally occurs. The definition of "naturally occurs" refers to a comparison with similar habitats free of measurable effects of human activity. This would apparently lead to the conclusion that the West Branch aquatic communities (plankton, periphyton, macroinvertebrates) and fish populations should be the same as would be found in an unregulated habitat with similar conditions. The irony here is that there is no such situation to be used for comparison, i.e., where do we find an unregulated river the size (width, depth) of the West Branch with an average flow of approximately 2,500 cfs and very few and short episodes of extreme high or low flows.

And if we could locate such a river, what would be its "natural" aquatic life. It might well not have salmon or lake trout and it would likely not have abundant smelt drift. Aquatic communities would be different because impoundments affect downstream species composition and abundance of certain of these communities (e.g., macro-invertebrates). Dissolved oxygen would probably be comparable, at least if the surrogate (natural) river was turbulent like the West Branch.

Therefore, if designating regulated segments of the West Branch Class AA assumes, in effect, that these segments are free flowing and natural, compared to a habitat that is "free of measurable effects of human activity," then that assumption is flawed. Today's West Branch will not meet such a standard. There are highly significant physical and biological differences associated with the evolution of the West Branch from "free of measurable effects of human activity" to its present highly regulated and managed state.

The Class A standards state that Class A waters should be suitable as habitat for fish and other aquatic life and that this habitat should be characterized as natural, and that aquatic life shall be as naturally occurs. These standards give rise to the same discussion as presented above for Class AA regarding "natural" habitat (flow, wetted width, depth, etc.) and "naturally occurring" fish and aquatic communities.

The West Branch segments proposed to be changed from Class B to Class A fail to pass the "natural" and "free of measurable effects of human activity" standards of Class A. The only alternative which provides the flexibility needed to sustain current condition is the presently ascribed Class B.

The Staff Proposal is inconsistent with the reality of the working river system, and as well as with the weight of public testimony and the past management practices of the West Branch watershed. Furthermore, it is a misapplication of the water quality laws, representing an attempt at de facto zoning in favor of "recreational uses" in complete disregard not only of the elaborate LURC land use plans and Conservation Easement provisions for this area, but also the Maine Legislature's own determination to exclude this working river segment from the hydropower prohibitions of the Maine Rivers Act.

The Staff Proposal for this section of the West Branch is inconsistent with its recommendations for other river segments. In the November 1, 1989 Proposal, the DEP staff recommends against water quality classification upgrade for other river segments on the rationale that the Maine Legislature did not include that segment in the Maine Rivers Act, and therefore, the Legislature did not wish to establish free flowing use and Class AA status for that segment. For instance, when reviewing the East Machias River basin the staff stated:

> This segment is not included in the Maine Rivers Act for Protection, therefore, it is assumed that the legislature did not wish to establish the free flowing use in this segment. (emphasis added.)

Staff Proposal, p.2. Consistent logic would require the same conclusion with respect to this highly regulated portion of the West Branch of the Penobscot, which the Legislature also excluded from the Maine Rivers Act; see also, Staff Proposal p.3 (existence of flow control structure precludes AA designation and legislative finding to protect free flowing use in Narraguagus River); Staff Proposal p.10 (Saco River Basin upgrade to AA justified by its designation as an outstanding river in Maine Rivers Act).

3. THE PROPOSED RECLASSIFICATION THREATENS EXISTING HYDROELECTRIC FACILITIES

If the proposed upgrade to Class AA and Class A is enacted, there is an unacceptable threat that the existing GNP hydroelectric power generation facility at McKay Station could be the victim of a forced shutdown due to inability to meet federal or state water quality licensing requirements never intended for a regulated river. If the hydrogeneration shuts down, the mills shut down. Although GNP does not believe that the hydroelectric power facilities are properly considered a "discharge" or "discharge of pollutants," to the extent that such a regulatory interpretation is adopted, the hydropower facilities could not meet the Class AA or A requirements. The DEP apparently believes that existing hydropower projects constitute projects which result in a "discharge" requiring certification under Section 401 of the Clean Water Act ("CWA"); see proposed water quality certification for Cataract Hydro Project, paragraph 2. Conceivably, if such a discharge is involved, this could result in denial of an operation license from the FERC because a water quality certificate from the DEP could not be granted since the free flowing and natural standard could not be met.

To date, appellate federal courts have ruled that a National Pollutant Discharge Elimination System (NPDES) permit is not required under the CWA, Section 402, rejecting the contention of environmental groups that hydroelectric power generation facilities involve the "direct discharge of pollutants" to waters. However, the issue is not yet free from doubt, as evidenced by the contrary ruling of the lower courts in those cases, and the absence of a dispositive ruling from the United States Supreme Court, or even the United States Court of Appeals for the First Circuit. Furthermore as noted above, the DEP staff believes the CWA Section 401 does apply to the dam as involving a "discharge into the navigable waters," thereby requiring a water quality certification from the State of Maine. Thus, when the Ripogenus project seeks a water quality certificate, the DEP would be faced with the issue of whether the existing Ripogenus Dam and McKay power station facilities were consistent with Class A or AA water quality standards.

The DEP may have no choice but to refuse the necessary certification on the basis that existing hydropower operations did not support the mandatory free flowing and natural river conditions, and precluded attainment of water quality standards listed under Class AA and A, thereby forbidding continued operation of the facilities. Finally, it is possible that the State of Maine itself would attempt to require a waste discharge permit under 38 M.R.S.A. Section 413 on the same "discharge" theory, and deny that license for non-attainment of Class AA or A standards.

Any mitigation measures which might be required as a FERC license condition in order to assure the free flowing and natural river habitat standards of Class AA and A, would likely force a shutdown of the hydroelectric power generation facility and consequently, GNP's mills. Any limitation on drawdowns in the Ripogenus impoundment inevitably will result in increased flood damage downstream, particularly on the main stem of the Penobscot River. Changes in the flows below McKay Station or limits on drawdowns could prevent white water boating during substantial parts of the summer. In sum, any upgrading of the river segment to which McKay Station discharges, will jeopardize the relicensing of the Ripogenus project before FERC. The practical solution is to leave the existing Class B classification intact on both of these river segments.

4. THE CONSERVATION EASEMENT GRANTED BY GNP TO THE STATE OF MAINE ALREADY AFFORDS THE RECREATIONAL USE PROTECTIONS SOUGHT IN THE PROPOSED RECLASSIFICATION

In its Proposal the DEP Staff explained the purpose for the recommended reclassification upgrade to Class AA and A:

> It is the staff's opinion that this upgrade will protect the quality and uses which attract people for the local recreation industry and will not inhibit development of most types of recreation associated facilities which might be considered. Staff Proposal, p.7. Although the staff acknowledges the existence of the GNP easement to the State allowing for recreation, it ignores the fact that the Easement, in combination with the LURC Resource Protection Plan, already assures protection of those same recreational uses, based upon a multiple use concept, rather than water quality classifications.

On August 14, 1981, following extensive negotiations with the Department of Conservation and the Governor's office, GNP conveyed a Conservation Easement to the State of Maine on some 75 miles of the Penobscot River watershed, including the river segment from the Ripogenus Dam to the Debsconeag Deadwater now under consideration for reclassification. The Easements extended outward 500 feet from the

normal high water mark of the river. In order to properly manage easement lands, GNP agreed to grant periodically renewable leases to the State of Maine to establish administrative structures, areas and other recreational facilities.

In accepting the easement, the State specifically confirmed GNP's "the right to . . . maintain hydroelectric and associated facilities on the Easement Lands." GNP also reserved the right to conduct any activities required by the FERC to maintain or obtain a hydroelectric license. Similarly, GNP excepted and reserved from the easement the right to "maintain transmission lines, roads, and such development as may be necessary for the transmission of electricity and all rights to use the easement lands for the safe and proper operation and maintenance of Grantor's hydroelectric plants."

Because the easement lands are in the unorganized territories, in 1981 GNP proposed and the LURC adopted a Resource Protection Plan (P-RP) which assured appropriate land use, zoning and protection while protecting multiple uses, including hydropower, on easement lands. The P-RP specifically states that it:

> Provides a mechanism for the State of Maine to administer recreational activities of the Resource Protection Plan lands. Without the legal authority to use GNP's lands, as is being conveyed by the easements, the level of protection and recreation administration desired by the State would not be possible . . .

The P-RP specifically provides for continued hydropower operations:

> The objective of the Plan is to ensure a continuous yield of forest products to support manufacturing facilities, to protect water quality and quantity for present and potential uses, including hydroelectric power generation, to provide for continued recreation uses associated with the river, lake and stream, and to provide for the continued protection of the natural character of the areas consistent with the land use activities proposed in The Plan. (emphasis added)

The P-RP was in effect a regulatory reiteration of the provisions and protections contained in the Conservation Easement itself, which provided for management of the land, timber, water and recreational resources of the affected Penobscot River segments to ensure the continued use and benefit of these resources for GNP and for the people of the State of Maine.

Thus, it is clear that the combination of the existing GNP easement and carefully crafted LURC Resource Protection Plan, through regulation of the lands surrounding the affected river segments, already protect the water quality, natural character and continued recreational uses associated with the affected river segments, while assuring continued hydropower operations by GNP. The DEP Staff's Proposal represents a unilateral change from a multiple use concept and seeks to duplicate recreational interest protections already agreed to by the State at the expense of a misapplication of the Class AA and A designations, thereby jeopardizing existing hydropower operations. The Staff Proposal actually penalizes GNP for granting the Conservation Easement to the State of Maine, by insisting that the recreational interests protected by the Easement overcome the specific Easement reservations for existing hydropower operations. This Proposal, if enacted, certainly undermines the Conservation Easement, and serves as a strong disincentive to any future grants of conservation easements to the State of Maine in similar situations.

Natural Resources Council of Maine
271 State Street, Augusta, Maine 04330-6912
207-622-3101 FAX 207-622-4343

November 21, 1989

Mr. David Courtemanch
Bureau of Water Quality Control
Department of Environmental Protection
State House Station 17
Augusta, Maine 04333

RE: Proposed Water Quality Classifications for the West Branch of the Penobscot

Dear David:

Pursuant to Steve Groves' November 13th memo to "Interested Parties" regarding the opportunity for public comment on DEP's proposed water reclassifications, I am writing on behalf of the Natural Resources Council of Maine to express the Council's strong support for DEP's proposed "AA" classifications for the West Branch of the Penobscot below Ripogenus Dam. The Council choses to comment on this particular recommendation, and feels especially strongly about it, because of our longstanding battle to keep this remarkable river stretch free flowing and without dams (Big A or otherwise). I trust that you will submit these comments to the BEP for their consideration.

The West Branch of the Penobscot below Ripogenus Dam. As noted in the DEP reclassification report, the section of the West Branch proposed for reclassification to AA contains the site on which Great Northern Nekoosa unsuccessfully sought permission to construct the Big A dam. Because of the anticipated filing of Great Northern's dam proposal during the passage of the Maine Rivers Act, this section of the West Branch was not included in the list of outstanding rivers protected from hydropower development under the Maine Rivers Act, despite the findings of the 1982 landmark Maine Rivers Study (copy of relevant page enclosed) that this portion of the West Branch was one of the most valuable in the state.

Also attached to these comments is the section of the legal brief written by the Council during the Big A proceedings before LURC, in which the "outstanding natural resources" of the West Branch were discussed in some detail -- particularly the whitewater rapids, the salmon fishery and the whitewater rafting ("ecological, social, scenic or recreational" resources, 38 MRSA sec.465(1)). The facts supporting this statement are discussed in some detail in that brief and do not need to be repeated in this letter.

Suffice it to say that we believed then, and believe now that a dispassionate appraisal of the qualities of the West Branch -- such as that done in the Maine Rivers Study -- demonstrates conclusively that the segment of the West Branch below Ripogenus meets the "outstanding natural resource" criteria of a AA river. For the Board to do anything but classify this as an AA river segment could only be explained by a desire to hold open the possibility of constructing a dam at the Big A Falls, and not based upon an objective assessment of the resource values or the actual water quality in comparison to other rivers in Maine. Looked at as a water quality issue, the case for AA classification of the West Branch is a relatively obvious one.

Thank you for the opportunity to comment on these important reclassifications.

Sincerely,

Ron Kreisman

Ronald A. Kreisman
General Counsel

MAINE RIVERS STUDY

FINAL LIST

"A" RIVERS

Rivers and related corridors on the "A" list possess a composite natural and recreational resource value with greater than state significance.

X River or river segment with related resource values meeting a minimum standard of significance (which may be regional, statewide, or greater than statewide) in a given resource category.

* River or river segment with related resource values which are some of the state's most significant in a given resource category. These resources may have greater than statewide or national significance.

River Name	Segment Description	County(s)	Length (in miles)	Unique/Significant River Resource Values									
				Geologic-Hydrologic	Critical/Ecologic	Undeveloped	Scenic	Anadromous Fishery	Inland Fishery	Whitewater Boating	Backcountry Excursion	Canoe Touring	Historic
Shin Brook	Seboeis River to headwaters	Penobscot	12	X		X	X						
West Branch Penobscot River (including)	Ambajejus Lake to Ripogenus Dam	Piscataquis	21	X*	X	X	X*		X*	X*			X
Debsconeag Streams	Debsconeag Deadwater to Eighth Debsconeag Pond	Piscataquis	10		X	X	X						
Abol Stream	West Branch Penobscot River to headwaters	Piscataquis	12			X	X						
Nesowadnehunk Stream	West Branch Penobscot River to Nesowadnehunk Lake	Piscataquis	14	X		X	X		X				
Katahdin Stream	West Branch Penobscot River to headwaters	Piscataquis	8	X		X	X						
Upper West Branch Penobscot River (including)	Chesuncook Lake to Seboomook Lake	Piscataquis Somerset	27	X		X*	X		X		X*	X	X
Lobster Stream	Upper West Branch Penobscot River to Lobster Lake	Piscataquis	2			X	X					X	
Main Stem Penobscot River (including)	Sandy Point to Veazie Dam including the Eastern Channel	Waldo Hancock Penobscot	32		X*			X*					X*
Orland River	East Channel Penobscot River to headwaters of Dead and Narramissic Rivers	Hancock	16					X					

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STATE OF MAINE
LAND USE REGULATION COMMISSION

Application of Great Northern) Nekoosa Corporation to build) Hydroelectric Power Project) at Big Ambejackmockamus Falls)	LURC Application No. HP 0005

POST-HEARING BRIEF
OF
PENOBSCOT COALITION TO SAVE THE WEST BRANCH

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THE RIVER AT RISK

THE PORTION OF THE WEST BRANCH TO BE INUNDATED BY THE BIG A DAM CONSTITUTES AN OUTSTANDING AND SCARCE NATURAL AND RECREATIONAL RESOURCE OF STATEWIDE AND NATIONAL SIGNIFICANCE

A. An Overview.

From Great Northern's opening statement introducing their case to the Commission on April 1, the company maintained that the four and one-half mile portion of the West Branch which would be inundated by the construction of the dam was a small and seemingly insignificant section of a river which extended for over 100 miles. Tr. 4/1/85 at 23-24. Great Northern Paper Company's President, Mr. Bartlett, refused to agree that the stretch of river at risk is remarkably scenic, and argued that it was not necessarily unique in any particular respect. Tr. 4/8/85 at 103-4. For example, regarding Ripogenus Gorge, he said, "there are other gorges".

His attitude typifies that displayed throughout Great Northern's application and during the hearing, and was best summarized by an independent federal agency in a letter dated September 20, 1983 contained in Vol. XV of Great Northern's FERC application:

> A review of the (Great Northern) report's methodology, emphasis, and findings gives the impression that the report is structured so as to justify the proposed project rather than to present objective assessment of recreational resources. Specifically, there is a minimization of the overall significance of the West Branch as a natural and recreational resource as well as an underevaluation of the importance of specific recreational activities, i.e., whitewater rafting and fishing.

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September 20, 1983 Departent of Interior Letter to Great Northern Paper Company. (emphasis added).

Despite Great Northern's efforts to downgrade the significance of the threatened stretch of river, the Coalition presented witnesses to the Commission who testified to the specialness and scarcity of both the natural and the recreational features found in the project area. Independent State and Federal studies have confirmed this testimony, as did the many citizens who appeared before the Commission. From this information, a picture emerged for the Commission: a picture of not just another short stretch of river in a state which is blessed with many miles of rivers, but of a four and one-half mile segment of "remarkable" and "priceless" river, filled with "critical" natural features and "irreplaceable" recreational resources.

In focusing here upon the river at risk, the Coalition will first review for the Commission the testimony concerning the individual natural and recreational resources found in the threatened stretch. The composite picture will then be presented.

B. The Natural Features in the Threatened Stretch Are Scarce and Outstanding.

The testimony revealed that three individual natural features in the threatened segment merit the special attention of the Commission.

1. The Whitewater Rapids. In the 1982 comprehensive study of Maine's whitewater rapids published by the State Planning Office, the State described the importance of whitewater rapids as a natural resource:

> Whitewater rapids are among the state's most beautiful natural features. To the canoeist and observer alike, the churning whitewater and roar of a rapid reveal the power of an "untamed" river and create a sense of wildness that is unparalleled in nature. Exh. 1252. page 3.

Beginning with photographs shown by three Coalition witnesses (Janet McMahon, Zip Kellogg, and Jay Schurman), and followed by references to state and federal studies, the testimony demonstrated that the threatened stretch of river (from the McKay Station through the Horserace) is filled with magnificent and well-recognized whitewater rapids. At the direction of the Legislature to assess "sites or areas of unusual natural, scenic or scientific significance" (under the auspices of the State's Critical Areas program), Janet McMahon studied and inventoried the whitewater rapids. Her methodology and results, published in Maine's Whitewater Rapids, show that the Cribwork and the Big A rapids were found to be two of the most significant in the State, and the Cribwork ranked as one of Maine's five most outstanding sets of whitewater rapids. Tr. 5/6/85 at 17-19. When the rapids found in Ripogenus Gorge were included in Ms. McMahon's evaluation (they had been left out because they had been inventoried in a Critical Areas study of Gorges, Tr. 5/6/85 at 21), Ms. McMahon testified that the rapids in Ripogenus Gorge

are "at the top of the State's ranking" of rapids.

In sum, "this combination of rapids that have such a wide array of unusual natural features occurs nowhere else in Maine." Tr. 5/6/85 at 22 (emphasis added). They also constitute the best example of whitewater rapids associated with a fault zone found anywhere in Maine. Tr. 5/6/85 at 22. */ All of these rapids would be flooded forever by construction of the dam.

2. Ripogenus Gorge. Anyone who has visited the West Branch knows that the Gorge is one of the most spectacular features of the area. In another Critical Areas study, entitled "Gorges in Maine", Exh. 1253, the State Planning Office found that Ripogenus Gorge was one of the three most significant gorges in the State of Maine. Only Ripogenus Gorge met all 13 criteria used by the State to evaluate the significance of gorges. Tr. 5/6/85 at 24. Based on this study, the Critical Areas Staff recommended that Ripogenus Gorge be added to its Register of Critical Areas. **/

The Gorge was originally over three miles long, but Ripogenus

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*/ In her testimony, Ms. McMahon explained that Great Northern appeared to recognize the implications of her findings. She provided the Commission with a copy of a November 5, 1981 letter written by Paul McCann to the State Planning Office. In that letter, Great Northern admitted that the designation of these rapids "could have the effect of providing powerful ammunition for opponents of further hydroelectric development to use in the permitting process." Exh. 1254.

**/ Like the whitewater rapids however, the Gorge was never placed on the Register because of Great Northern's opposition.

Dam, built by Great Northern in 1916, entirely inundated its upper reaches. While the proposed Big "A" dam would not obliterate entirely this "critical area", Ms. McMahon explained that the Big A impoundment would substantially affect and diminish nine of the 13 criteria used to establish the importance of the Gorge. From her analysis, Ms. McMahon concluded that the character of the Gorge would be "drastically altered." Tr. 5/6/85 at 28. The reasons for her conclusions are not difficult to understand. The proposed dam would quiet the river, eliminate the Woodsia Alpina which cling to the Gorge's steep walls, and inject into the existing views of the Gorge a powerhouse, a surge tank, a bridge and other project elements (FERC Vol. XII, p. E8-50-57). */ The dynamic process of river crashing through narrow Gorge walls, carving and shaping the Gorge as it has done for thousands and thousands of years will be ended.

Summing up the results of the Critical Areas reports, Ms. McMahon testified that:

> I hope it is clear that if the Big A dam at Big Ambejackmockamus is built, an extraordinary combination of critical natural features will be lost. Three of Maine's most exceptional rapids will be destroyed, and the character of the gorge will be drastically altered and the overall natural beauty of the West Branch greatly diminished. Tr. 5/6/85 at 28.

She concluded that the dam will "destroy a four and a half mile river stretch that has the greatest concentration of natural hydrologic features of statewide significance in Maine..." Tr.

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*/ As it now exists, the Gorge is the longest and finest example of a gorge formed by a fault in the earth found in Maine. Tr. 5/6/84 at 24.

5/6/85 at 26.

3. Landlocked Salmon. From the standpoint of its salmon fishery, the West Branch project area represents a resource of paramount significance. Within the threatened section of river is a landlocked salmon fishery unparalleled in the nation.

The Maine Department of Inland Fisheries and Wildlife, in its pre-hearing comments (Exh. 44), pointed out that no other river in Maine had a fishery of the magnitude of the West Branch, possessing features such as: (1) a predominently self-sustaining wild salmon fishery; (2) a combination of swift water and dead water areas providing varied habitat and fishing opportunities; (3) stable water flows; (4) abundant smelt drift; and (5) season-long quality fishing. IF & W's comments reiterated the conclusions of the 1982 Maine Rivers Study that the West Branch is recognized to be "one of the State's highest quality fishery resources".

Exhibit 532, the averaged creel census data from 1979-1983, speaks more eloquently to the productivity of the area to be inundated than does any other piece of evidence in this proceeding. Almost two legal-sized salmon were released for every one creeled by anglers fishing this four and one-half mile stretch of river. More legal salmon were caught in this section than in the seven miles between the project boundary and Abol Bridge.

C. The Recreational Resources in the Threatened Stretch Are Scarce and Outstanding.

Similar to the testimony during the hearings concerning the natural features, evidence provided to the Commission by a variety of expert and public witnesses demonstrated unequivocally that the recreational resources contained within the threatened stretch of river were some of the best of their type in the Northeastern United States, if not in the entire United States. Three outstanding individual resources emerged from the weeks of testimony: the salmon fishing; the whitewater rafting; and the private whitewater boating.

In addition, scores of people who testified at public comment periods emphasized the "quiet" recreational activities enjoyed by so many: simply sitting back and appreciating the power, the majesty, and the sounds of the West Branch. The combination of river features, with Mount Katahdin as a backdrop, produce an area of unparalleled scenic beauty. */

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*/ The applicant itself, in guarded language, concedes that the project would deprive visitors of opportunities for this quiet enjoyment. Great Northern states in its FERC application:

> The negative consequences are that the visual environment of the lake will be less diverse than the river currently is; there will be fewer opportunities to view the whitewater rapids; and the views in the lower half of the Ripogenus Gorge will be less dramatic than they currently are. Project elements will also have a visual impact in several stretches of the river.

Vol. XII, p. E8-85.

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1. The Salmon Fishery is of National Significance.

The threatened portion of the West Branch provides an outstanding salmon fishery throughout the season. */ As explained by angling experts such as Harry Vanderweide, Al Raychard and Nick Albans, equivalent fishing exists only in remote areas of Canada and the western United States mountains and South America. Their opinions were confirmed by numerous citizens who came to speak during the public comment period.

The West Branch fishing is within a few hours drive of anywhere in Maine. People of modest means who could never hope to afford an expedition to Canada's Ugava River or other remote northern waters can experience equivalent angling on the threatened segment. Perhaps the best attribute of the West Branch fishery is that it exists in a place where it can share its magic with the average citizen. It makes no special provision for fishermen of wealth. It remains the river of the people of Maine.

It is both unfortunate and insightful that throughout this proceeding Great Northern has vigorously attempted to trivialize the significance of the fishery. It is unfortunate because it represents an attempt to obfuscate an issue about which there should rightfully by no serious disagreement. IF & W, the Maine

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*/ The natural attributes of this salmon fishery have already been described in Section B, above.

Rivers Study, angling witnesses, public commentors, and Great Northern's own creel census data (Exh. 532) all point to the fact that the West Branch is a most important game fishery resource. In the oldest document contained in Vol. XV, the consultation document, Great Northern's own Environmental Protection Supervisor wrote on September 30, 1977 that:

> The West Branch of the Penobscot may be the finest landlocked salmon river fishery in America.

Great Northern's studied attempt to downplay the river's angling significance is an example of disingenuousness in the extreme. Seriously arguing that this Commission should decide this case from the perspective that it involves the alteration of only 2.3 % of the moderate to high quality riverine fisheries in Maine and only 0.7% of the salmon river fisheries in the State (FERC Application, Vol. XI, p. E7-60) demonstrates an extraordinary lack of candor on the part of the applicant and, we submit, counsels skepticism in the evaluation of other portions of Great Northern's fisheries case.

2. The Whitewater Rafting is of Regional, if not National Significance.

The West Branch constitutes one of only two commercially rafted rivers in New England. When the West Branch is compared to other rafting rivers in the Northeast, including the Kennebec and others in New York, even Great Northern's own studies show

that it has the highest "use index" of any rafting river north of West Virginia. (See FERC application Volume XI, p. 106). The Cribwork Rapid alone is recognized to be as technically difficult a rapid as is commercially run in the United States today.

For rafting, the river possesses a special series of attributes. These include a continuously exciting Class III - IV rapids at the beginning, the Cribwork itself (as a Class V rapid), a variety of wildlife found nowhere else on rafting rivers in the East Coast, clean water, and a terrific variety of hydrologic, geologic and scenic features. Tr. 5/6/85 at 77-8.

Importantly, not even outfitters who have signed the agreement with Great Northern to no longer oppose construction of the dam voiced any disagreement with this conclusion. Wayne Hockmeyer has said, "the whitewater in this section of the river is unparalleled in the east. It is as good or better than that on most western rivers." Exh. 986. Another outfitter has described the whitewater resources this way:

> Probably the finest all round trip Downeast has to offer is the popular West Branch of the Penobscot trip. Exciting rapids, beautiful scenery and frequent encounters with wildlife. This river has it all". Exh. 1344.

Documents submitted by Great Northern in their FERC application demonstrate that people travel from at least as far away as Pennsylvania to take part in this recreational activity (Vol. XI, p. E7-54). Numerous citizens during the public comments session

testified about the spectacular quality of this raft trip, including people who were employed by paper companies. See testimony of Mike Otis, Tr. 5/6/85 at 416-418.

3. The Non-Commercial Whitewater Boating is of Regional Significance.

The Commission heard abundant amounts of testimony establishing that the non-commercial whitewater boating found within the four and one-half mile segment was unequalled in Maine and New England on a season-wide basis, and ranks as a boating resource of major significance in the Eastern United States. For instance, Charles Walbridge explained to the Commission that when a variety of factors are taken into account, the threatened segment of the river is one of the East Coast's premier whitewater boating resources. Many citizens with extensive boating experience confirmed the conclusions of the Coalition's experts, during the public comment session. A physician from Bangor described how he moved to Maine for the "outstanding whitewater in the state" and noted that:

> The West Branch is unrivalled in the Northeast United States for its natural beauty, wild setting, and the variety of whitewater conditions. These conditions are perfect for teaching beginners up to challenging experts. Tr. 5/6/85 at 379.

Another witness drove for four hours to explain to the Commission his view of the importance of the West Branch as a whitewater resource:

> I have had the opportunity to boat many of the premier

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> whitewater rivers in the eastern United States, among them the Chattooga, Ocoee, and several of the great rivers of West Virginia... I have also been on the Youghiogheny in Pennsylvania, the Hudson River gorge, the West River in Vermont.... and the spectacular West Branch of the Penobscot.
>
> I left work early today and drove four hours because I wanted to tell you from my own personal experience that this section of the West Branch of the Penobscot which is threatened is unique in the eastern United States. I -- I know that you have been told that it will be possible to offer comparable experience to this part which would be destroyed. I am here to tell you that this simply can't be true. Tr 5/6/85 at 384.

Many other persons during the public comments session stated the same thing, though in different words. See, e.g., Tr. 5/2/85 at pp. 142-143 ("I have paddled on rivers in this area of the Northeast as far south as West Virginia, Montana, Ontario, and there is no river as unique as the West Branch."); Tr. 5/6/85 at 463 ("it is a trip that is really unequalled in this state."). */

Stepping back from these distinct recreational uses, an important composite picture emerges from Great Northern's own FERC application: In terms of recreational use, the project area of the West Branch ranks with only Baxter State Park and the Allagash as an outdoor attraction in the State of Maine. Application, Volume XI, p. E7-62. Herb Hartman, Director of Maine's Bureau of Parks and Recreation, could think of no other stretch of river in Maine which was as popular. Tr. 4/19/85

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*/ Great Northern produced no witnesses who countered these conclusions.

at 298. */

D. The Combination and Concentration of Magnificent Natural and Recreatonal Resources Located in the Project Area Are Not Found Elsewhere in Maine and Are Unusual in the United States.

In his opening remarks, Chuck Hewett noted that while the natural and recreational resources of the West Branch were highly praised individually, in combination they were even more exceptional. Mr. Hewett's opinion was reinforced by the numerous public comment witnesses who appeared before the Commission. Also cited in the hearings were the variety of studies which have been performed by both state and federal agencies which document the extraordinary combination of natural and recreational resources. **/

*/ Although Great Northern suggested throughout the hearing that there were many other rivers and lakes in the state which provided the same recreational resources as the West Branch and which people did use and could use, no figures or testimony were ever presented by the company to try to substantiate this claim. If the numbers of people attracted to the West Branch are similarly attracted to the recreational resources of any other river in Maine, no such evidence was produced at the hearing. Further, although Great Northern seemed to attribute the recreational attractions of the project area to its easy access rather than to its intrinsic value, no testimony was introduced by Great Northern to explain why other road-accessible portions of the West Branch outside of the project area did not receive the tremendous use by fishermen and boaters which the four and one-half mile stretch of river below Ripogenus dam received.

**/ It is worthy to note that all of these studies were conducted by independent experts inventorying either state, regional or national resources. All were completed well before the LURC hearings, and were not developed to justify the position of the Coalition.

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In addition to the Critical Areas reports, another major statewide analysis, the Maine Rivers Study, */ evaluated the natural and recreational resources on the West Branch. Not only is the project area one of the twenty rivers in Maine with greater than statewide significance, but the Maine Rivers Study also noted that the West Branch was one of the seven finest multiple-use rivers in the State. When Herb Hartman was asked whether the quality of the cumulative recreational resources found in the four and one-half mile stretch were found anywhere else in Maine, he responded, "I guess I can't think of any." Tr. 4/19/85 at 334.

Chris Brown explained that national studies have confirmed the findings of the Critical Areas reports and the Maine Rivers Study. For instance, in recommending the portion of the West Branch below Ripogenus dam for designation as a national natural landmark, the Department of Interior noted:

> "The area has the widest variety of diverse geological, geomorphic, hydrologic and scenic features of anywhere in the state of Maine.

See application of Great Northern to FERC, volume XI, e7-10, quoting from Siccama, et al., Potential Ecological and Geological Natural Landmarks in New England-Adirondack Region, 105 (1982) (emphasis added).

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*/ Cited and discussed in the testimony of Chris Brown, the Acting Executive Director of the American Rivers Conservation Council, and Herb Hartman, the Director of the State's Bureau of Parks and Recreation.

Mr. Brown explained that the West Branch of the Penobscot was one of only 27 rivers included for study in the original Federal Wild and Scenic Rivers Act. Reviewing the actual study which recommended designation of the West Branch as a Federal Wild and Scenic River, he noted that each of the six values which made the West Branch as a whole eligible for Wild and Scenic designation also was found in the project area. Tr. 5/6/85 at 37.

Based upon the large number of independent studies which have thoroughly examined the river, all of which have emerged with essentially the same conclusions, Chris Brown underscored how "very unusual" it was to have such a scarce grouping of exceptional resources concentrated within a short stretch of river. Based upon what he knew of rivers across the country, Mr. Brown was able to conclude to the Commission that "you have got an extraordinary resource here...a very, very special river...". Tr. 5/6/85 at 42.

This conclusion is shared by a number of prominent national environmental groups. Despite the fact that there are over 4,500 dam applications pending at FERC, covering hundreds of rivers, Tr. 5/6/85 at 35, eight national environmental groups which collectively represent 5.5 million people have decided that the West Branch of the Penobscot -- and not any of the other rivers on which these 4,500 applications are pending --

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is the "number one most threatened river" in the United States today. Tr. 5/6/85 at 32, 41.

Last (and certainly not least), the conclusions of these experts were echoed by numerous members of the public who testified during the comment sessions. Mainers and non-Mainers alike expressed to the Commissioners why this four and one-half mile stretch of river has become such an important part of their lives. If one simply were to look at the public statements made on May 1, 1985, one would find that within a 23 page spread of transcribed testimony (probably less than one-half hour), no less than five citizens testified to the uniqueness and irreplaceablilty of the river. And throughout the hearings in Gardiner, people from all over the State repeatedly testified that they wanted to have this river segment preserved in order to be able to show it to their children and their grandchildren, and to pass it on as a part of their children's inheritance as Maine citizens. See, e.g., Tr. 4/29/85 at 310; 5/1/85 at 327; 331; 5/2/85 at 140; 147; 169 5/6/85 at 385; 447.

D. Natural and Recreational Resources of this Type are Very Scarce and are Becoming More So.

Not only does the threatened stretch of river contain natural and recreational resources which individually and in combination are of outstanding value, but the Commission must recognize that resources of this type are becoming ever more difficult

to find, both on the West Branch itself and in the United States as a whole. The testimony and slide presentation by Zip Kellogg visually demonstrated that the four and one-half mile stretch of river below Ripogenus dam constitutes the last remaining significant stretch of whitewater on the West Branch -- a river which once possessed numerous such stretches, and even drew its name from them. Had the State of Maine undertaken to survey the critical natural features of the West Branch 150 years ago, Janet McMahon's predecessor would have had many other segments of rapids and even waterfalls to include in various state studies: Gullivers Falls, Seboomook Falls, Pinestream Falls, the Falls of Caucomgomoc Stream, the Cataract between Chesuncook and Ripogenus Lakes, Ambajejus Falls, Grand Falls, Rock-Ebeeme Rapids. Natural features which took thousands of years to create are now gone, forever. Their destruction was accomplished within the space of 150 years.

Beyond the West Branch itself, Chris Brown explained to the Commission that a parallel loss of river resources was taking place throughout the United States. Tr. 5/6/85 at 35. As a result, there is an "incredible scarcity" of free-flowing river segments similar to the West Branch. Tr. 5/6/85 at 41. Less than .2 percent of the rivers in the United States are protected by the National Wild and Scenic Rivers Act, and even when state protection programs are included, less than 1 percent of U.S. rivers are covered. Tr 5/6/85 at 35. The Nationwide Rivers Inventory has identified only 2 percent of all rivers in the United States

which remain in a sufficiently natural and free-flowing condition to even qualify for Wild and Scenic River status. Fewer than 5 percent of New England rivers are still free-flowing. Tr. 5/6/85 at 36.

In conclusion, there is no doubt that a very special and important part of Maine is at stake in this proceeding. If the Commission decides that this river segment is to be inundated, let it be with the full knowledge of what will be destroyed forever.

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PRETI, FLAHERTY, BELIVEAU & PACHIOS

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November 27, 1989

David Courtemanch, Director
Division of Water Bureau
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State House Station 17
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Re: Proposed Reclassification of the Penobscot River

Dear Dave:

Thank you for the opportunity to comment again on the proposed reclassification of the Penobscot River. Bangor Hydro-Electric Company is still concerned about the impacts of the proposed reclassification scheme on hydroelectric facilities. The concerns are threefold. First, the reclassification fails to address the application of the habitat/aquatic life criteria to impoundments. Second, an upgrade of water bodies which have not met all criteria for the higher classification will result in denials of discharge licenses and water quality certifications for both existing and new sources and turn complying facilities into violators. And finally, the special designation for the river section from the Veazie Dam to the Maine Central Railroad Bridge is inconsistent with the language in the Maine Rivers Bill and could make it impossible for Bangor Hydro to maintain or upgrade that existing hydroelectric facility.

A primary concern is with the proposed upgrade of the mainstem of the Penobscot River from Class C to B. This proposed upgrade has significant implications for Bangor Hydro's

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hydroelectric facilities.

Bangor Hydro's facilities operate as run-of the river and therefore have very little impact on water quality. Impoundment habitats, however, are different than the river habitat as a result of changes in water depth and velocity. The Department recognizes that these habitat differences are a legitimate concern of hydropower facilities, but proposes to address the issue in another proceeding. In the interim, however, hydropower projects are seeking water quality certifications as part of the FERC license renewal process. Further, since the issue is raised as a result of the reclassification proposal, it is fair and essential to resolve the issue as part of the reclassification proposal.

The Department has suggested that existing or new impoundments would meet the A, B, or C, habitat/aquatic life criteria if the chemical water quality in the impoundment would support the benthic macroinvertebrates and species found or expected to be found on A, B, or C rivers in impoundments. Thus a new impoundment on a B segment of river would satisfy the water quality criteria for Class B if the chemical parameters (D.O. bacteria) were met and the impoundment supported benthic macroinvertebrates species and other aquatic species comparable to the communities existing in an existing Class B impoundment. This is a reasonable policy and must be adopted as part of the reclassification scheme.

The Department's policy should be adopted by including the following language to be added to the end of 38 M.R.S.A. §465.

"Existing and new impoundments satisfy the habitat/aquatic life standards for Class A, B, and C waters if the chemical water quality is sufficient to support the aquatic life which would be present in the riverine environment and the impoundment will support aquatic species which could be expected to exist in an impoundment within the applicable classification."

Failure to incorporate this concept into the proposed reclassification is inconsistent with the protection of hydroelectric generation as a designated use. Nonadoption of this idea also will mean that existing hydroelectric facilities will be unable to obtain water quality certification and no new hydroelectric generation projects will be permitted or developed.

A second concern is a reclassification scheme based on water quality goals rather than existing conditions in the water body. Bangor Hydro is supportive of Maine's efforts to clean up Maine's rivers and improve water quality but thinks such efforts should be achieved through effective and efficient procedures. The Department states that some of the mainstem of the Penobscot does not meet the proposed upgraded, B classification as a result of bacteria problems thought to be associated with several municipal systems. As a result, any project, existing or new, which requires a discharge license or water quality certification will not be able to obtain the required approval until the bacteria problems in the river are corrected, even if the project or facility does not discharge any bacteria. The law states, "The board may only issue a discharge license pursuant to section 414-A or approve water quality certification... if the standards of classification of the water body... will be met." 38 M.R.S.A. §464(4)(F)(3). Thus, as long as the upgraded classification standard for bacteria is not being met, any project, whether new or existing, cannot be licensed if it impacts the section of the river where bacteria standards are not being achieved. This result occurs even if the project has no bacteria discharge. The Department has an unwritten policy to prevent this result, however, the policy appears to be inconsistent with the law. This policy allows projects with no discharge of the offending pollutant (in this case bacteria) to obtain approvals even though classification standards for the water body are not being achieved. An existing facility which discharges bacteria, however, would be required to clean-up the bacteria problem (even though its discharge is not the reason the standard is not being met). In addition, facilities which have complied with their discharge license will now be operating in violation of the law.

Bangor Hydro does not think that these results are what the Department intended, and thinks that there are at least two ways to rectify the situation. The most obvious is to reclassify water bodies based on attainment of all the elements of the proposed classification, not goals. The second is to add a section to the reclassification bill which specifically provides that existing facilities on the Penobscot which discharge bacteria may be approved as long as the bacteria discharge is not increased. And further provide that new or existing facilities on the Penobscot which do not discharge bacteria may be approved.

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PRETI, FLAHERTY, BELIVEAU & PACHIOS

Bangor Hydro's third concern is the proposed language, "(5) from the Veazie Dam to the Maine Central Railroad Bridge in the Bangor-Class B. Further, the Legislature finds that the free flowing habitat of this river segment provides irreplaceable social and economic benefits and that this use shall be maintained." Sec. 1 (7)(A)(5) Hydroelectric power generation is a designated use on this section of the river except as prohibited under Title 12, Section 403. This section prohibits development of new dams without specific legislative authorization and prohibits redevelopments which diminish significant resource values on the Penobscot River "including the Eastern Channel, from Sandy Point in Stockton Springs up to, but not including the Veazie Dam." The Veazie Dam under existing law is both a designated and existing use. The proposed language does not recognize Veazie's status and is inconsistent with existing law. Further, the proposed language could make it impossible for Bangor Hydro to repair, maintain or redevelop that facility and ironically could even make it impossible to install any new fish passage facilities. Bangor Hydro's concern can be addressed by redrafting the proposed language as follows: "(5) From, but not including the Veazie Dam, to the Central Maine Railroad Bridge in Bangor Class B. Further, the Legislature finds that the free flowing habitat of this river segment provides irreplaceable social and economic benefits and that this use shall be maintained." This revised language accomplishes the Department's goal of preserving the free flowing habitat without jeopardizing the existence or redevelopment of the Veazie project.

These comments should be read as an expansion of Bangor Hydro-Electric Company's earlier comments. Should you have any questions, please do not hesitate to contact me.

Again, thank you for the opportunity to comment.

Sincerely,

Virginia E. Davis

VED/hj
.AE7

§465Standards for classification of fresh surface waters.

The board shall have 4 standards for the classification of fresh surface waters which are not classified as great ponds.

1. **Class AA waters.** Class AA shall be the highest classification and shall be applied to waters which are outstanding natural resources and which should be preserved because of their ecological, social, scenic or recreational importance.

A. Class AA waters shall be of such quality that they are suitable for the designated uses of drinking water after disinfection, fishing, recreation in and on the water and navigation and as habitat for fish and other aquatic life. The habitat shall be characterized as free flowing and natural.

B. The aquatic life, dissolved oxygen and bacteria content of Class AA waters shall be as naturally occurs.

C. There shall be no direct discharge of pollutants to Class AA waters.

2. **Class A waters.** Class A shall be the 2nd highest classification.

A. Class A. waters shall be of such quality that they are suitable for the designated uses of drinking water after disinfection; fishing; recreation and and on the water; industrial process and cooling water supply; hydroelectric power generation, except as prohibited under Title 12, section 403; and navigation; and as habitat for fish and other aquatic life. The habitat shall be characterized as natural.

B. The dissolved oxygen content of Class A waters shall be not less than 7 parts per million or 75% of saturation, whichever is higher. The aquatic life and bacteria content of Class A waters shall be as naturally occurs.

C. Direct discharges to these waters licensed after January 1, 1986, shall be permitted only if, in addition to satisfying all the requirements of this article, the discharged effluent will be equal to or better than the existing water quality of the receiving waters. Prior to issuing a discharge license, the board shall require the applicant to objectively demonstrate to the board's

satisfaction that the discharge is necessary and that there are no other reasonable alternatives available. Discharges into waters of this classification which were licensed prior to January 1, 1986, shall be allowed to continue only until practical alternatives exist. There shall be no deposits of any material on the banks of these waters in any manner so that transfer of pollutants into the waters is likely.

3. **Class B waters.** Class B shall be the 3rd highest classification.

A. Class B waters shall be of such quality that they are suitable for the designated uses of drinking water supply after treatment; fishing, recreation in and on the water; industrial process and cooling water supply; hydroelectric power generation, except as prohibited under Title 12, section 403; and navigation; and as habitat for fish and other aquatic life. The habitat shall be characterized as unimpaired.

B. The dissolved oxygen content of Class B waters shall be not less than 7 parts per million or 75% of saturation, whichever is higher, except that for the period from October 1st to May 14th, in order to ensure spawning and egg incubation of indigenous fish species, the 7-day mean dissolved oxygen concentration shall not be less than 9.5 parts per million and the 1-day minimum dissolved oxygen concentration shall not be less than 8.0 parts per million in identified fish spawning areas. Between May 15th and September 30th, the number of Escherichia coli bacteria of human origin in these waters may not exceed a geometric mean of 64 per 100 milliliters or an instantaneous level of 427 per 100 milliliters.

C. Discharges to Class B waters shall not cause adverse impact to aquatic life in that the receiving waters shall be of sufficient quality to support all aquatic species indigenous to the receiving water without detrimental changes in the resident biological community.

4. **Class C waters.** Class C shall be the 4th highest classification.

A. Class C waters shall be such quality that they are suitable for the designated uses of drinking water supply after treatment; fishing; recreation in and on the water; industrial process and cooling water supply; hydroelectric power generation, except as prohibited under Title 12, section 403; and navigation; and as a habitat for fish and other aquatic life.

B. The dissolved oxygen content of Class C water shall be not less than 5 parts per million or 60% of saturation, whichever is higher, except that in identified salmonid spawning areas where water quality is sufficient to ensure spawning, egg incubation and survival of early life stages, that water quality sufficient for these purposes shall be maintained. Between May 15th and September 30th, the number of Escherichia coli bacteria of human origin in these waters may not exceed a geometric mean of 142 per 100 milliliters or an instantaneous level of 949 per 100 milliliters. The department shall promulgate rules governing the procedure for designation of spawning areas. Those rules shall include provision for periodic review of designated spawning areas and consultation with affected persons prior to designation of a stretch of water as a spawning area.

C. Discharges to Class C waters may cause some changes to aquatic life, provided that the receiving waters shall be of sufficient quality to support all species of fish indigenous to the receiving waters and maintain the structure and function of the resident biological community.

"Existing and new impoundments satisfy the habitat/aquatic life standards for Class A, B, and C waters if the chemical water quality is sufficient to support the aquatic life which would be present in the riverine environment and the impoundment will support aquatic species which could be expected to exist in an impoundment within the applicable classification."

99993.AE8

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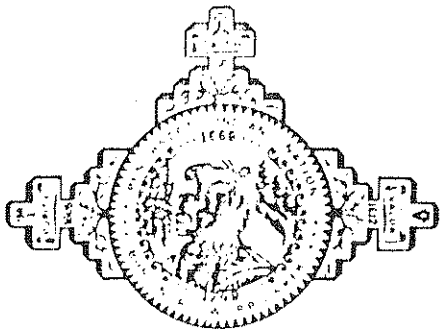
PENOBSCOT NATION
DEPARTMENT OF
NATURAL RESOURCES



6 RIVER ROAD
INDIAN ISLAND
OLD TOWN, ME 04468
TEL: 207/827/7776

Comments to the Board of Environmental Protection on the Staff Proposal for the Reclassification of the Waters of the Penobscot River Basin

Presented by: Tim Lukas
Fish & Wildlife Resources Manager

November 29, 1989

Ladies and gentlemen of the Board, my name is Tim Lukas, Fish and Wildlife Resources Manager with the Penobscot Nation Department of Natural Resources. I am here today, along with Clemon Fay, our Fisheries Biologist, and Heather Westra, our Water Quality Technician, to present to you our Department's views and recommendations on the proposed reclassification of the waters of the Penobscot River Basin. Acknowledging that the Board is receiving comments on numerous watersheds today, I will attempt to limit my comments to the greatest extent possible. I would note that we have presented testimony and recommendations at previous hearings. I would urge you to consult these materials for a more detailed and comprehensive understanding of our views.

Our basic concern with the current proposal is its failure to represent a truly "goal" oriented program. In reality, upgrades have only been proposed where water quality is known or assumed to <u>already</u> meet the higher classification. This is classification which represents only the status quo. It provides no incentives or encouragement for any improvement efforts. Our attempts at advocating for water quality considerations along the Penobscot River are routinely dismissed by companies with the stock answer that the water quality classification is being met, so don't bother us with requests for improvement. Basing this current reclassification on existing conditions will simply perpetuate this attitude and even allow for reductions in water quality. A Class C water, which may presently be nearing Class B quality, can be degraded away from this level so long as it remains within Class C parameters. Where are the so-called

goals? Our concerns are intensified by the fact that we note that there are Class B waters with better or equal values and quality than some of those singled out for Class A.

We are particularly distressed by the blanket classification of most mainstem and Piscataquis tributaries as Class B. The staff report does note that the Penobscot Nation presented substantial monitoring data from several streams and that we recommend upgrade of tributaries to Class A. The staff does not elaborate on this data however, and simply dismisses our recommendation citing a desire for more data. Sounds like a presidential position on acid rain. In fact, we selected seven representative tributaries, ranging from relatively small to quite substantial and from very limited human impacts to fairly intensive. Data on D.O. and bacteria were collected with bacteria samples analyzed by the D.E.P. laboratory. Using D.E.P. criteria, all seven of the streams surpassed the standards for Class B! Not four out of seven, or six out of seven, but all seven. To me, that's pretty convincing evidence that a Class B designation of all the tributaries will likely fail to represent even the status quo in an overwhelming majority of cases. All of these streams also support varying salmonid populations, cited as a factor in classification of comparable waters as Class A. For the seven streams we sampled, a blanket B classification might very well be in error 100% of the time.

We also submitted a number of recommendations for upgrades from the proposed classifications on sections of the Penobscot, Piscataquis, Mattawamkeag, and Passadumkeag rivers. These recommendations for changes to the initial proposals are noted on an attached summary.

With the exception of the Passadumkeag, none of our recommendations were adopted. This, despite the fact that many of our recommendations focused on free-flowing, picturesque river sections providing significant fishery and recreational values to an ever increasing number of Maine citizens.

The sections on the Piscataquis, and on the Penobscot below the Mattawamkeag, represent free-flowing mid-river areas with relatively unique recreational opportunities and aesthetic values. The section of the Penobscot from the Passadumkeag River to the head of Freeze Island is both free flowing and relatively undeveloped. Recreational use of this river segment has increased dramatically over the last 3-5 years. The staff report notes good water quality in this section, but questions whether "as naturally occurs" standards for acquatic life can be met. I question this assertion when the staff report notes that acquatic life samples from only a few miles downriver, below a pulp mill discharge and below an untreated municipal discharge, still showed good acquatic community composition.

Access to all of these river segments by Maine people is free of charge and their recreational value and use will obviously multiply many times over in the coming years. On all of these sections, the proposed staff classifications are already being met, in most cases, well past the minimum standards for the proposed classifications. We come back to our concerns over what truly represents a "goal" oriented program.

I would also like to point out that as we attempted to work within the D.E.P. classification system we encountered extremely difficult classification standards. Both bacteria and acquatic life standards

eventually rely on a criteria of "as naturally occurs." But, "as naturally occurs" is in no way given more defineable criteria. In resisting many of our recommendations, staff would cite an unlikelihood that this standard of "as naturally occurs" could be achieved. This appears to be a subjective, and in most cases, unsubstantiated assumption. Relying on bacteria of human origin as a measure of water quality, when analysis does not differentiate between human or animal origin, is simply unworkable. Quite frankly, these parameters need to be defined much more clearly to be useful. While developing more useful and deineable criteria however, it would certainly be wise to provide water quality protection which is occasionaly unattainable, rather than inadequate. After all, striving for a goal which you may not attain is a heck of a lot more productive than establishing a goal which has already been reached.

Thank you very much for your time and indulgence. I would like to stress that I feel the staff have done an excellent job with this difficult task. We simply have some differences of opinion which I feel are nothing more than a reflection of our more intimate knowledge and concern relative to the Penobscot River Basin. The hearing and comment phases of this process have been the most open, informative, and constructive I have been involved with to date. Staff were incredibly cooperative despite our obvious differences of opinion and I express our appreciation. Please review these staff recommendations for the Penobscot River very critically. Please feel free to contact me personally to discuss any specifics of our recommendations. I will make myself available at your convenience and will travel as might be necessary to discuss these issues in more detail.

JOHN T. FRAWLEY
City Engineer
Director of Public Services

City of Bangor, Maine
ENGINEERING DEPARTMENT

November 22, 1989

Department of Environmental Protection
Bureau of Water Quality
State House Station 17
Augusta, Maine 04333

Attn: Mr. David Courtemanch

Re: Comments on Water Reclassification Proposal

Dear Mr. Courtemanch

The City of Bangor wishes to make the following comments on the State Water Reclassification Proposal:

Page 26 New Item (5) "From the Veazie Dam to the Maine Central Railroad bridge in Bangor -- Class B."

The proposed change from Class C to Class B on this stretch of the Penobscot River does not recognize the existence of Combined Sewer Overflows from the City of Bangor sewer system. Although the City of Bangor has a very extensive sewer rehabilitation program under way, and although the City has eliminated two of these CSO structures, the elimination of remaining CSO's cannot be accomplished for several years.

It makes no sense to change the water classification for this section of the River if the new water quality standard cannot be achieved. Therefore, The City of Bangor Engineering Department strongly recommends that this portion of the Penobscot River between the Veazie Dam and the Maine Central Railroad Bridge in Bangor remain at it's present "C" classification.

Page 30 New Item (4) "Kenduskeag Stream (Bangor) below the I-95 Bridge -- Class C."

The proposed reclassification of the stretch of the Kenduskeag Stream between Bullseye Bridge and the I-95

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Bridge in Bangor from Class C to Class B does not recognize the existence if a Combined Sewer Overflow from the City of Bangor sewer system. The elimination of the CSO structure will not be possible for several years under the City's sewer rehabilitation program.

It makes no sense to change the water classification for this section of the Kenduskeag Stream if the new water quality standard cannot be achieved. Therefore, the City of Bangor Engineering Department strongly recommends that the Kenduskeag Stream in Bangor between Bullseye Bridge and the I-95 Bridge remain at it's present "C" classification.

Very truly yours,

John L Murphy

John L. Murphy, P.E.

OCEAN PRODUCTS, INC.

Mr. Dave Courtemanche
Maine Department of Environmental Protection
State House Station 17
Augusta, Maine 04333

22 November 1989

Re: Water Reclassification - Bog Stream

Dear Dave,

This is to confirm our phone conversation this morning concerning the stream on which our hatchery in DeBlois is located.

According to U.S. Geodetic Survey topographic maps the tank field is located on Bog Stream which flows into the Pleasant River and our hatch house is located on another small stream (unnamed) which also flows into the Pleasant River, downstream from the confluence of Bog Stream. We would like both of these streams to be specifically listed as Class B. This would clarify the name confusion and prevent any future problems.

Thank you for your help.

Sincerely,

Gayla F. Barker

Gayla F. Barker
Permit Coordinator

cc: William T. Webster, Jr.
William F. Marshall
Steve Groves

Corporate Office: 400 Commercial Street, Portland, Maine 04101 207-774-5124 FAX: 207-773-8297
Plant Operations: P.O. Box 263, Estes Head, Eastport, Maine 04631 207-853-6081 FAX: 207-853-6056

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SCARBOROUGH SANITARY DISTRICT
415 BLACK POINT ROAD
SCARBOROUGH, MAINE 04074
TELEPHONE 883-4553

November 22, 1989

Steve Groves
Water Bureau Director
Department of Environmental Protection
State House Station 17
Augusta, ME 04333

Re: Reclassification of Waters

Dear Mr. Groves:

I am writing in response to your memo, dated November 13, 1989, requesting comments on the "Staff Proposal for Reclassification of Surface Water."

My comments are specifically related to the discussion on the Scarborough Marsh (page 17) and Spurwink River (also page 17). With regard to the Scarborough Marsh discussion you should be aware of the following:

1. The Scarborough Sanitary District Rules and Regulations prohibit the discharge of cooling water to the District's sewers for obvious reasons. Also, I believe that Federal Regulations may similarly prohibit the discharge of uncontaminated wastewater to public sewers.

2. Snow Canning's economic viability may be threatened by further environmental regulation and their representatives should be specifically contacted for input.

3. Anjon's Restaurant is not currently serviced by the District's sewer and it may not be economically feasible to extend public sewer to the site of Anjon's Restaurant, which holds a Department of Environmental Protection license for overboard discharge.

With regard to the Spurwink River please be advised of the following:

1. The Scarborough Sanitary District has no combined sewer overflows.

2. It is my understanding that the Wastewater Treatment Plant in Cape Elizabeth discharges to the Spurwink River.

I would like to question whether Class SA for these waterbodies is realistically achievable with the above comments being recognized, and also recognizing that the suburban land use patterns in Scarborough and Cape Elizabeth result in storm water run off contributions to these waterbodies. Furthermore there are numerous subsurface wastewater disposed systems within the watersheds of these waterbodies.

I would be happy to discuss these matters with you further at your convenience.

Sincerely,

SCARBOROUGH SANITARY DISTRICT

Charles J. Andreson

Charles J. Andreson, P.E.
Superintendent

CJA/rb

cc: Trustees Scarborough Sanitary District
Scarborough Town Manager
Scarborough Town Planner

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Maine Chapter
The Nature Conservancy
122 Main Street, Post Office Box 338
Topsham, Maine 04086
(207) 729-5181

November 16, 1989

Mr. David Courtemanch
Dept. of Environmental Protection
State House Station 17
Augusta, ME 04333

Dear Mr. Courtemanch:

Thank you for the opporunity to review the revised water re-classification proposal. We appreciate the consideration given to information provided by The Nature Conservancy in amending the original proposal.

However, I regret the specific staff recommendation not to upgrade Tomah Stream, tributary of the St. Croix, to Class AA. As the proposal recognizes, Tomah Stream is habitat for an extremely rare mayfly; keeping the stream at Class A would allow the possible development of an impoundment for waterfowl; such an impoundment would severely threaten the existence of this mayfly population. It is my understanding that the extreme rarity of this species is in fact already <u>well</u> substantiated by UMO. In any case, as a principle of species conservation it seems dangerously illogical to allow degradation of critical habitat for "potentially" endangered species until they are <u>proven</u> to be endangered.

I would strongly recommend, therefore, that the Department of Environmental Protection upgrade Tomah Stream to Class AA at this time. Then, if further studies of the mayfly demonstrate it is <u>not</u> so rare, or loss of this habitat would <u>not</u> significantly threaten its global status (which we feel is quite unlikely), it would of course be appropriate to review the classification and consider downgrading to Class A.

Thank you for your consideration.

Sincerely,

Barbara Vickery

Barbara Vickery
Director of Science and Stewardship

BV/jd

CC: John Albright

STATE OF MAINE
Department of Environmental Protection

MAIL OFFICE: RAY BUILDING, HOSPITAL STREET, AUGUSTA
MAIL ADDRESS: State House Station 17, Augusta 04333
207 289 2688

JOHN R. McKERNAN, JR.
GOVERNOR

DEAN C. MARRIOTT
COMMISSIONER

MEMORANDUM

TO: David Courtemanch, Director
Division of Environmental Evaluation and Lakes Studies

FROM: Dana Paul Murch
Hydropower Coordinator

DATE: November 2, 1989

RE: Classification of East Machias River

** *** ** *** ** *** ** *** ** *** ** *** ** *** ** *** ** *** ** *** ** *** **

Lew Flagg of DMR recently expressed to me his concern that there might be some confusion regarding the appropriate classification for the lower portion of the East Machias River.

So, for the record:

The 1983 Maine Rivers Policy designated the East Machias River as an outstanding river "from the Route 191 Mill Memorial Bridge in East Machias to the outlet of Pocomoonshine Lake." The bridge referred to is the one immediately upstream from the old dam in the village of East Machias (which is also the Route 1 bridge), not the bridge upstream in Jacksonville.

Notwithstanding the fact that the designated segment of the river actually begins above the old dam, it is my understanding that the Legislature fully and knowingly intended that the river be maintained in its current free flowing state. I would also point out that, prior to the final enactment of the Rivers Policy, the BEP had already denied a permit for the reconstruction of the East Machias Dam as part of a proposed hydro project.

To avoid any future confusion, I suggest that a free flowing clause be added to the proposed water quality classification of the lower portion of the East Machias River ("from a point located 0.25 miles above the Route 1 bridge to tidewater"). Similar clauses are being considered in the reclassification of the Dennys River and the Pleasant River.

cc: Lew Flagg, DMR

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Maine Council - Atlantic Salmon Federation

Clinton B. Townsend, President
P.O. Box 467, Skowhegan, Maine 04976

November 29, 1989

Mr. David Courtemanche
Water Bureau
Department of Environmental Protection
State House Station 17
Augusta, Maine 04333

Dear David:

It was pleasant to talk with you on Monday, and to learn that you will be recommending a legislative finding that the free flowing quality of the East Machias below the AA section is worthy of protection. As we discussed, several years ago the Board denied an application for a hydro project at this location because of the adverse effect on water quality. I remember appearing and testifying before the Board at the University in Machias.

With respect to the other matter that we discussed, I renew my request that the tributaries to Class AA rivers also be classed AA.

Particularly with respect to the so-called Class A salmon rivers, being the Dennys, East Machias, Machias, Narraguagus, Pleasant, Duck Trap and Sheepscot, the tributaries are at least as important for spawning and reproduction as the main stems.

This is, generally speaking, also true of the restoration rivers, the Penobscot and St. Croix.

The principle applies not only for Atlantic salmon, but also for other cold water species all across the state. Because these tributaries are often smaller and more sensitive than main stems, they are worthy of special consideration.

This principle has been recognized by the proposed AA classification of Mopang Stream, Old Stream, the West Branch of the Machias, the West Branch of the Narraguagus, and the tributaries to the East and West Branches of the Penobscot River within Baxter Park.

High grade tributaries capable of supporting spawning habitat for Atlantic salmon, brook trout, and other salmonids deserve the same level of protection all across the state.

Sincerely,

Bill

Clinton B. Townsend

CBT:dfc

Jim Dunham
P.O. Box 102
Lincolnville, ME 04849
November 29, 1989

David Courtemanch
Department of Environmental Protection
State House Station #17
Augusta, Maine 04333

Dear David,

I am writing to you, on behalf of the Lincolnville Conservation Commission and Tanglewood 4-H Camp, regarding the proposed reclassification of rivers in Maine.

Our commission met this week and unanimously voted in favor of seeking your support to upgrade the Ducktrap River from Class B to Class AA.

The Ducktrap's watershed includes about 35 square miles of land, much of which is located in the town of Lincolnville. The Ducktrap supports a limited run of alewives and Atlantic salmon. Our commission feels that water quality protection of the Ducktrap River is vital.

Tanglewood 4-H Camp is a program of Cooperative Extension, University of Maine. Our program emphasis is environmental education. Tanglewood leases 850 acres of the Lincolnville section of Camden Hills State Park from the Bureau of Parks and Recreation. About three miles of the Camp's property borders the Ducktrap River. Each year, thousands of people utilize the river for educational and recreational activities. Our camp, too, requests that you upgrade the Ducktrap River to Class AA.

I trust your staff will evaluate this proposal and consider our requests. Thank you for your consideration. Please contact me if you have any concerns.

Sincerely,

Jim Dunham
Vice Chairman, Lincolnville
Conservation Commission
Director, Tanglewood 4-H Camp
(789-5233)

414

Georgia-Pacific Corporation
Woodland, Maine 04694-0999
Telephone (207) 427-3311

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DEPARTMENT OF
ENVIRONMENTAL
PROTECTION

Nov 27 9 47 AM '89

AB
State

November 21, 1989

Mr. David Cortemanch
Department of Environmental Protection
Bureau of Water Quality Control
State House Station 17
Augusta, Maine 04333

Dear David:

We are in receipt of the staff proposal for the classification of surface waters dated November 1, 1989.

In reading the language of the St. Croix River Basin, listed on page eleven, it appears that the Woodland impoundment isn't specifically designated as Class C, which it is presently.

The existing language discusses enhancing the designation from Vanceboro to Woodland impoundment to Class A. The next sentence discusses the classification of Class C below Woodland as being appropriate. Again, the staff has held that the impoundment will stay designated as Class C although it is unclear the way it presently reads. Georgia-Pacific testified in support of this recommendation and the rest of the changes proposed for the St. Croix basin at the hearing in Calais last August.

We would appreciate the Department clarifying this issue by explicitly stating that the Woodland impoundment will retain its current class C designation when presenting this proposal to the Board.

If you have any questions, please give me a call. Thank you for your attention to this matter.

Sincerely,

C. Scott Beal

C. Scott Beal
Environmental Affairs Manager

CSB:brm

cc: J. Robinson
M. Lambert
J. Beaudoin
J. Norton
K. Bentley - Atlanta
S. Groves - DEP - Augusta
K. Ruff - Augusta

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Senator Linda Curtis Brawn
District 21
State House 3
Augusta, Maine 04333

MAINE STATE SENATE
114th Legislature

RFD, Box 4952
Camden, Maine 04843

To Dave C

November 15, 1989

Stephen Groves
Bureau of Water Quality Control
Department of Environmental Protection
State House Station 17
Augusta, ME 04333

Dear Steve:

I am writing to support the Georges River Land Trust's proposal to upgrade the St. George River. This group is very committed to care of our river and I hope you will give careful consideration to this request.

If I can be of further help or answer any questions, do not hesitate to contact me.

Sincerely,

Linda Brawn
Linda Curtis Brawn
State Senator

LCB/jr
cc: Georges River Land Trust

Central Maine Power
General Office, Edison Drive, Augusta, Maine 04336
(207) 623-3521

416

November 27, 1989

Mr. David Courtemanch
Division of Environmental Evaluation &
Lake Studies
Dept. of Environmental Protection
State House Station No. 17
Augusta, Maine 04333

Re: Reclassification of Waters in the Saco and Presumpscot River Basins

Dear Dave:

Thank you for the opportunity to comment on the proposed reclassifications of the Saco and Presumpscot Rivers. As in our previous comment letter on reclassification of the Kennebec and Androscoggin Rivers, our comments focus on the issue of preserving the opportunity for hydroelectric development on certain river stretches. We believe that any reclassification should be in conformity with the Maine Waterway Development and Conservation Act (38 M.R.S.A. § 630 et. seq.) whose purpose is to "support and encourage the development of hydropower projects . . . ." 38 M.R.S.A. § 631. Therefore, we believe that any recommendation to reclassify a river segment to AA should be given serious consideration as such a reclassification would result in the complete prohibition of hydroelectric development.

As we noted before, hydropower is a unique and important resource to the State of Maine. The opportunity to develop that resource should be preserved and the decision whether or not to allow development of hydroelectric potential should be made on a case-by-case basis under the requirements of the Maine Waterway Development and Conservation Act.

Our specific comments are as follows:

1. Presumpscot River, main stem.

   (a) From the outlet of Sebago Lake to its confluence with Dundee Pond - Class A.

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CMP supports maintaining the current classifications for this portion of the Presumpscot River.

2. Saco River, main stem.

(a) From the Maine-New Hampshire boundary to its confluence with the impoundment of the Swan's Falls Dam - Class A.

(b) From its confluence with the impoundment of the Swan's Falls Dam to a point located 1000 feet below the Swan's Falls Dam - Class A.

(c) From a point located 1000 feet below the Swan's Falls Dam to its confluence with the impoundment of the Hiram Dam - Class AA.

(d) From its confluence with the impoundment of the Hiram Dam to a point located 1000 feet below the Hiram Dam - Class A.

(e) From a point located 1000 feet below the Hiram Dam to its confluence with the Little Ossipee River - Class AA.

(f) From its confluence with the Little Ossipee River to its confluence with Thatcher Brook - Class A.

(g) From its confluence with Thatcher Brook to tidewater - Class B.

CMP supports the proposed reclassification of the mainstem of the Saco River. As stated in our comment letter on the proposed reclassification of the Androscoggin and Kennebec Rivers, it is our understanding that starting AA classifications 1000 feet below certain existing dams is intended to provide a buffer zone so that existing hydropower development is protected and the potential for new hydropower development is specifically preserved. We again request that this intent is clearly communicated to the Board and to the Legislature in order to put everyone on notice as to the intent of the buffer zone.

Again, thank you for the opportunity to participate. If you have any questions, please call.

Sincerely,

Sarah A. Verville

Sarah A. Verville
Counsel

Water ReClass

MAINE AUDUBON SOCIETY

Gilsland Farm • 118 U.S. Route One • Falmouth, Maine 04105 • 781-2330

The responsible voice for Maine's environment and natural resources.

December 12, 1989

E. Christopher Livesay, Chair
Members, Board of Environmental Protection
Department of Environmental Protection
State House Station 17
Augusta, Maine 04333

Re: Reclassification of Surface Waters:
West Branch of Penobscot River to Class AA

Dear Chris and other Board Members:

During the staff presentation of the proposed Reclassification of Surface Waters, Great Northern Paper Company raised essentially two issues that Maine Audubon wishes to address.

Issue I. Can Class AA status be conferred on waters that are downriver of impoundments such as on the segment of the West Branch of the Penobscot River below Ripogenus Dam?

The statutory language describing Class AA waters does not explicitly preclude river stretches downstream from impoundments receiving this designation. Nor is there any implied rationale for such a restrictive interpretation of the law.

Class AA standard must be applied in the light of its introductory language: "Class AA shall be the highest classification and shall be applied to waters which are outstanding natural resources and which should be preserved because of their ecological, social, scenic or recreational importance." 38 MRSA section 465 (1) The evidence in the record illustrates that these goals are splendidly served by the section of the West Branch of the Penobscot proposed for Class AA status by the Department.

The specific standards of Class AA waters provide further clarification but should be guided by the introductory description. These detailed qualities include the designated uses of drinking water after disinfection, fishing, recreation and as habitat for fish and other aquatic life. No one, including Great Northern, contends that these attributes are not met in the section of the West Branch of the Penobscot at issue.

Great Northern Paper contends that the language "the habitat shall be characterized as free flowing and natural" prevents river segments affected by impoundments upstream from being classified as AA. To the contrary, it means only that the segment classified as AA cannot have within it dams and impoundments, and that once it is granted Class AA status, new impoundments and discharges cannot be permitted within that section.

Such an interpretation is supported by the language of the Water Reclassification Report of the Joint Standing Committee on Energy and Natural Resources (March, 1986):

> This provision in conjunction with the general provisions for licensing (section 464, subsection 4) means that activities which would cause Class AA waters to be other than a free flowing habitat for fish and other aquatic life cannot be licensed. (Emphasis added.)

It is significant to note that the BEP in the past has also interpreted this section to mean that regulated rivers, such as the Allagash, that have the special traits outlined in the statute, can be classified as AA.

This same reasoning applies to the Class AA requirement that "aquatic life, dissolved oxygen and bacteria content of Class AA waters shall be as naturally occurs." 38 MRSA section 465 (1)(B) Given the degree of humankind's influence on watersheds throughout Maine resulting from impoundments, from acid deposition, and from alterations in weather patterns to name a few, Great Northern's argument that any alteration to aquatic communities disqualify a segment of a river from Class AA status would mean that no river segments could be thus classified. It is doubtful that the Legislature would enact a meaningless provision. The Department has appropriately construed "as naturally occurs" to mean that the river segment displays the overall characteristics of an unpolluted, unimpeded water body.

In sum, the Class AA standard is appropriate for river segments that contain outstanding qualities deserving of protection because of their ecological, social, scenic or recreational importance AND that contain no impoundments or discharges. It must feature the characteristics of free flowing and natural. These

standards are amply met by that section of the West Branch suggested for Class AA by the DEP.

Issue 2. Does Class AA status for the West Branch of the Penobscot below Ripogenus Dam threaten relicensing and associated water quality certification of the dam?

Great Northern Paper maintains that if this section of the West Branch was classified to Class AA, that a future Board could rule that the existing Ripogenus Dam was preventing that section from meeting the Class AA status and refuse water quality certification during relicensing.

If Great Northern is serious about this concern, there is a straightforward solution -- include as part of the BEP's findings to the Legislature in support of Class AA reclassification, a statement that the river segment now meets the Class AA characteristics, with the impoundment and the existing uses. Such a formal finding would dispel any arguments during relicensing that the Class AA designation could not be met by the continued existence of the Ripogenus Dam.

In closing, we appreciate the opportunity to provide these comments.

Sincerely,

Karin R. Tilberg, Esq.

Water Reclass

Great Northern Paper
a company of
Great Northern Nekoosa Corporation

File No. 522.00

December 8, 1989

Mr. Stephen Groves, Director
Bureau of Water Quality Control
Department of Environmental Protection
State House Station 17
Augusta, Maine 04333

Dear Steve:

Re: Penobscot River, West Branch Proposed Reclassification

Confirming our discussion at the Board meeting on November 29, I wanted to be sure you understood that, as Great Northern considers possible options for further production facilities in and around the area, we have targeted for further investigation, certain sites on the river corridor above Millinocket (i.e., on the West Branch from the Debsconeag deadwater to the boundaries of Ferguson and Quakish lakes).

Classification of waters in this area as Class A would seriously affect our ongoing investigations and likely render impossible the construction of any new production facility. We believe it is fair and appropriate to leave this stretch in its present classification to avoid any possibility of removing appropriate sites for additional facilities from consideration.

Sincerely,

Dale K. Phenicie
Manager of Environmental Affairs

DKP/bv

cc: Dean Marriott, Commissioner

Water Reclass

Normandeau Associates, Inc.
25 Nashua Road
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(603) 472-5191
(603) 472-7052 (Fax)

NORMANDEAU ASSOCIATES

11 December 1989

Mr. Dale K. Phenicie
Great Northern Paper
Millinocket, Maine 04462

Dear Mr. Phenicie:

I have reviewed existing biological data on the aquatic communities of the Penobscot River, West Branch and the State of Maine water classification standards for fresh surface waters (Section 465) with regard to the following issues:

1. A proposal to classify the reach of the West Branch from a point 250 feet down stream of McKay Station to its confluence with Debsconeag Deadwater as Class AA.

2. A proposal to classify the reach of the West Branch from Debsconeag Deadwater to the outlets of Ferguson and Quakish Lakes as Class A.

For aquatic communities, particularly the benthic macroinvertebrates, the critical part of the Maine water quality standard which distinguishes Class AA and Class A waters from Class B are the statements in Section 465 1A and Section 465 2A which require the habitat to be characterized as "free flowing and natural" for Class AA or "natural" for Class A. Class B waters have dissolved oxygen limits, and require that the aquatic life and bacterial content be "as naturally occurs".

There appears to be an inherent inconsistency in the application of either Class AA or Class A to the reaches of the West Branch referenced above. A reach of river below an existing hydropower dam and impoundment like the reach below McKay Station is not "free flowing" or "natural" . Water storage and flow regulation practices associated with the operation of McKay Station have stabilized seasonal variation in West Branch discharge and created an impoundment where a free flowing river would exist naturally.

Stable flows and the impoundments created by Ripogenus Dam and North Twin Dam provide dramatically different habitat conditions for aquatic communities than would occur if the river flow was unregulated in this reach of the West Branch. The Ripogenus impoundment produces and exports plankton and other fine, particulate organic material to the river segment below McKay Station which becomes a food supply for aquatic communities. In particular, net-spinning caddisflies (Tricoptera: Hydropsychidae), which specialize in feeding on particulate material like the kind exported from impoundments, are abundant in the West Branch below McKay Station. These net-spinning caddisflies

represented between 25% and 60% of the benthic macroinvertebrate community found in mid-channel at Big Eddy between June 1981 and September 1984. Under free flowing and natural conditions which existed prior to these dams, the net spinning caddisflies would represent a significantly lower proportion of the macroinvertebrate community because of low flows, periodic dessication, and the absence of impoundments to produce an abundant supply of fine particulate material.

NAI has sampled the benthic macroinvertebrate community in the West Branch for GNP during 1981, 1982, 1984, 1986 and 1987 and found consistently high abundance of net-spinning caddisflies, particularly below McKay Station. Natural communities dominated by such high abundance of net-spinning caddisflies are typically found in river segments below natural lake outlets. Due primarily to this dominance of net-spinning cadisflies, the West Branch below McKay Station exhibits lower diversity and higher abudance of benthic macroinvertebrates under the present conditions than it would under an unregulated flow regime. These observations concur with the scientific literature which documents an increase in the abundance of net-spinning caddisflies below impoundments. Net-spinning caddisflies found in such high proportion in the benthic macroinvertebrate community in the West Branch below McKay Station leads to the conclusion that the aquatic communities have adapted to the present state of impoundment and flow regulation and would not occur in this diversity or abundance under free flowing and natural conditions.

If you have any additional questions or need additional information, please give me a call.

Sincerely,

NORMANDEAU ASSOCIATES, INC.

Mark T. Mattson

Mark T. Mattson, Ph.D.
Assistant Vice President

CC. W. Taylor
D. Magee

Water Reclass

Charles Ritzi Associates
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DISCUSSION OF INCONSISTENCIES BETWEEN EXISTING FISH HABITAT AND POPULATIONS AND PROPOSED STATUTORY REQUIREMENTS FOR DEP WATER RECLASSIFICATION OF THE WEST BRANCH PENOBSCOT RIVER

BACKGROUND

The DEP is proposing water classification changes for the West Branch Penobscot River from the dam at the outlet of Seboomook Lake downstream to the outlets of Ferguson and Quakish Lakes. These reclassifications propose upgrading Class B sections to Class AA and Class A. For Class AA the statutory requirement is that the habitat be free-flowing and for both Classes AA and A the statutory requirements are that the habitat be characterized as natural, the aquatic life be characterized as naturally occurs, and that both habitat and aquatic life be free of measurable effects of human activity. This discussion summarizes inconsistencies between these proposed statutory requirements and existing habitat, fish populations, and important related aquatic life.

HABITAT

The existing habitat of the West Branch in no way resembles the natural condition. There have been major measurable effects of human activity and these activities have caused significant changes in habitat resulting from impoundment by dams and intensive, drainage-wide storage and flow management. These changes include:

- Flow management at the Seboomook Dam that regulates discharge into the West Branch above Chesuncook Lake (the Ripogenus Project Impoundment) with an average summer flow of approximately 150 cfs.

- Flow management at the Ripogenus Dam that regulates discharge into the West Branch via the McKay Station generating facility. In the natural condition, this flow was subject to extreme flood and drought conditions with long periods of low flow. The present intensively managed flows provide virtually year-round, bank-full, relatively stable flows (averaging approximately 2,500 cfs) with few, short-term episodes of high or low flow and a Federal Energy Regulation Commission (FERC) minimum flow.

- Flow management at the Ripogenus Dam that regulates discharge into the Upper Gorge, the approximately 4,300 ft long bypass channel between the Ripogenus Dam and the McKay Station tailrace. In the natural condition, all West Branch flow was via this narrow, steep channel and, at all but lowest flows, high velocity and turbulence eliminated virtually all fish habitat. With the leakage flows prevailing with existing hydroelectric generation, there is juvenile salmonid habitat and fishing opportunity in the Upper Gorge.

- Flow management at North Twin Dam that provides a minimum flow of 2,000 cfs from that hydroelectric facility to satisfy FERC License requirements for discharge downstream of this facility.

- A pumping station at Millinocket Lake that diverts water from Millinocket Stream discharge into Ambajejus Lake (the North Twin Impoundment) with a FERC-licensed minimum flow in Millinocket Stream.

- Flow management in tributary lakes (Harrington Lake, Caucomgomoc Lake, Ragged Lake, and Nesowadnehunk Lake) that results in more stable flows and improved fish habitat.

FISH POPULATIONS

Existing and natural fish populations also differ significantly with the following major changes:

- Landlocked salmon were not native to the West Branch. They were introduced in the early 1900's but the salmon population in the West Branch was sparse; the prime fishery was for brook trout. As a result of the excellent habitat provided by Great Northern Paper's storage and flow management, salmon have flourished and the existing population is self-sustaining and supports a renowned fishery. The brook trout fishery is now secondary. This salmon population and fishery would not exist under natural conditions.

- There is downstream movement of smelt (termed smelt drift), the essential forage fish for salmon, from the Ripogenus and North Twin Impoundments into the West Branch via the McKay Station and North Twin Facility hydroelectric generating discharges. These consistent high-volume discharges provide the smelt drift necessary to sustain the riverine salmon populations in their healthy status. This consistent smelt drift would not be available without the Great Northern Paper impoundments and generating facilities.

- Upper Gorge habitat presently supports juvenile salmonid production, a brook trout population and fishing opportunity for salmon with existing leakage flow conditions. This fishery management would not be possible with the unfavorable natural flows in this section if Ripogenus Dam discharge was not primarily via McKay Station.

- There is considerable stocking in the West Branch impoundments and tributary waters, all of which change the natural condition. While salmon have been stocked in all waters at various times, the only current stockings are into the North Twin Impoundment and Millinocket Lake, and these fish are known to move up into the West Branch as far as Ripogenus Dam and downstream into the lower West Branch. Lake trout are stocked into the Ripogenus Impoundment, North Twin Impoundment and Millinocket Lake. Brook trout are stocked into tributary lakes (Abol Pond, Carry Pond) and splake are stocked into Holbrook Pond; it is known that these stockings contribute to the West Branch population. Millinocket Stream receives put and tale brook trout stockings annually.

RELATED AQUATIC LIFE

Various aquatic communities (plankton, macroinvertebrates) are important in the food web of fish. These communities have been changed from natural by man's activities on the West Branch. The enhanced flow conditions that improve fish habitat also provide a habitat for certain aquatic life that would not naturally occur. The discharges from the impoundments also carry food organisms into the riverine sections and provide increased nutrients which in turn support increased populations of aquatic communities which might not otherwise be present.

In summary, both physical and biological conditions on the West Branch today are significantly different than historic natural conditions. The charges due to human activity are certainly measurable and have actually resulted in fish populations and fisheries much improved over natural conditions.

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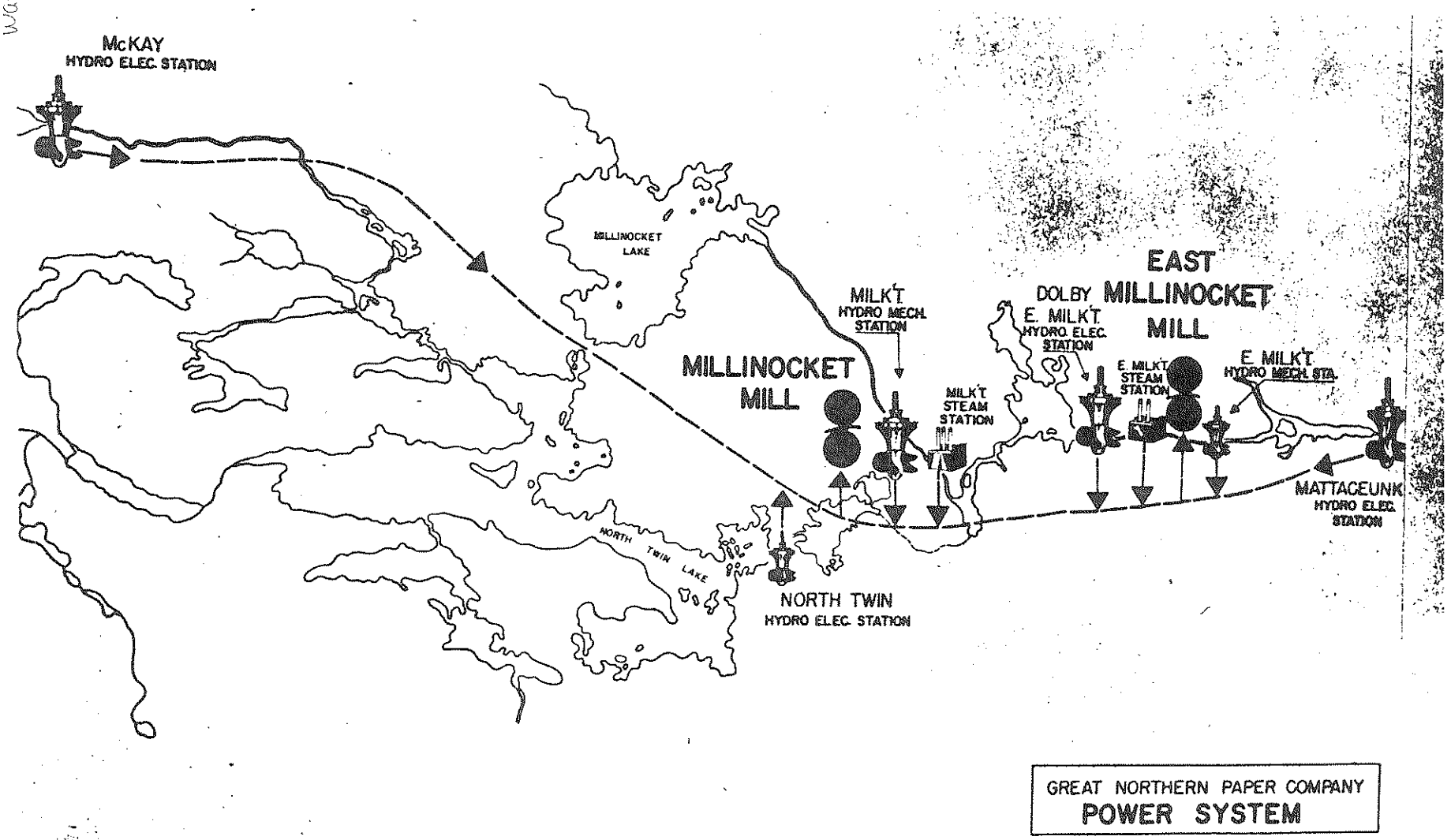

GREAT NORTHERN PAPER COMPANY
POWER SYSTEM

Water Reclass

GREAT NORTHERN PAPER COMPANY

Excerpts from:

- Water Quality Classification Statutes (Tab 1)
- Outstanding Rivers Act (Tab 2)
- Proposed Reclassification of Several River Segments (Tab 3)
- Deed of Conservation Easement to the State of Maine (Tab 4)
- Section 401 - Clean Water Act (Tab 5)

§ 414-A. Conditions of licenses

1. **Generally.** The board shall issue a license for the discharge of any pollutants only if it finds that:

A. The discharge either by itself or in combination with other discharges will not lower the quality of any classified body of water below such classification;

§ 466. Definitions

As used in this article, unless the context otherwise indicates, the following terms have the following meanings.

2. **As naturally occurs.** "As naturally occurs" means conditions with essentially the same physical, chemical and biological characteristics as found in situations with similar habitats free of measurable effects of human activity.

5. **Direct discharge.** "Direct discharge" means any discernible, confined and discrete conveyance, including, but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation or vessel or other floating craft, from which pollutants are or may be discharged.

9. **Natural.** "Natural" means living in, or as if in, a state of nature not measurably affected by human activity.

10. **Resident biological community.** "Resident biological community" means aquatic life expected to exist in a habitat which is free from the influence of the discharge of any pollutant. This shall be established by accepted biomonitoring techniques.

11. **Unimpaired.** "Unimpaired" means without a diminished capacity to support aquatic life.

12. **Without detrimental changes in the resident biological community.** "Without detrimental changes in the resident biological community" means no significant loss of species or excessive dominance by any species or group of species attributable to human activity.

§ 465. Standards for classification of fresh surface waters

The board shall have 4 standards for the classification of fresh surface waters which are not classified as great ponds.

1. **Class AA waters.** Class AA shall be the highest classification and shall be applied to waters which are outstanding natural resources and which should be preserved because of their ecological, social, scenic or recreational importance.

A. Class AA waters shall be of such quality that they are suitable for the designated uses of drinking water after disinfection, fishing, recreation in and on the water and navigation and as habitat for fish and other aquatic life. The habitat shall be characterized as free flowing and natural.

B. The aquatic life, dissolved oxygen and bacteria content of Class AA waters shall be as naturally occurs.

C. There shall be no direct discharge of pollutants to Class AA waters.

2. **Class A waters.** Class A shall be the 2nd highest classification.

A. Class A waters shall be of such quality that they are suitable for the designated uses of drinking water after disinfection; fishing; recreation in and on the water; industrial process and cooling water supply; hydroelectric power generation, except as prohibited under Title 12, section 403; and navigation; and as habitat for fish and other aquatic life. The habitat shall be characterized as natural.

B. The dissolved oxygen content of Class A waters shall be not less than 7 parts per million or 75% of saturation, whichever is higher. The aquatic life and bacteria content of Class A waters shall be as naturally occurs.

C. Direct discharges to these waters licensed after January 1, 1986, shall be permitted only if, in addition to satisfying all the requirements of this article, the discharged effluent will be equal to or better than the existing water quality of the receiving waters. Prior to issuing a discharge license, the board shall require the applicant to objectively demonstrate to the board's satisfaction that the discharge is necessary and that there are no other reasonable alternatives available. Discharges into waters of this classification which were licensed prior to January 1, 1986, shall be allowed to continue only until practical alternatives exist. There shall be no deposits of any material on the banks of these waters in any manner so that transfer of pollutants into the waters is likely.

3. **Class B waters.** Class B shall be the 3rd highest classification.

A. Class B waters shall be of such quality that they are suitable for the designated uses of drinking water supply after treatment; fishing; recreation in and on the water; industrial process and cooling water supply; hydroelectric power generation, except as prohibited under Title 12, section 403; and navigation; and as habitat for fish and other aquatic life. The habitat shall be characterized as unimpaired.

B. The dissolved oxygen content of Class B waters shall be not less than 7 parts per million or 75% of saturation, whichever is higher, except that for the period from October 1st to May 14th, in order to ensure spawning and egg incubation of indigenous fish species, the 7-day mean dissolved oxygen concentration shall not be less than 9.5 parts per million and the 1-day minimum dissolved oxygen concentration shall not be less than 8.0 parts per million in identified fish spawning areas. Between May 15th and September 30th, the number of Escherichia coli bacteria of human origin in these waters may not exceed a geometric mean of 64 per 100 milliliters or an instantaneous level of 427 per 100 milliliters.

C. Discharges to Class B waters shall not cause adverse impact to aquatic life in that the receiving waters shall be of sufficient quality to support all aquatic species indigenous to the receiving water without detrimental changes in the resident biological community.

§ 403. Special protection for outstanding rivers

The Legislature declares that certain rivers, because of their unparalleled natural and recreational values, provide irreplaceable social and economic benefits to the people in their existing state. It is the Legislature's intent that no new dams be constructed on these river and stream segments without the specific authorization of the Legislature, that no new water diversion, which would constitute a hydropower project pursuant to Title 38, section 632, and which would bypass all or part of the natural course of these river and stream segments, be constructed without the specific authorization of the Legislature and that additional development or redevelopment of dams existing on these segments, as of September 23, 1983, shall be designed and executed in a manner that either enhances or does not diminish the significant resource values of these river segments identified by the 1982 Maine Rivers Study. No license or permit under Title 38, sections 630 to 636 may be issued for construction of new dams on the river and stream segments subject to this special protection without the specific authorization of the Legislature, for the construction of any water diversion project which would constitute a hydropower project pursuant to Title 38, section 632, and which would bypass all or part of the natural course of river and stream segments subject to this special protection without the specific authorization of the Legislature or for additional development or redevelopment of existing dams on the river and stream segments subject to this special protection where the additional development or redevelopment diminishes the significant resource values of these river and stream segments.

Further, the Legislature finds that projects inconsistent with this policy on new dams and diversion projects, which constitute hydropower projects pursuant to Title 38, section 632, and redevelopment of existing dams will alter the physical and chemical characteristics and designated uses of the waters of these river and stream segments. It finds that these impacts are unacceptable and constitute violations of the State's water quality standards. The Legislature directs that no project which fails to meet the requirements of this section may be certified under the United States Clean Water Act, Section 401.[1]

For purposes of this section, outstanding river and stream segments meriting special protection shall include:

1. **Allagash River.** The Allagash River from Gerald Brook in Allagash up to but not including the Churchill Dam in T.10, R.12, W.E.L.S., including its tributaries the Musquacook Stream from the Allagash River to the outlet of Third Musquacook Lake in T.11, R.11, W.E.L.S.; Allagash Stream from its inlet to Chamberlain Lake to the outlet of Allagash Pond in T.9, R.15, W.E.L.S.; and Chemquasabamticook Stream from its inlet into Long Lake to the outlet of Chemquasabamticook Lake, excluding Round Pond in T.13, R.12, W.E.L.S., Harvey Pond, Long Lake, Umsaskis Lake, Musquacook Lakes (1-2), Little Round Pond in T.8, R.13, W.E.L.S., Allagash Lake and Clayton Lake;

2. **Aroostook River.** The Aroostook River from and including the Sheridan Dam in Ashland to Millinocket Stream, including its tributaries Millinocket Stream from the Aroostook River to the outlet of Millinocket Lake; Munsungan Stream from the Aroostook River to the outlet of Little Munsungan Lake; St. Croix Stream from the Aroostook River to Hall Brook in T.9, R.5, W.E.L.S.; and the Big Machias River from the Aroostook River to the outlet of Big Machias Lake, excluding Round Pond in T.7, R.9, W.E.L.S.;

3. **Dead River.** The Dead River from the Kennebec River to the upstream limit of Big Eddy;

4. **Dennys River.** The Dennys River from Hinckley Point in Dennysville to the outlet of Meddybemps Lake;

5. **East Machias River.** The East Machias River, including the Maine River, from the Route 191 Mill Memorial Bridge in East Machias to the outlet of Pocomoonshine Lake,

excluding Hadley Lake, Second Lake, Round Lake, Crawford Lake, Lower Mud Lake and Upper Mud Lake;

6. **Fish River.** The Fish River from its inlet into St. Froid Lake in T.14, R.7, W.E.L.S. to the outlet of Mud Pond in T.13, R.8, W.E.L.S., excluding Portage Lake, Round Pond and Fish River Lake.

7. **Kennebec River.** The Kennebec River from Bay Point in Georgetown to the Father Curran Bridge in Augusta and from the confluence of the Dead River with the Kennebec River up to, but not including, the Harris Dam in Indian Stream Township;

8. **Machias River.** The Machias River, including Fourth and Fifth Lake Streams, from Fort O'Brien in Machias to the outlet of Fifth Machias Lake, including its tributaries the West Branch Machias River from the Machias River to the outlet of Lower Sabao Lake; Old Stream from the Machias River to the outlet of First Lake; and Mopang Stream from the Machias River to the outlet of Mopang Second Lake, excluding Machias Lakes (1–4), Lower Pond and Mopang First Lake;

9. **Mattawamkeag River.** The Mattawamkeag River from the Penobscot River to the Mattawamkeag and Kingman Township townline.

10. **Moose River.** The Moose River from its inlet into Attean Pond to its confluence with Number One Brook in Beattie Township;

11. **Narraguagus River.** The Narraguagus River from the Route 1 bridge in Cherryfield to the outlet of Eagle Lake, excluding Beddington Lake and Deer Lake;

12. **Penobscot River.** The Penobscot River, including the Eastern Channel, from Sandy Point in Stockton Springs up to, but not including, the Veazie Dam, including its tributaries the West Branch of the Penobscot from its inlet into Ambajejus Lake to the western Boundary of T.3, R.10, and from its inlet into Chesuncook Lake up to, but not including, the dam at Seboomook Lake; the East Branch Penobscot River from the Penobscot River up to, but not including, the dam at the outlet of Grand Lake Matagamon; the Wassataquoik Stream from the East Branch of the Penobscot River to Annis Brook in T.4, R.9, W.E.L.S.; the Webster Brook from its inlet into Grand Lake Matagamon up to, but not including, Telos Dam in T.6, R.11, W.E.L.S.; the Seboeis River from the East Branch of the Penobscot River to the outlet of Snowshoe Lake; and the Sawtelle Brook from the Seboeis River up to, but not including, the dam at the outlet of Sawtelle Deadwater, excluding Passamagamet Lake, Webster Lake, White Horse Lake and Snowshoe Lake;

13. **Pleasant River.** The Pleasant River from Seavey Point in Addison to the outlet of Pleasant River Lake;

14. **Rapid River.** The Rapid River from the Magalloway Plantation and Upton townline to the outlet of Pond in the River;

15. **Saco River.** The Saco River from the Little Ossipee River to the New Hampshire border;

16. **St. John River.** The St. John River from one mile above the foot of Big Rapids in Allagash to the Baker Branch, including its tributaries the Big Black River from the St. John River to the Canadian border; the Northwest Branch from the St. John River to the outlet of Beaver Pond in T.12, R.17, W.E.L.S.; the Southwest Branch from the Baker Branch to 5 miles downstream of the Canadian border; and the Baker Branch from the St. John River to 1.5 miles below Baker Lake;

17. **Sheepscot River.** The Sheepscot River from the Route 1 bridge in Wiscasset to Halldale Road in Montville, excluding Long Pond and Sheepscot Pond, including its tributaries the West Branch of the Sheepscot from its confluence with the Sheepscot River in Whitefield to the outlet of Branch Pond in China; and

18. **West Branch Pleasant River.** The West Branch Pleasant River from the East Branch to the outlet of Fourth West Branch Pond in Shawtown Township, excluding Silver Lake and West Branch Ponds (1–3).

INCONSISTENT STAFF RECOMMENDATIONS - RIVER RECLASSIFICATIONS

The DEP Staff recommendation for the West Branch of the Penobscot River is inconsistent with its recommendations for other river segments in the "November 1, 1989 Staff Proposal for Reclassification of Surface Waters to the Board of Environmental Protection," listed below.

1. East Machias River Basin

"The Atlantic Salmon Federation recommends extending class AA to US Route 1, however, presently there are licensed discharges above the bridge. They also recommend a "legislative finding" to protect the free flowing use below the AA segment. This segment is not included in the Maine Rivers Act for protection therefore it is assumed that the legislature did not wish to establish the free flowing use in this segment." (emphasis added.)
Staff Proposal, p.2.

2. Narraguagus River

"The Atlantic Salmon Federation requested that a "legislative finding" to protect the free flowing use be included for the segment below the AA water; however, a flow control structure already exists in this segment which precludes such a designation." (emphasis added).
Staff Proposal, p. 3

3. Saco River Basin

"Management strategy for the Saco Rivcer focuses on its designation as an outstanding river in the Maine River Act. In conformance with that law, the Saco River from Swans Falls Dam to the Little Ossippee river excluding existing impoundments should be upgraded to Class AA." (emphasis added).
Staff Proposal, p. 10

4. St. Croix River Basin

"The Atlantic Salmon Federation suggested AA for the upper river; however, such a classification would be in conflict with specific language in the Maine Rivers Act regulating hydropower in this international waterbody."
Staff Proposal, p. 11

5. St. John River, main stem

"Certain upgrades are suggested for the St. John River to make management consistent with the Maine Rivers Act and to be consistent with improvements in water quality from treatment. The segment from the confluence of the Northwest and Southwest Branches to Big Rapids in Allagash is recommended for upgrade to Class AA since there are presently no discharges and this segment has been precluded from hydropower development in the Maine Rivers Act."
Staff Proposal, p. 12

EXCERPTS

GNP DEED OF CONSERVATION EASEMENT TO STATE OF MAINE

The purpose of this Conservation Easement is to assist in managing the land, timber, water and recreational resources of certain portions of the Penobscot River described herein, to insure the continued use and benefit of these resources for Great Northern Nekoosa Corporation and for the people of the State of Maine.

. . .

Also excepting and reserving from said Easement the right to construct and maintain hydroelectric and associated facilities on the Easement Lands, including, without limitation, dams, structures, transmission line facilities, facilities intended to mitigate environmental impacts and roads (including roadways over any dam), and the right to locate borrow pits and excavate therefrom material necessary for construction of said facilities, the right to conduct any activities required by any government agencies, including without limitation, the Federal Energy Regulatory Commission either to obtain a hydroelectric license or permit to construct hydroelectric or related facilities or to comply with the terms or conditions of any such license or permit, and the right to flow Easement Lands and adjacent lands, and furthermore, excepting and reserving on the Easement Lands the right to cause whatever impact might result from construction of said hydroelectric and related facilities and resultant flowage and impoundment . . ..The boundaries of said Easement shall change consistent with the new normal high water mark resulting from any water impoundment or dam constructed by Grantor.

. . .

Also excepting and reserving from said Easement the right to construct and maintain transmission lines, roads, and such development as may be necessary for the transmission of electricity.

. . .

Notwithstanding the covenants and restrictions contained herein, the Grantor reserves all rights to use the Easement Lands in any way necessary or appropriate as required by law for the safe and proper operation and maintenance of Grantor's hydroelectric plants which are or may be licensed by the Federal Energy Regulatory Commission . . . .

SUBCHAPTER IV—PERMITS AND LICENSES

Cross References

Continuing planning process, approval of State permit program, see section 1313 of this title.

§ 1341. Certification [FWPCA § 401]

(a) Compliance with applicable requirements; application; procedures; license suspension

(1) Any applicant for a Federal license or permit to conduct any activity including, but not limited to, the construction or operation of facilities, which may result in any discharge into the navigable waters, shall provide the licensing or permitting agency a certification from the State in which the discharge originates or will originate, or, if appropriate, from the interstate water pollution control agency having jurisdiction over the navigable waters at the point where the discharge originates or will originate, that any such discharge will comply with the applicable provisions of sections 1311, 1312, 1313, 1316, and 1317 of this title. In the case of any such activity for which there is not an applicable effluent limitation or other limitation under sections 1311(b) and 1312 of this title, and there is not an applicable standard under sections 1316 and 1317 of this title, the State shall so certify, except that any such certification shall not be deemed to satisfy section 1371(c) of this title. Such State or interstate agency shall establish procedures for public notice in the case of all applications for certification by it and, to the extent it deems appropriate, procedures for public hearings in connection with specific applications. In any case where a State or interstate agency has no authority to give such a certification, such certification shall be from the Administrator. If the State, interstate agency, or Administrator, as the case may be, fails or refuses to act on a request for certification, within a reasonable period of time (which shall not exceed one year) after receipt of such request, the certification requirements of this subsection shall be waived with respect to such Federal application. No license or permit shall be granted until the certification required by this section has been obtained or has been waived as provided in the preceding sentence. No license or permit shall be granted if certification has been denied by the State, interstate agency, or the Administrator, as the case may be.

(2) Upon receipt of such application and certification the licensing or permitting agency shall immediately notify the Administrator of such application and certification. Whenever such a discharge may affect, as determined by the Administrator, the quality of the waters of any other State, the Administrator within thirty days of the date of notice of application for such Federal license or permit shall so notify such other State, the licensing or permitting agency, and the applicant. If, within sixty days after receipt of such notification, such other State determines that such discharge will affect the quality of its waters so as to violate any water quality requirements in such State, and within such sixty-day period notifies the Administrator and the licensing or permitting agency in writing of its objection to the issuance of such license or permit and requests a public hearing on such objection, the licensing or permitting agency shall hold such a hearing. The Administrator shall at such hearing submit his evaluation and recommendations with respect to any such objection to the licensing or permitting agency. Such agency, based upon the recommendations of such State, the Administrator, and upon any additional evidence, if any, presented to the agency at the hearing, shall condition such license or permit in such manner as may be necessary to insure compliance with applicable water quality requirements. If the imposition of conditions cannot insure such compliance such agency shall not issue such license or permit.

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DEP INFORMATION SHEET

Hydropower Relicensing

date: July 1989 contact: Dana Murch, (207) 289-2111

The Department of Environmental Protection is now in the midst of relicensing many of the hydroelectric generating and water storage dams in Maine. This effort provides a once-in-a-lifetime opportunity to shape the destiny of our river resources.

Hydro Licensing

Hydro projects are licensed by the Federal Energy Regulatory Commission (FERC) which has jurisdiction over all generating and storage dams on navigable rivers. Projects on non-navigable rivers that have undergone post-1935 construction and affect interstate commerce (as through an interconnection with a public utility power grid) also fall under FERC's control.

Sixty-nine projects are now licensed in Maine. These have a combined installed generating capacity of 655 megawatts (mw) as well as billions of cubic feet of water storage capacity. (Thirty-five other small scale projects are approved within the state, but they are exempt from the licensing provisions of federal law.)

Relicensing Activity in Maine

Maine, New York, Wisconsin and Minnesota together account for the majority of the federal relicensing activity planned during this century.

To date, ten Maine projects have already been relicensed (Table 1). Six of these involved plans for expanded generating capacity. When on-line, they will produce an additional 378 million kilowatt hours of electricity annually--enough to supply the needs of about 56,000 homes.

The licenses of 25 more Maine projects, involving a total of 36 dams, are set to expire by 1993 (Table 2). Some of our largest hydro facilities fall in this group which, as a whole, represents almost half of the state's total hydro generating capacity .

Many of the projects up for relicensing are sited on Maine's major river systems.

The State's Role in the Relicensing Process

In order for a hydro project to be relicensed by FERC, the state must first certify that continued operation will comply with Maine's water quality standards. These standards relate to the waterbody's physical characteristics (e.g., minimum dissolved oxygen levels) as well as its designated uses (recreation, fishing, aquatic habitat, etc.). Existing in-stream uses are to be protected under the state's "anti-degradation" policy.

As a result of this requirement, DEP has found it necessary to impose certain conditions on the relicensing projects it has reviewed to date. To ensure that state standards are maintained, the department has, in specific cases, set minimum flow releases, established allowable water level fluctuations, required the maintenance or construction of boat ramps, canoe portage trails, and other recreational facilities, and required the construction of new or improved fish passage facilities.

The state can regulate in another way as well. Any proposed relicensing that calls for the expansion of an existing project must be approved under the Maine Waterway Development and Conservation Act. This statute requires an evaluation of the full range of potential impacts, including consideration of financial backing, public safety, economic benefits, flood control, water quality, and energy benefits.

Federal Role in Relicensing

To issue a license, FERC must find that a project is "best adapted to a comprehensive plan for improving or developing a waterway." The Electric Consumers Protection Act (1986), directs FERC to consider power and non-power uses in making this determination. Specifically, the agency must give "equal consideration to the purposes of energy conservation, the protection, mitigation of damage to, and enhancement of fish and wildlife, the protection of recreational opportunities, and the preservation of other aspects of environmental quality."

Licenses are valid for periods of 30 to 50 years.

The Relicensing Process

The relicensing process actually begins informally with pre-application consultation. This consists of a lengthy series of meetings and studies during which licensees, resource consultants, and representatives of state and federal agencies identify environmental issues, address information needs, and explore mitigation options.

Most of the projects scheduled for relicensing over the next five years are already in this consultation stage. As a result of agency comments to date, many studies have been initiated to determine existing water quality, the effects of varying water levels and flow releases on fish and wildlife habitat, the efficiency of existing fishways, and the presence of archaeological sites.

Formal relicensing begins with the filing of an application with FERC. Federal law requires that this be done no later than two years prior to license expiration. In the event that a new license has not been issued for a project when the old one expires, FERC will issue annual permits until relicensing is completed.

Conclusion

Hydro relicensing will greatly affect the character