STATE OF MAINE
BOARD OF ENVIRONMENTAL PROTECTION

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SUSAN M. LESSARD
CHAIR

CYNTHIA S. BERTOCCI
EXECUTIVE ANALYST

TERRY A. HANSON
ADMIN. ASSISTANT

February 17, 2009

Senator Seth A. Goodall
Representative Robert S. Duchesne
Members of the Joint Standing Committee on Natural Resources
#13 State House Station
Augusta, Maine 04333-0013

Re: Recommendations for Changes in Water Quality Classification

Dear Senator Goodall, Representative Duchesne, Committee Members:

Changes to the classification of waters of the State are governed by 38 M.R.S.A. section 464. This law requires the Department of Environmental Protection to conduct water quality studies and the Board of Environmental Protection to hold public hearings periodically and propose, if appropriate, changes to the classification of State waters (including river segments, tributaries, and coastal waters). The Board's recommendations for changes in the water classification of a number of waterbodies are enclosed. These recommendations are being incorporated into a Department bill which will be proposed for the Committee's consideration in the first Regular Session of the 124th Legislature.

The Board is recommending 17 upgrades in water quality classification: (1) marine Class SB to Class SA, (2) Class A to Class AA, (12) Class B to Class A, and (2) Class C to Class B. Descriptions of these classifications can be found in Appendix A of the recommendation. The Board is also recommending changes to clarify the water quality classification of six waterbody segments, and that a Use Attainability Analysis be conducted to determine the level of water quality that can be attained in Jepson Brook in Lewiston. The Board is not recommending three citizen initiated proposals for upgrade: Androscoggin River main stem from Worumbo Dam to Merrymeeting Bay, Aroostook River from Washburn to Caribou, and Aroostook River from Caribou to the international border.

Questions on this submission may be directed to Cynthia Bertocci, the Board's Executive Analyst, at 287-2452 or cynthia.s.bertocci@maine.gov.

Respectfully submitted,

Susan M. Lessard

Susan M. Lessard, Chair
Board of Environmental Protection

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BOARD OF ENVIRONMENTAL PROTECTION
RECOMMENDATIONS TO THE LEGISLATURE FOR
CHANGES IN WATER QUALITY CLASSIFICATION
FEBRUARY 2009

I. INTRODUCTION

The recommendations contained in this report have, with one exception, been incorporated into a Department bill (LD 330 "An Act to Change the Classification of Certain Waters of the State") for your consideration. The Board's recommendation for Long Creek in Westbrook will be proposed as an amendment to LD 330.

Changes to the classification of waters of the State are governed by Title 38, section 464 et seq. This statute requires the Department of Environmental Protection to conduct water quality studies, and the Board of Environmental Protection to hold hearings to receive public comment on proposals made by the Department. The public also has an opportunity to propose changes in water classification for the Department's consideration. The Board's recommendations are forwarded to the Legislature for its review and decision. The Legislature has sole authority to change the classification of State waters.

II. PROCESS

In developing its recommendations to the Board, Department staff sought input from a variety of sources including the following governmental agencies: Maine Department of Inland Fisheries and Wildlife, Maine Department of Marine Resources, and the U.S. Environmental Protection Agency. Staff also sought input from the Native American tribes, municipalities, various watershed councils and associations, the Portland Water District, and many organizations including: Friends of Merrymeeting Bay, Friends of the Basin, Western Foothills Land Trust, The Nature Conservancy, Maine Rivers and its affiliates, and the Natural Resources Council of Maine. Staff hosted two public meetings to obtain input from the interested public, one in Lewiston and one in Presque Isle. Finally, the Board held a public hearing in Augusta on September 18, 2008. With the exception of Long Creek in Westbrook, the enclosed recommendations were approved unanimously by the Board at its regularly scheduled meeting on December 18, 2008. At that time, the Board re-opened the record to receive additional comment on Long Creek. On February 5, 2009, the Board voted 4 in favor / 3 opposed to recommend a correction to the classification of a segment of Long Creek in Westbrook.

III. RECOMMENDATIONS

The Board is recommending 17 upgrades in water quality classification: (1) marine Class SB to Class SA, (2) Class A to Class AA, (12) Class B to Class A, and (2) Class C to Class B. Descriptions of these classifications can be found in Appendix A of the recommendation. The Board is also recommending changes to clarify the water quality classification of six waterbody segments – these are not substantive changes, but rather corrections of unintentional errors in the classification law. Additionally, the Board is recommending that a Use Attainability Analysis be conducted to determine the level of water quality that can be attained in Jepson Brook in Lewiston. The Board is not recommending three citizen initiated proposals for upgrade: Androscoggin River main stem from Worumbo Dam to Merrymeeting Bay, Aroostook River from Washburn to Caribou, and Aroostook River from Caribou to the international border.

The majority of recommendations contained in this report were not controversial. A summary of comments received and responses thereto appears in Appendix B. The Board wishes to highlight four recommended changes in classification that were the subject of considerable public comment and discussion before the Board.

Crooked River in Harrison and Otisfield. Recommendation to upgrade a segment of the Crooked River from Class A to Class AA. The segment of Crooked River in question is located at the site of the breached Scribner's Mill Dam, 21 miles upstream from Sebago Lake. The dam and associated sawmill were originally constructed in 1846-7. The mill ceased operation in 1962, and a section of the dam was breached in 1972 to improve passage for landlocked salmon. Supporters of Scribner's Mill Preservation Inc., which had applied for a permit to repair the dam, restore the mill site, and create an operational sawmill museum, testified in opposition to the upgrade. Impoundments are not permitted on Class AA waters. The Board concluded that the Crooked River at this site currently meets Class AA standards and should be upgraded. The Department has since denied the application by Scribner's Mill Preservation Inc. finding that the proposed project would violate the water quality standards that currently apply to the river at this location (i.e. Class A). The Commissioner's decision has been appealed to the Board.

Kennebec River. Recommendation to upgrade a segment from Class C to Class B. The Board is proposing an upgrade of the main stem of the river from the Shawmut Dam to Messalonskee Stream, excluding impoundments, from Class C to Class B. While some persons testified in favor of upgrading the impoundments, there is not sufficient data to upgrade the impounded areas at this time. The Board believes that an upgrade of the main stem of the Kennebec River, including the impoundments, from Class C to Class B between Skowhegan and Messalonskee Stream in Waterville and Winslow should be a state water quality goal. The Board urges a cooperative effort to obtain the data necessary to more fully characterize water quality in the impounded segments and complete the upgrade of the Kennebec River below Skowhegan to Class B standards.

Long Creek, Westbrook. Recommendation to correct the classification of the Westbrook segment of the main stem of Long Creek. Long Creek is a freshwater stream located in southern Maine, in the vicinity of the Maine Mall, which flows into Clark's Pond, the Fore River and eventually Casco Bay. The main stem of Long Creek is designated Class C in both South Portland and Portland; however, the approximately 0.3 mile segment of the main stem that is located in Westbrook is currently designated Class B. The result is that the classification of the main stem of Long Creek changes from Class C in South Portland, to Class B as it flows into Westbrook, and then back to Class C as it flows into Portland and then back into South Portland.

In the reclassification proceedings before the Board, Department staff stated their view that the 0.3 mile stretch of the main stem of Long Creek located in Westbrook was inadvertently changed from Class C to Class B as the result of a Legislative bill drafting error that occurred in 1990. Staff recommended that the Board propose to the Legislature that the Westbrook portion of the main stem of Long Creek be designated Class C as a correction. The segment in question does not meet Class B standards. If the water quality actually met Class B standards, it would not be possible to make the recommended correction (i.e. the higher water quality classification would need to be retained).

By a vote of 4 in favor / 3 opposed, the Board is recommending that the Legislature correct the classification of the 0.3 mile segment of the main stem of Long Creek in Westbrook to specify Class C. In considering this proposed change, the Board weighed the information in the record, including the statement of the Department staff person involved in the 1990 water reclassification proceeding, with

the majority concluding that the 1990 change in the classification of the Westbrook segment from Class C to Class B was unintentional.

The Board's consideration of this matter was complicated by the considerable amount of time that has elapsed since the "error" in classification. Several members noted that the Westbrook segment of the main stem has been labeled Class B for many years, and that there has likely been an expectation on the part of some members of the public that the watershed would be managed to eventually achieve Class B standards in this segment of Long Creek. Additionally, members expressed the view that this recommendation does not reflect a lack of support for the U.S. Environmental Protection Agency's recent Preliminary Residual Designation of Long Creek pursuant to the Clean Water Act[1]. The Preliminary Residual Designation will more fully regulate stormwater discharges to this urban impaired stream in an effort to improve water quality.

In the final analysis, members voting in favor of the recommendation to correct the classification of this segment of Long Creek did so with the knowledge that an affirmative vote would move this matter forward to the Legislature, which has sole authority to designate the classification of a water body, for further discussion and a decision.

Lower Androscoggin River. The Board is not recommending an upgrade of Lower Androscoggin River from Class C to Class B. Board members recognize that there is strong support from communities along the river to upgrade the lower Androscoggin (from Worumbo Dam in Lisbon and Durham to Merrymeeting Bay) from Class C to Class B; however, the Board is not recommending an upgrade to Class B at this time due to insufficient data. While the Friends of Merrymeeting Bay and others have expended considerable resources to document water quality in the river, more data is needed to support a change in the classification. The Board believes that the upgrade of this segment of the river to Class B standards should be an important state water quality goal; improved water quality would bring both environmental and economic benefits to the communities along the river. We urge the regulated community, municipalities, citizen groups, and the Department to work cooperatively to obtain the data necessary to more fully document water quality in this river stretch and to identify watershed management strategies that could be employed to allow reclassification of this segment of the river to Class B standards.

IV. MAPS and APPENDICES

The Board's recommendations are presented on the following maps. The maps depict the location and current classification of each waterbody considered. The proposed change to statutory language for each proposed change in classification appears with the relevant map. The maps/recommendations are arranged in the order in which they appear in LD 330. Appendix A provides background information on the water quality classification system, including a table showing the designated uses and criteria associated with each classification. Appendix B is the response to comments received on the proposed changes in classification. The appendices were prepared with the assistance of Susan Davies, Biologist III, of the Department's staff.

[1] Preliminary Residual Designation Pursuant to Clean Water Act, 33 U.S.C. §§ 1251 et seq., and 40 C.F.R. §122.26(a)(9)(i)(D); by Regional Administrator of the U.S. Environmental Protection Agency Region I; December 5, 2008.

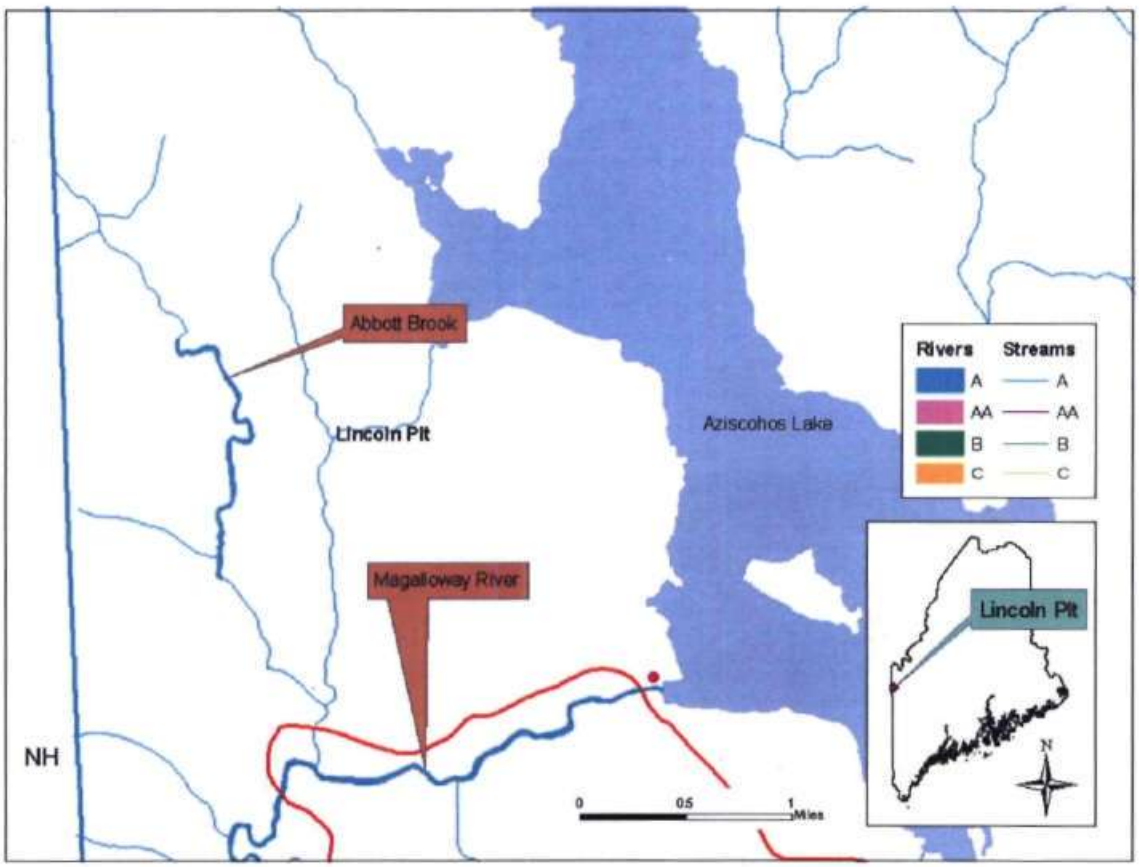
ANDROSCOGGIN RIVER BASIN

Abbott Brook, including all tributaries, Lincoln Plantation - Class A to AA (4 miles)
Proposal: Maine Department of Inland Fisheries and Wildlife
Basis: Ecological, social, scenic, economic and recreational importance;
Fishery values: Abbott Brook provides important spawning and rearing habitat for native brook trout from the Magalloway River, which is a brook trout sport fishery of statewide significance. Abbott Brook plays a key role in maintaining this fishery.
Issues affected by reclassification: None
Recommend revising 467.1.C as follows:

C. Androscoggin River, Upper Drainage; that portion within the State lying above the river's most upstream crossing of the Maine-New Hampshire boundary - Class A unless otherwise specified.

(4) Magalloway River and tributaries above Aziscohos Lake (Lynchton Township, Parmachenee Township and Bowmantown Township) - Class AA.

(4-A) Abbott Brook and tributaries (Lincoln Plantation) – Class AA



Aunt Hannah Brook, including all tributaries, Dixfield Class B to Class A (5 miles)

Proposal: Department of Environmental Protection

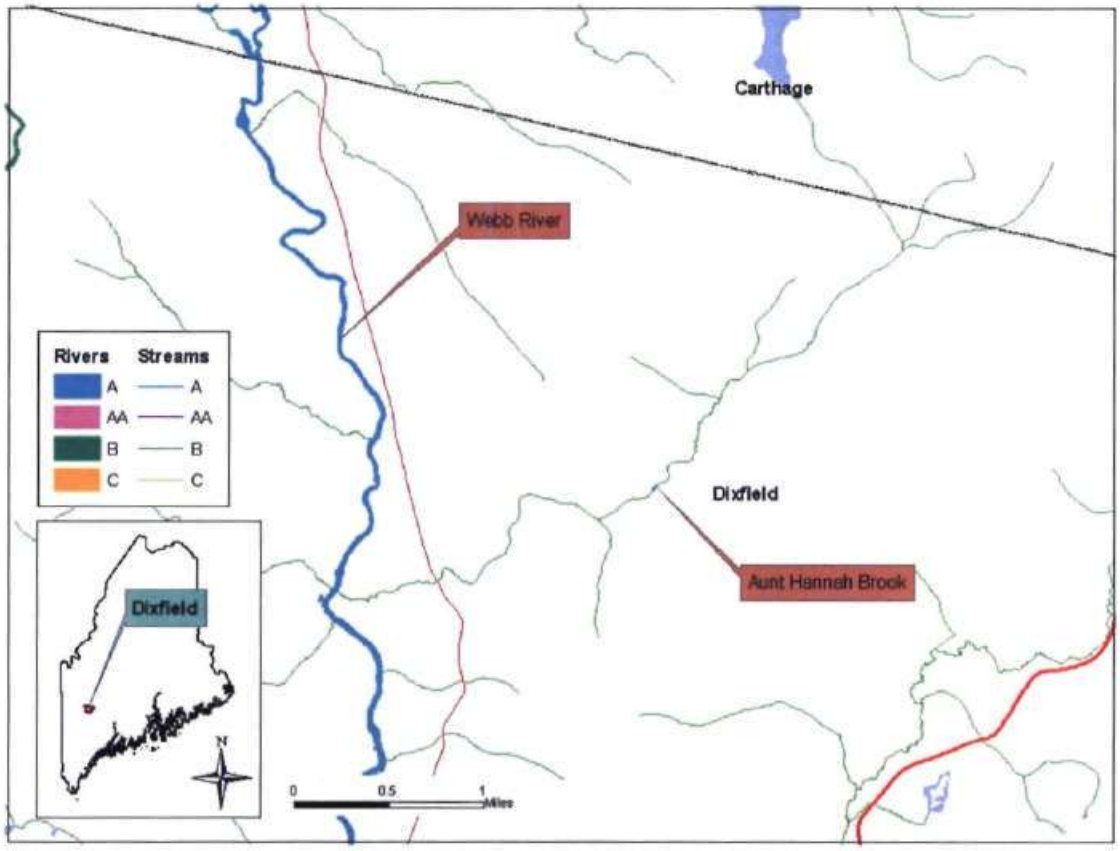
Basis: Currently a Class B stream flowing to the Class A Webb River; biological monitoring shows that this brook is now attaining the standards of Class A biocriteria (1998 and 2003). The watershed is 90% forested with the remainder in small farms. The primary public use of Aunt Hannah Brook is a managed trout fishery that MDIFW manages as 'children only' fishing.

Issues affected by reclassification: None

Recommend revising § 467.1.D as follows:

D. Androscoggin River, minor tributaries - Class B unless otherwise specified.

(8) Aunt Hannah Brook and its tributaries (Dixfield) – Class A.



KENNEBEC RIVER BASIN

Kennebec River from downstream of the Shawmut Dam to confluence with Messalonskee Stream, excluding all impoundments. Fairfield, Clinton, Benton, Waterville, Winslow - Class C to Class B (~ 5.35 miles)

Proposal: Department of Environmental Protection

Basis: Recent DEP monitoring and water quality modeling for the Kennebec indicates that this segment of the river generally is attaining Class B criteria for aquatic life and dissolved oxygen; much of the rest of the mainstem of the Kennebec has been successfully upgraded to Class B. This segment supports important fisheries for both anadromous and resident species with a coldwater sport-fishery of statewide and regional significance in the segment immediately downstream of the Shawmut Dam in Benton.

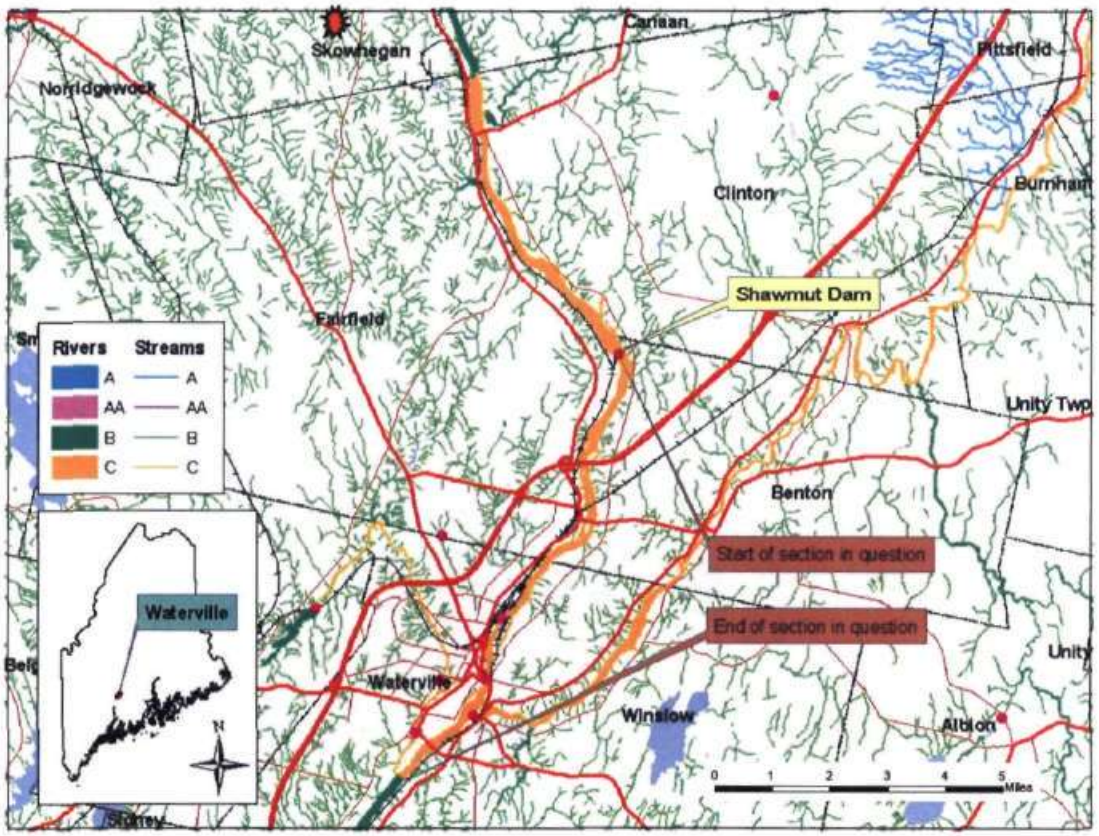
Issues affected by reclassification: Water quality in this segment is affected by two paper mill discharges, several municipal discharges and two impoundments. The deeper areas of some impounded sections may show excursions of water quality criteria at times. When flow condtions allow, the Department plans to collect water quality data (dissolved oxygen) for impounded sections in Fairfield and Waterville to determine whether Class B standards can be attained.

Recommend revising § 467.4.A as follows:

A. Kennebec River, main stem.

(10) From the Fairfield-Skowhegan boundary to ~~its confluence with Messalonskee Stream, including all impoundments~~ the Shawmut Dam - Class C.

(10-A) From the Shawmut Dam to its confluence with Messalonskee Stream, excluding all impoundments – Class B.

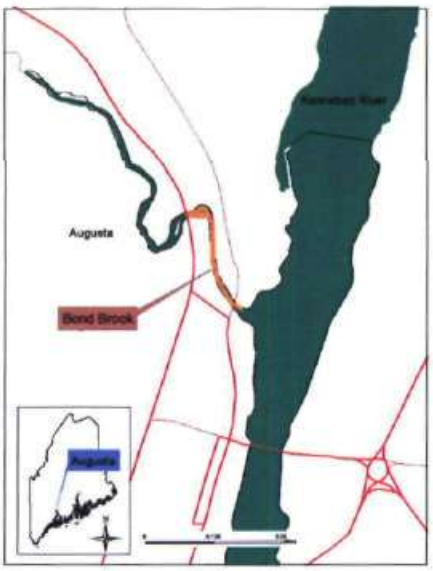


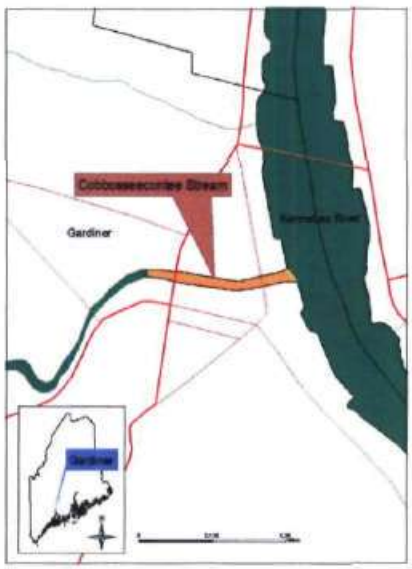
Kennebec River, tidal sections of tributaries including, for example
Bond Brook. Augusta - Class C to Class B (0.25 miles)
Cobbosseecontee Stream. Gardiner - Class C to Class B (0.25 miles)
Togus Stream. Randolph, Pittston - Class C to B (0.4 miles)
Proposal: Department of Environmental Protection;
Basis: Non-tidal portions of minor tributaries to the Kennebec are Class B unless otherwise specified but tidal sections of tributaries were mistakenly left out when lower Kennebec River mainstem was upgraded from Class C to Class B in 2002.
Issues affected by reclassification: None; reasonably expected to attain Class B
Recommend revising § 467.4.I as follows:

I. Kennebec River , minor tributaries – Class B unless otherwise specified.

(2) All tidal portions of tributaries entering between ~~Edwards Dam~~ the Sidney, Vassalboro, and Augusta townline and a line drawn across the tidal estuary of the Kennebec River due east of Abagadasset point – Class ~~C~~ B unless as otherwise specified.

(a) Eastern River from head of tide to confluence with Kennebec River – Class C.





PENOBSCOT RIVER BASIN

Seboeis Stream, tributaries. T4 R9 NWP, T3 R9 NWP, Seboeis Plt, Mattamiscontis TWP, Maxfield, Howland - Class B to Class A (*miles undetermined*)

Proposal: The Nature Conservancy

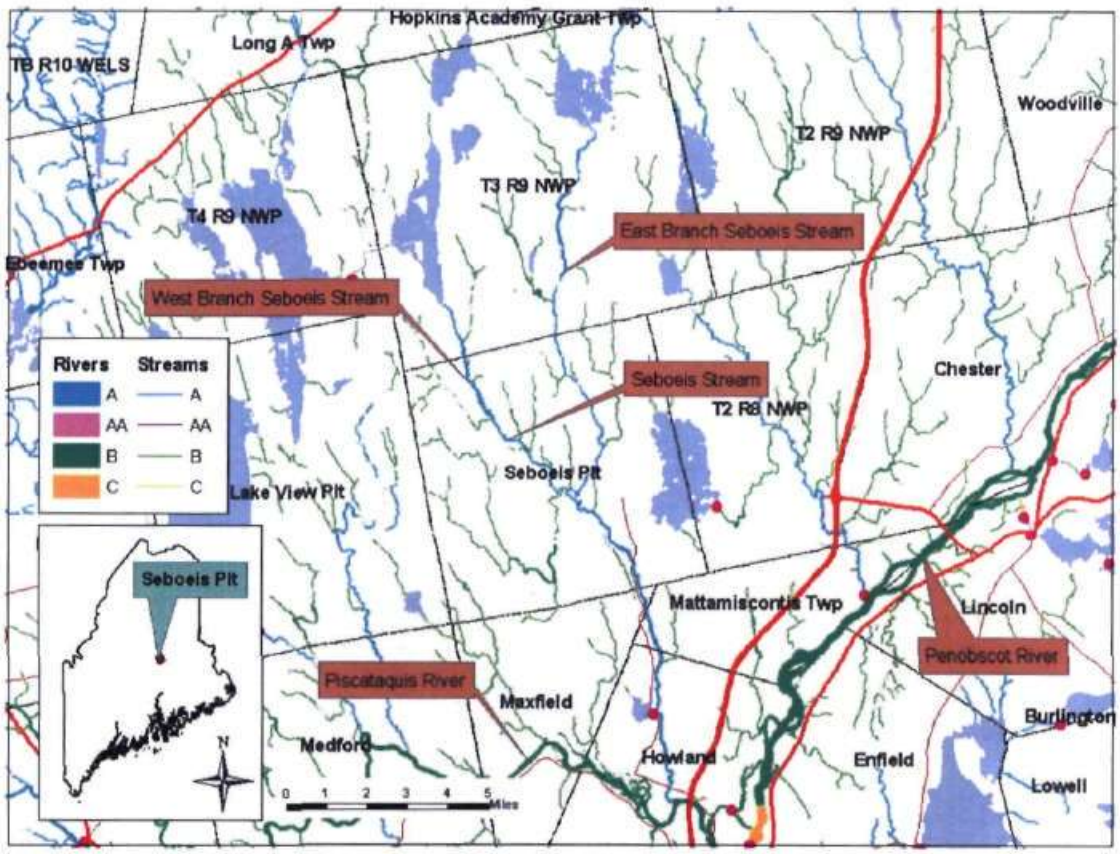
Basis: Tributaries mistakenly left out of Seboeis River upgrade to Class A. Ocean connectivity fishery values; habitat for alewife, American eel, blueback herring and Atlantic salmon exists in the Seboeis but tributaries were not specified. The proposal is to clarify that Seboeis and all tributaries to the East and the West Branches and the mainstem of Seboeis Stream, are Class A.

Issues affected by reclassification: None; reasonably expected to attain Class A

Recommend revising 467.7.E.(2) as follows:

(2) Piscataquis River, tributaries - Class B unless otherwise specified.

(m) ~~Sebois~~ Seboeis Stream, including East and West Branches, and tributaries - Class A.



Alder Stream and its tributaries; tributary to the Piscataquis River. Dover-Foxcroft, Atkinson, Orneville TWP, Milo - Class B to Class A (18 miles)

Proposal: The Nature Conservancy; also endorsed by the Sweetwater Land Trust

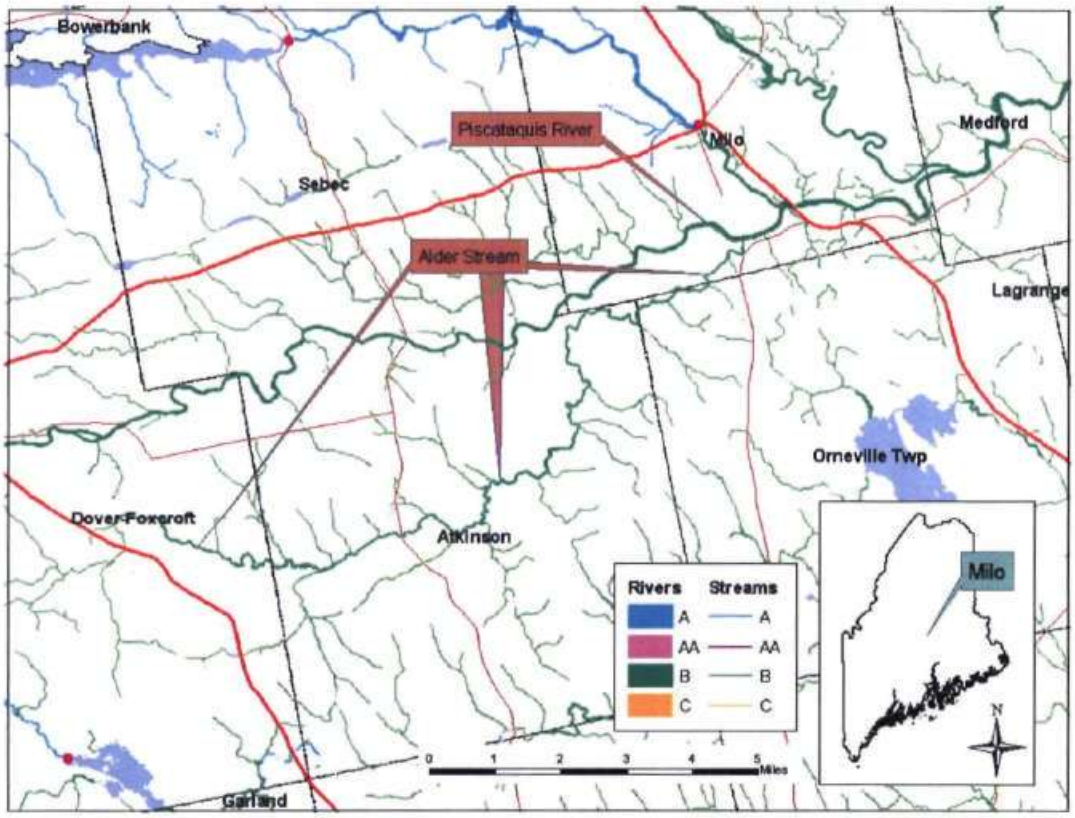
Basis: Alder Stream is recognized by the Nature Conservancy as one of the best examples of its ecological type. Upgrade is recommended based on documentation of special concern species; watershed is 88% natural cover. The potential exists for significant ocean connectivity value for anadromous/diadromous fish due to hydrological connection to the Penobscot River and the future prospects for fishery benefits from the Penobscot River Restoration Project.

Issues affected by reclassification: None; Reasonably expected to attain Class A

Recommend revising 467.7.E.(2) as follows:

(2) Piscataquis River, tributaries - Class B unless otherwise specified.

(n) Alder Stream and its tributaries – Class A



Souadabscook Stream, selected tributaries,
Upgrade from Class B to Class A
West Branch Souadabscook Stream, Newburgh, Hampden (10 miles)
Brown Brook/Reeds Brook, Hampden (6 miles)

Proposal: Atlantic Salmon Commission; The Nature Conservancy

Basis: tributaries were not specified when the Souadabscook mainstem was upgraded to Class AA to protect endangered Atlantic salmon. The Souadabscook and some of its coldwater tributaries offer critical habitat for Atlantic salmon and other anadromous fish from the Penobscot River.

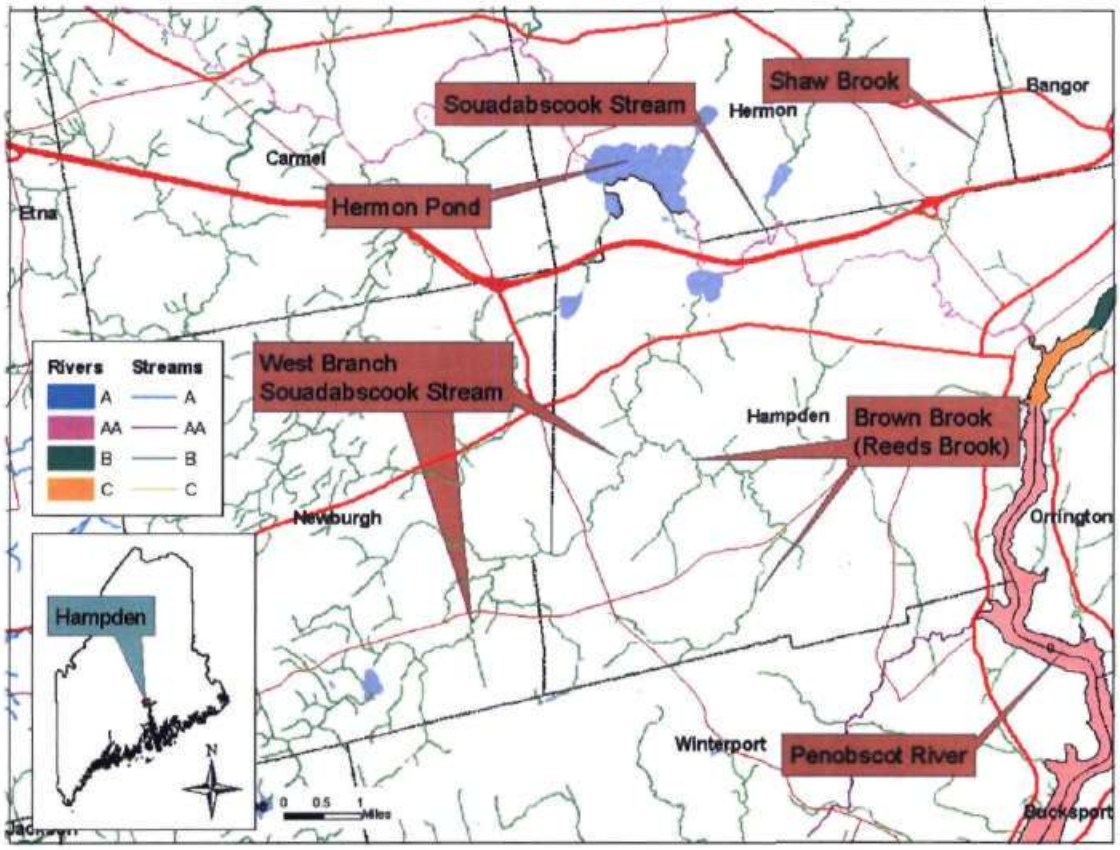
Issues affected by reclassification: This area is undergoing rapid development. Maintenance of Class A water quality criteria may be challenged by altered landuse from human activities.

Recommend 38 MRSA § 467.7.F.(7-A) be enacted to read:

(7-A) Tributaries of Souadabscook Stream - Class B, unless otherwise specified

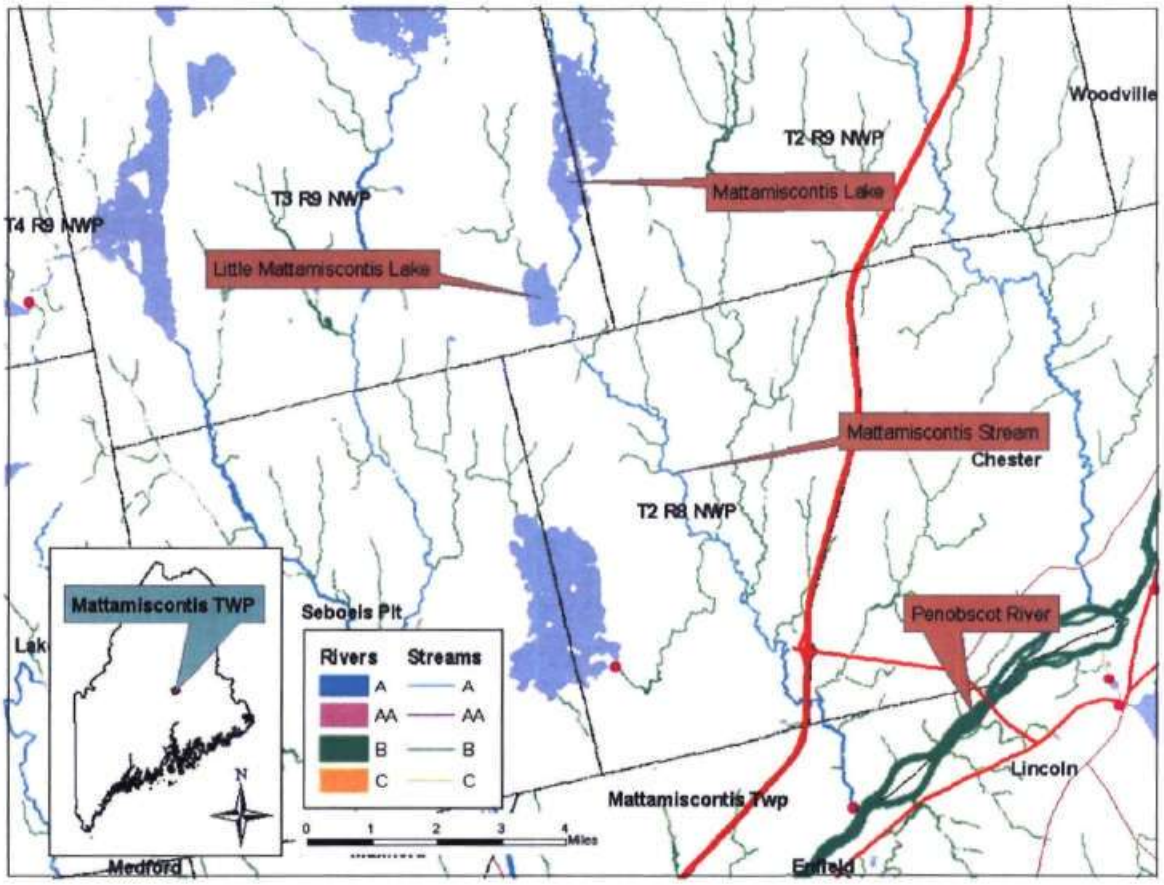
(a) West Branch Souadabscook Stream (Hampden, Newburgh) – Class A

(b) Brown Brook (Hampden) – Class A



Mattamiscontis Stream, tributaries. Class B to Class A (*miles undetermined*)
Proposal: The Nature Conservancy; also endorsed by Penobscot Indian Nation
Basis: Tributaries mistakenly left out of Mattamiscontis Stream upgrade to Class A. Ocean connectivity fishery values. The proposal is to clarify that Mattamiscontis Stream and all tributaries are Class A.
Issues affected by reclassification: None. Some of these tributaries are wholly contained on Penobscot Indian Nation Trust Land; Reasonably expected to attain Class A.
Recommend revising § 467.7.F as follows:

F. Penobscot River, minor tributaries - Class B unless otherwise specified.
(11) Mattamiscontis Stream, and tributaries - Class A.



PRESUMPSCOT RIVER BASIN

Crooked River, at Scribner's Mill, Harrison/Otisfield- Upgrade to Class AA (0.1 miles)

Proposal: Proposed by Maine Department of Inland Fisheries and Wildlife; Mollyockett Chapter of Trout Unlimited; Natural Resources Council of Maine; Portland Water District; Upland Headwaters Alliance; Western Foothills Land Trust; Bart Hague, citizen/landowner;

Basis: ecological, social, scenic, economic and recreational importance;

Fishery values: the Crooked River is the largest tributary to Sebago Lake which supports one of only four known indigenous populations of landlocked Atlantic salmon in Maine. The Crooked River provides virtually all of the salmon spawning and nursery habitat for the Sebago Lake fishery. MDIFW recognizes the Crooked River as the "crown jewel" of riverine salmon and trout fishing in southern Maine. The Crooked River supports additional fisheries of special significance or value including brook trout, creek chubsucker (species of special concern), white sucker, American eel, and rainbow smelt.

Drinking water values: the Crooked River is also significant as the largest tributary to Sebago lake, from which the Portland Water District, the State's largest water utility, provides drinking water to over 200,000 customers.

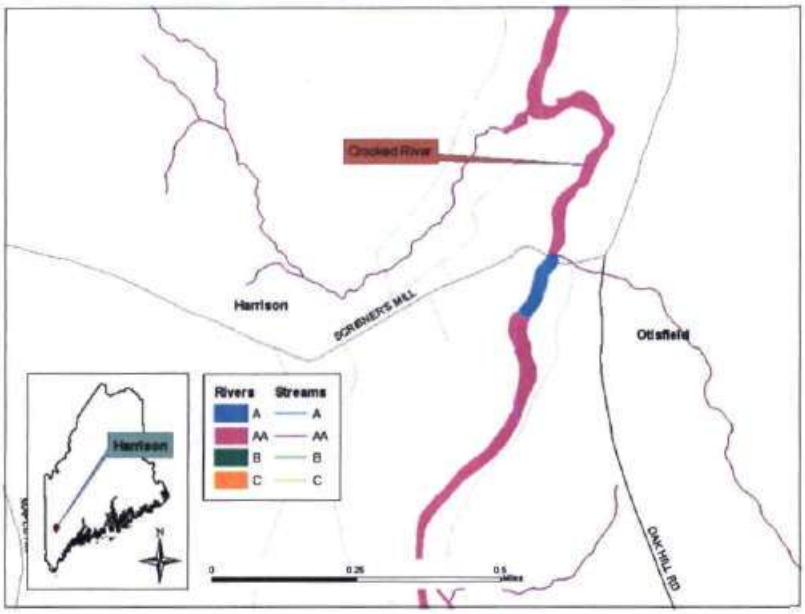
Issues affected by reclassification: At the time the Board held its public hearing on the proposed reclassification of the Crooked River, Scribner's Mill Preservation Inc. had a pending application for a permit under the Maine Waterway Development and Conservation Act to restore a dam and operate a water-powered sawmill, using original 19th century equipment, as part of an education center and museum; and there is considerable testimony in the record on this matter. The application was denied by the Department on December 31, 2008. Hydroelectric power generation is a designated use of Class A waters, but is not a designated use of a Class AA water. Under State law, the habitat of Class AA waters shall be characterized as "free flowing and natural."

Recommend changing §467.9.B as follows:

B. Presumpscot River, tributaries - Class A unless otherwise specified.

(1) All tributaries entering below the outlet of Sebago Lake - Class B.

(2) Crooked River and its tributaries, except as otherwise provided, excluding existing impoundments ~~and excluding that area of the river previously impounded at Scribners Mill~~ - Class AA.



SACO RIVER BASIN

South River and its tributaries, tributary to the Ossipee River, Parsonsfield – Upgrade Class B to Class A (4 miles)

Proposal: The Nature Conservancy

Basis: The South River is a significant tributary to the Ossippee River. Emerson Brook, in the headwaters of the South River in Maine is Class A due to a high quality native brook trout fishery identified by MDIFW. A significant portion of the South River watershed is protected as conservation land by the Pine River Matrix and the watershed is largely intact, natural cover. It represents a valuable opportunity to increase Class A river segments in the southern Maine region. Because the South River originates in New Hampshire, the N.H Department of Environmental Services has been notified of the proposed upgrade.

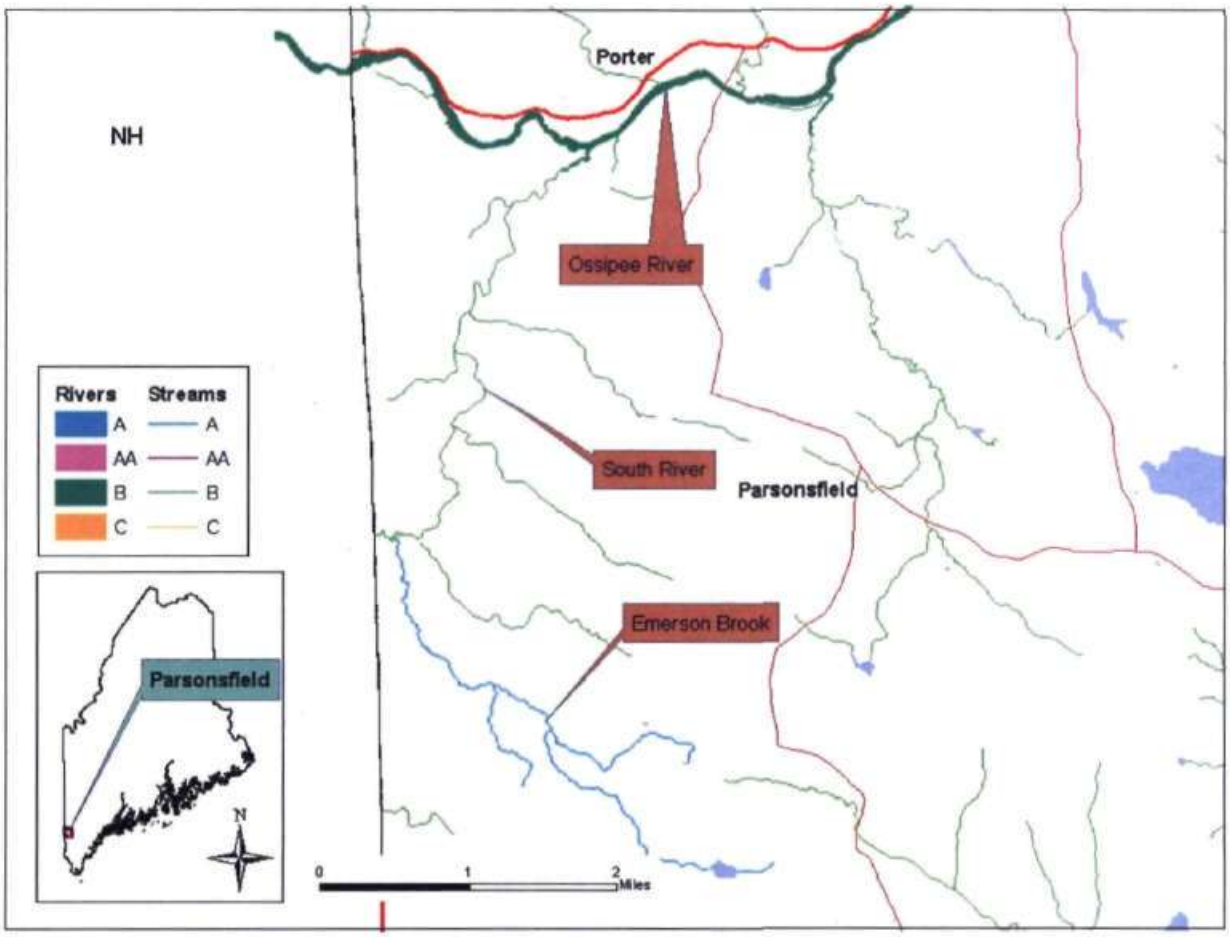
Issues affected by reclassification: None; reasonably expected to attain Class A.

Recommend revising § 467.12.B as follows:

B. Saco river, tributaries, those waters lying within the State – Class B unless otherwise specified.

(4) Ossipee River Drainage, those waters lying within the State - Class B unless otherwise specified.

(b) South River and its tributaries (Parsonsfield), those waters lying within the State – Class A



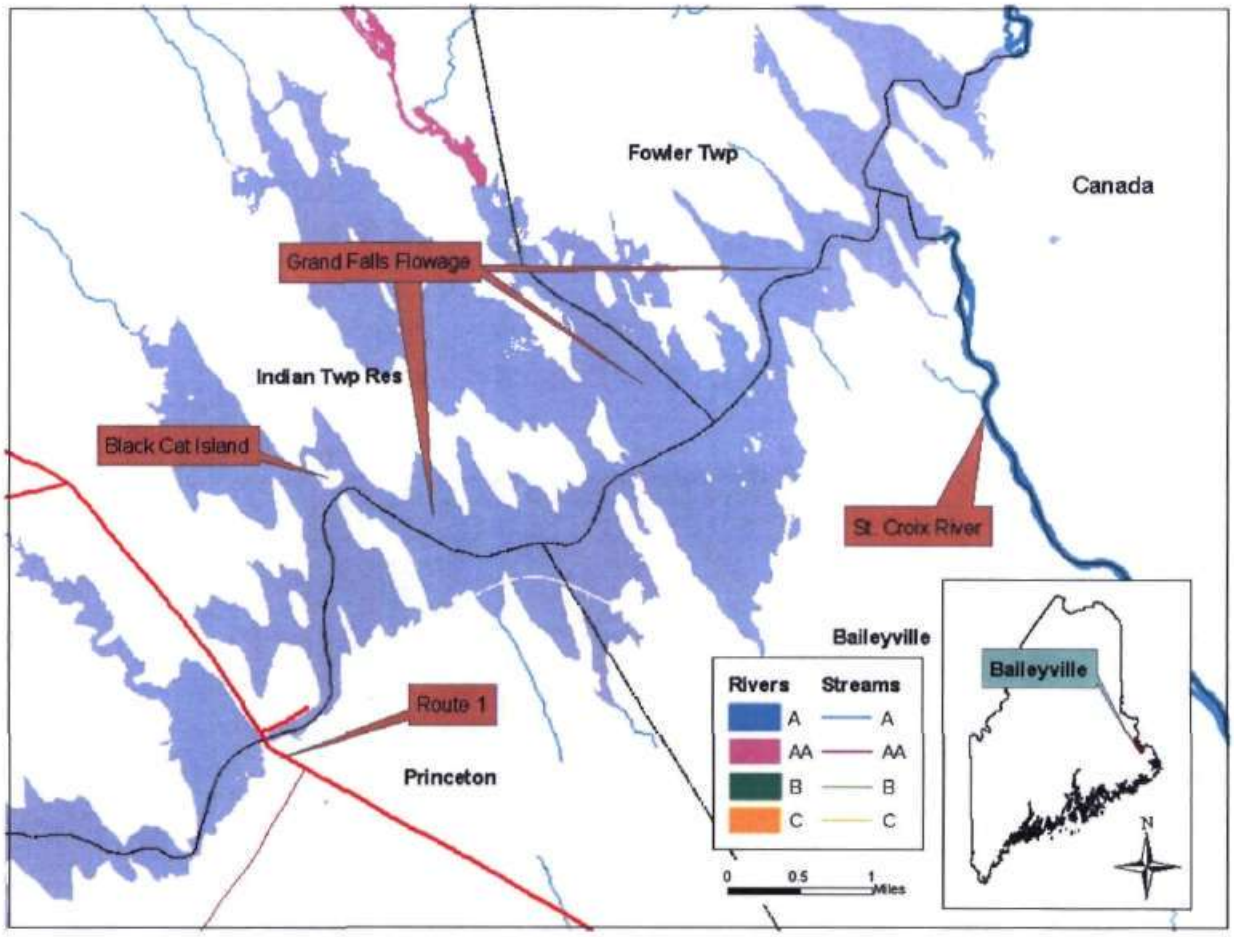
ST. CROIX RIVER BASIN

Grand Falls Flowage, St Croix drainage. Princeton, Indian TWP Reservation, Baileyville, Fowler TWP - clarify that GPA classification (not riverine Class B) applies
Proposal: Department of Environmental Protection
Basis: Previously existing wastewater discharges have been discontinued and the ecological functioning of this section of the St. Croix is more similar to a great pond than a river but 38 MRSA § 467.13 designates this as riverine Class B. Water quality management of the Grand Falls Flowage is more appropriately based on its lake-like characteristics.
Issues affected by reclassification: None; reasonably expected to attain Class GPA standards
Recommend revising § 467.13 as follows:

13. St. Croix River Basin.

A. St. Croix River, main stem.

(2) Those waters ~~of the~~ impounded in the Grand Falls Flowage including those waters between Route 1 (Princeton and Indian Township) and ~~Black Cat Island~~ Grand Falls Dam - Class ~~B~~ GPA .



ST. JOHN RIVER BASIN

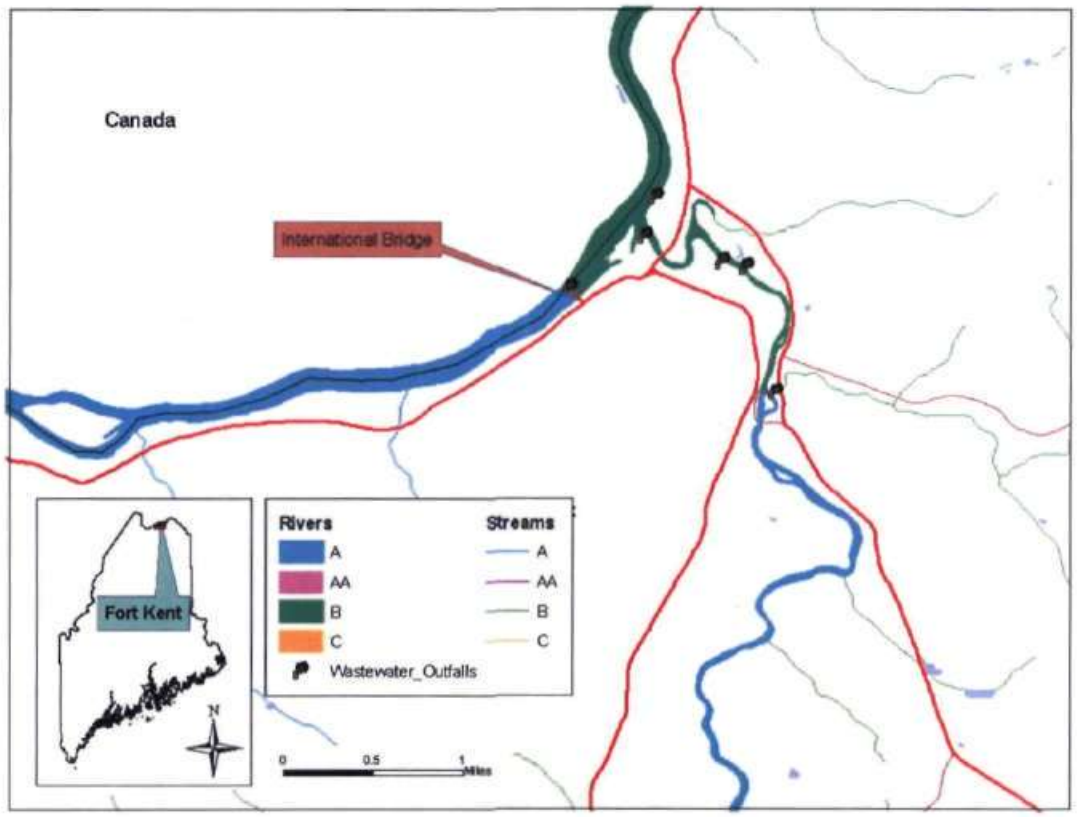
St. John River. Fort Kent –
Change the landmark used to designate class change from Class A to B
Proposal: Department of Environmental Protection
Basis: 38 MRSA § 467.13 currently designates the Canada-U.S. International Bridge in Fort Kent as the landmark used to mark the classification transition from Class A to Class B on the St. John River. The International Bridge is scheduled to be re-located downstream, with the potential consequence that the outfall of the Fort Kent POTW, now discharging to Class B water, would discharge to Class A water.
Issues affected by reclassification: None
Recommend revising § 467.15 as follows:

15. St. John River Basin.

A. St. John River, main stem.

(2) From a point located one mile above the foot of Big Rapids in Allagash to a point one-half mile above the confluence with the Fish River ~~the international bridge~~ in Fort Kent, those waters lying within the State, including all impoundments - Class A.

(3) From a point one-half mile above the confluence with the Fish River ~~the international bridge~~ in Fort Kent to the international bridge in Madawaska, those waters lying within the State, including all impoundments - Class B.



Beaver Brook and its tributaries, T14 R6 WELS, T14 R5 WELS, T13 R5 WELS, Portage Lake, Ashland, Castle Hill (West Branch, 13 miles, East Branch, 10 miles, below confluence, 9 miles)

Upgrade Class B to Class A

Proposal: The Nature Conservancy

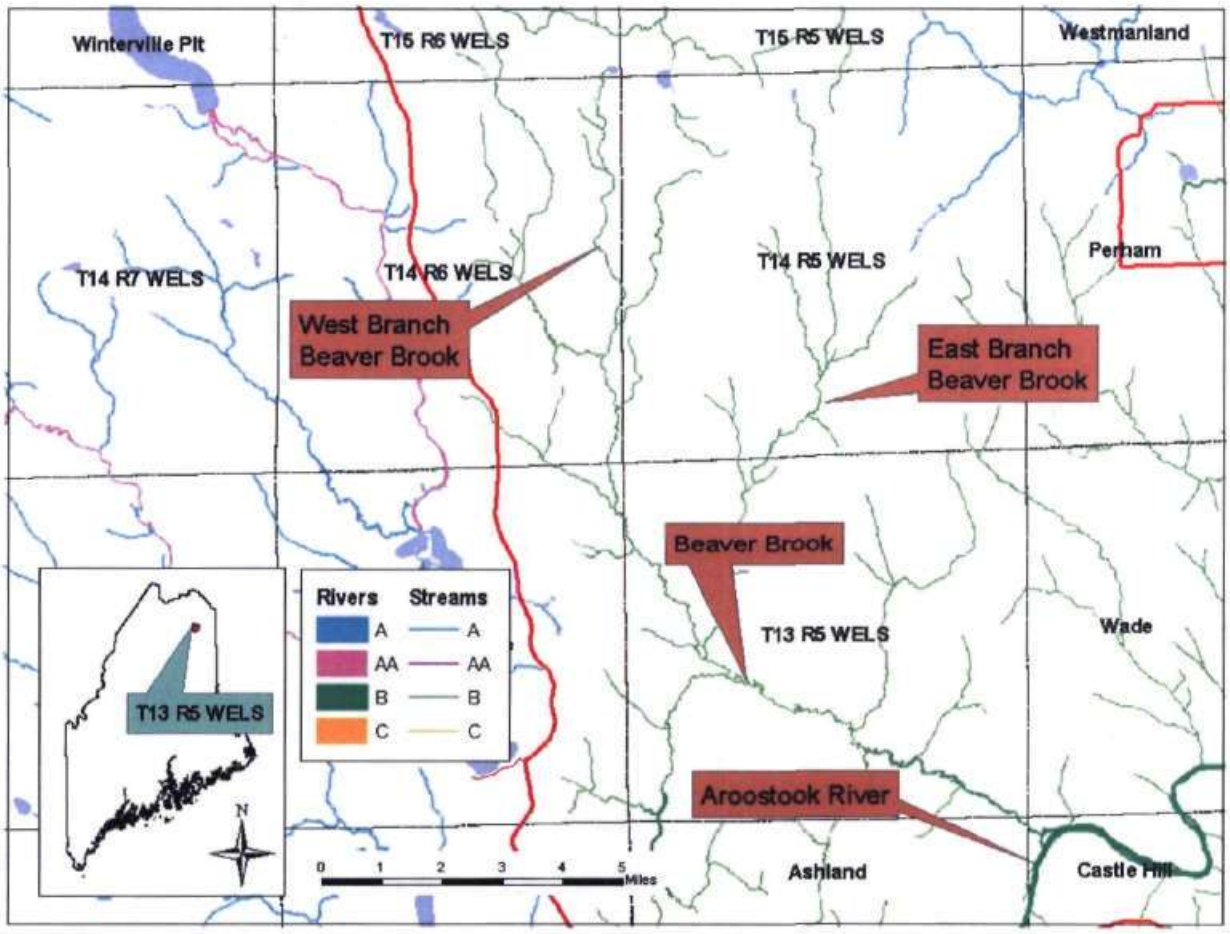
Basis: Recommended by the Nature Conservancy as an example of a high quality, natural, ecological resource.The Beaver Brook watershed is predominantly in natural land cover.

Issues affected by reclassification: Little water quality data available but reasonably expected to attain Class A standards

Recommend revising § 467.15.C(2) as follows:

(2) Aroostook River, tributaries, those waters lying within the State - Class A unless otherwise specified.

(l)Beaver Brook and its tributaries (T14 R6 WELS, T14 R5 WELS, T13 R5 WELS, Portage Lake, Ashland, Castle Hill) – Class A.



Gardner Brook and its tributaries, T14 R5 WELS, T13 R5 WELS, Wade – Upgrade Class B to Class A (8 miles)

Proposal: Citizen proposal

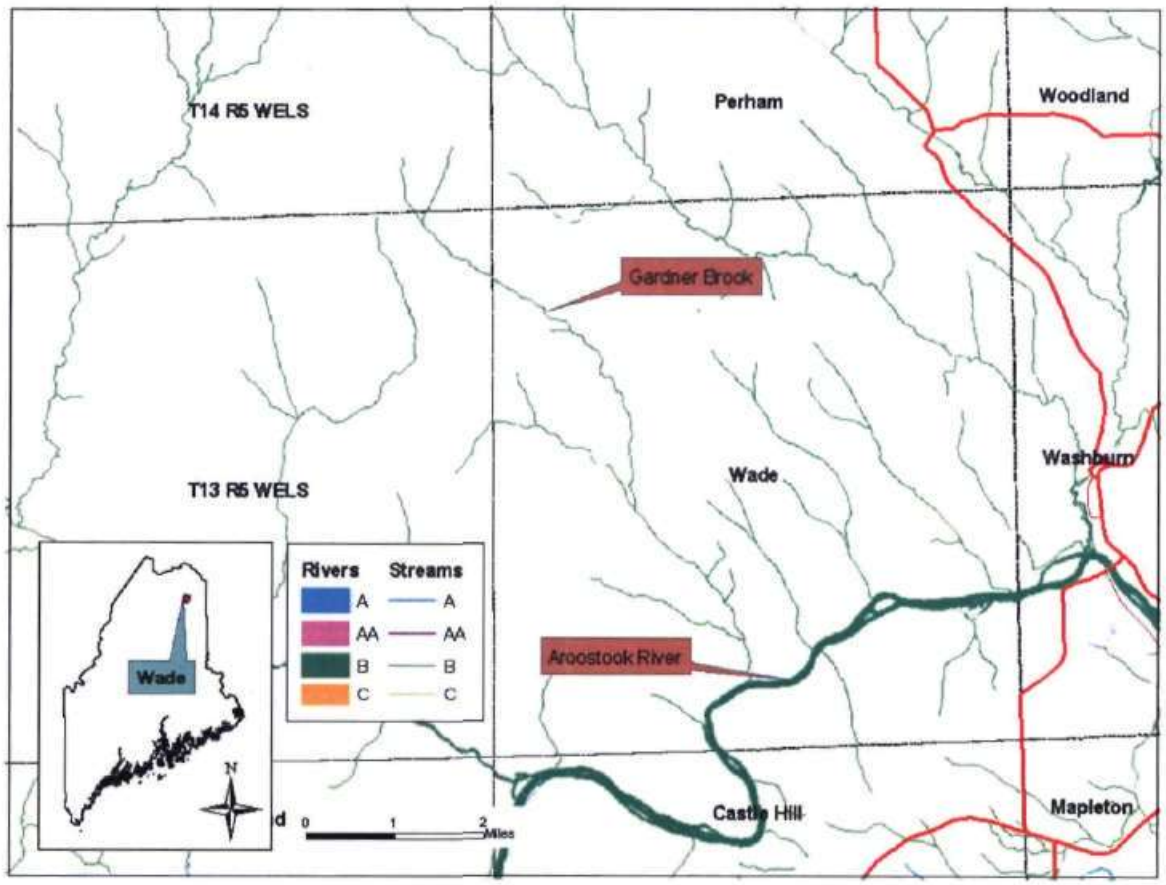
Basis: Gardner Brook showed attainment of Class A biocriteria in 2004. The Gardner Brook watershed is predominantly in natural land cover. It is a high quality, natural, ecological resource.

Issues affected by reclassification: None; reasonably expected to attain Class A standards

Recommend revising § 467.15.C(2) as follows:

(2) Aroostook River, tributaries, those waters lying within the State - Class A unless otherwise specified.

(m) Gardner Brook and its tributaries (T14 R5 WELS, T13 R5 WELS, Wade) – Class A.



Violette Stream and its tributaries, from source to the confluence with Caniba Brook. T17 R3 WELS, Van Buren,

Upgrade Class B to Class A (6 miles, approx.)

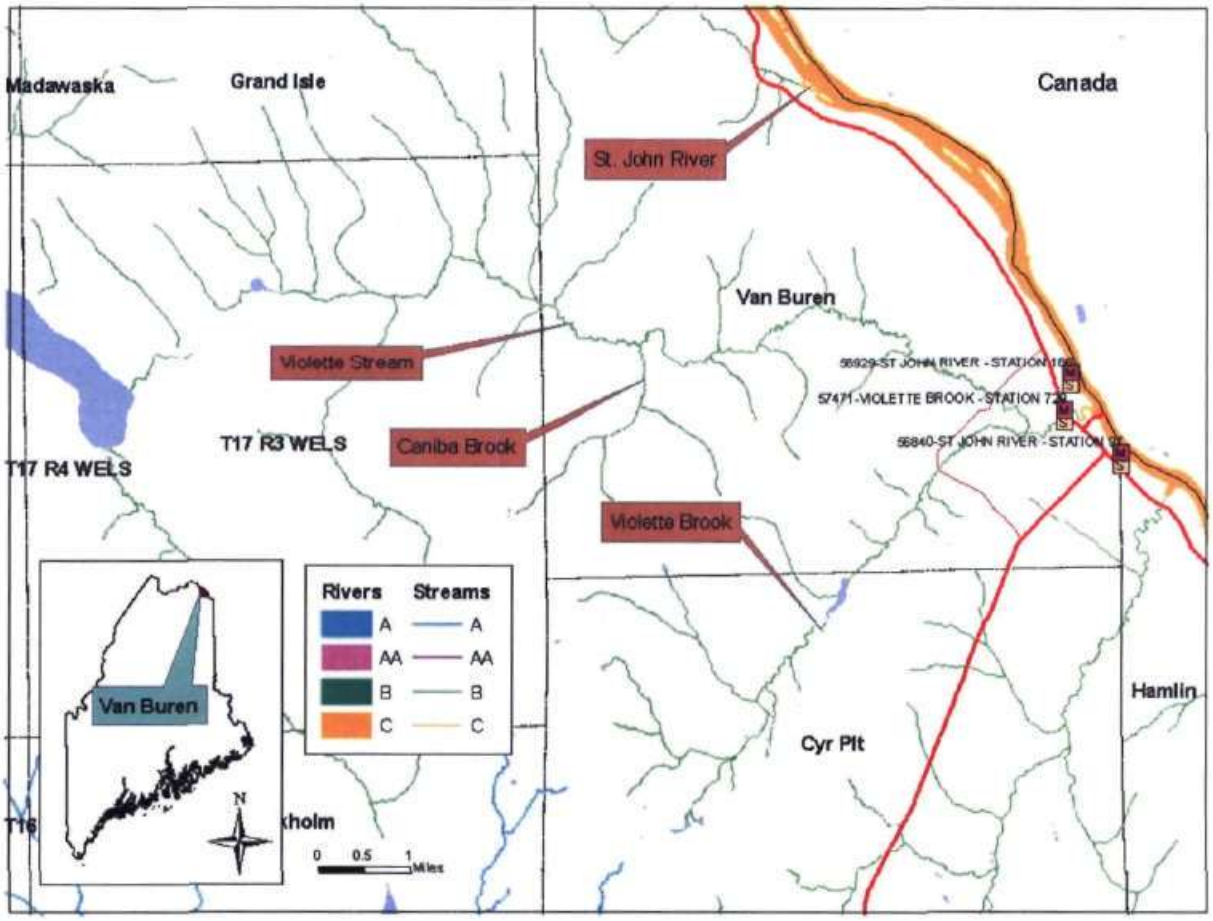
Proposal: The Nature Conservancy

Basis: Violette Stream is a large tributary to Violette Brook, entering just before the confluence with the St. John River. A sampling location on Violette Brook attained Class A biocriteria in 2004, in Van Buren, downstream of the confluence with Violette Stream. The upper watershed of Violette Stream has predominantly natural land cover. The stream was noted by The Nature Conservancy as the only representative of its ecological type in the St. John watershed.

Issues affected by reclassification: Bacteria sampling in locations on Violette Brook with significant human populations (Van Buren) shows excursions of Class B bacteria criteria but the upper watershed of Violette Stream is reasonably expected to attain Class A.

Recommend revising § 467.15.F as follows:

> F. St. John River, minor tributaries, those waters lying within the State - Class A unless otherwise specified.
>
> (1) Except as otherwise classified, all minor tributaries of the St. John River entering below the international bridge in Fort Kent, those waters lying within the State - Class B.
>
> (7) Violette Stream and its tributaries, from source to the confluence with Caniba Brook – Class A.



SALMON FALLS RIVER BASIN

Little River and its tributaries, tributary to the Salmon Falls River. Berwick, No. Berwick, Lebanon - Class Upgrade B to Class A (21 miles)

Proposal: The Nature Conservancy

Basis: The Little River is a significant tributary to the Salmon Falls River. Biological monitoring shows attainment of Class A biocriteria in two sampled locations (No. Berwick and Lebanon). The watershed is largely intact natural cover. It represents a valuable opportunity to increase Class A river segments in the southern Maine region.

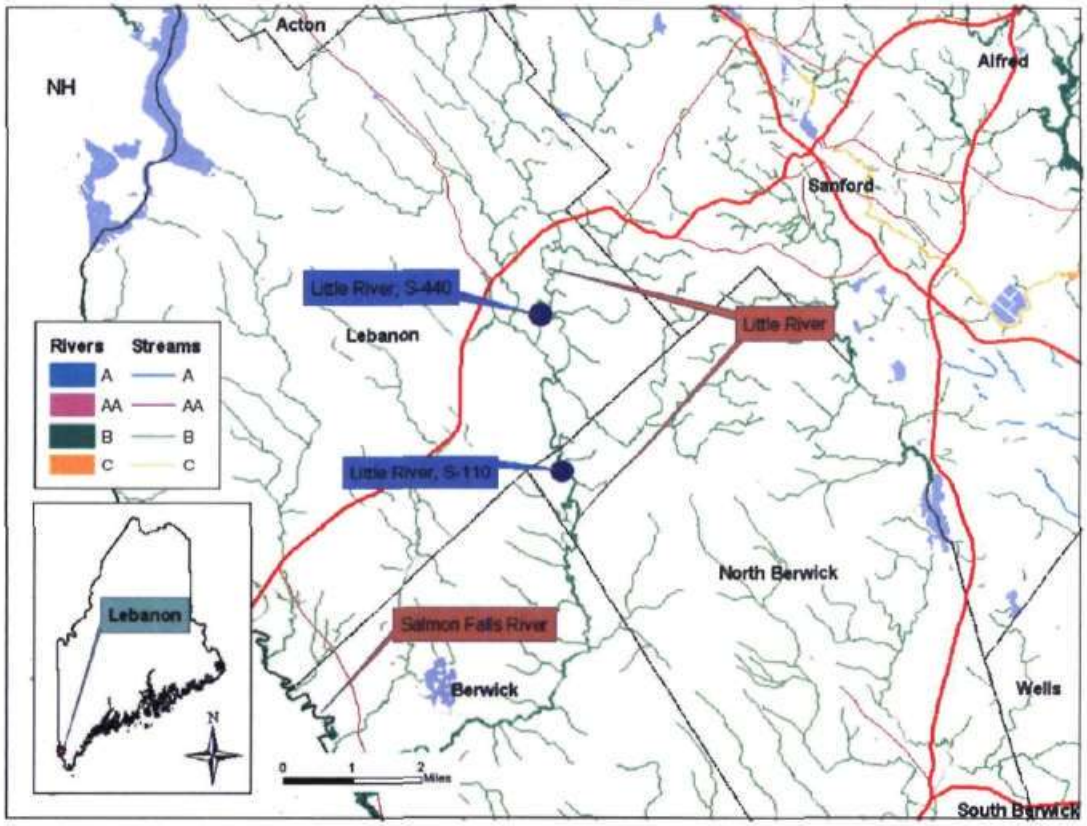
Issues affected by reclassification: None; reasonably expected to attain Class A

Recommend revising § 467.16.B as follows:

B. Salmon Falls River, tributaries, those waters lying within the State - Class B unless otherwise specified.

(1) Chicks Brook (South Berwick, York) - Class A.

(2) Little River and its tributaries (Berwick, North Berwick, Lebanon) – Class A



MINOR DRAINAGES

CUMBERLAND COUNTY

Trout Brook. Cape Elizabeth, South Portland – clarify Class C status (0.7 miles)

Proposal: Department of Environmental Protection

Basis: Ambiguous language in statute. Trout Brook is assigned to two classes along a town boundary that runs through the mid-channel of the brook. Waters draining into tidal waters of Cumberland County are Class B by default, except that all minor drainages in South Portland are classified as Class C. Clarify that the segment of Trout Brook that serves as the town-border between Cape Elizabeth and So. Portland is Class C.

Issues affected by reclassification: None; Class B is not attained;Trout Brook is on the 303d list of impaired waters; the TMDL is completed with restoration goal of Class C.

Recommend revising 38 MRSA §468, sub-§1, ¶A-1 to read:

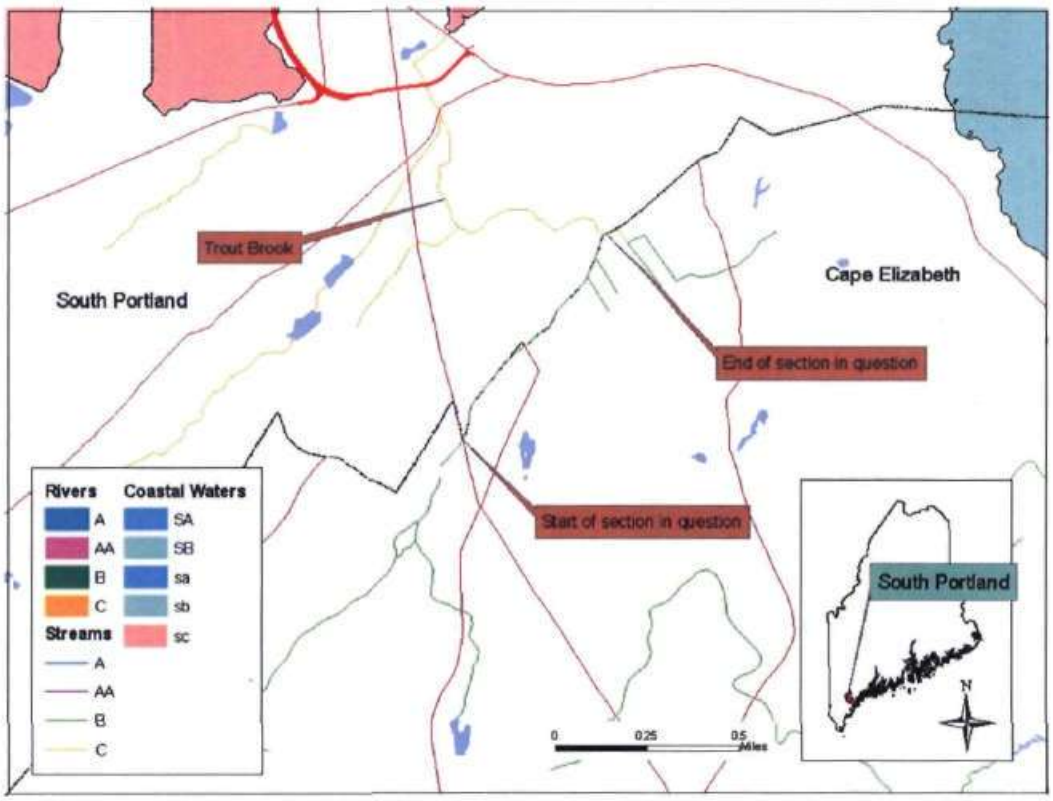
A-1. Cape Elizabeth

(1) Trout Brook, those waters which form the town boundary with South Portland – Class C

D. South Portland.

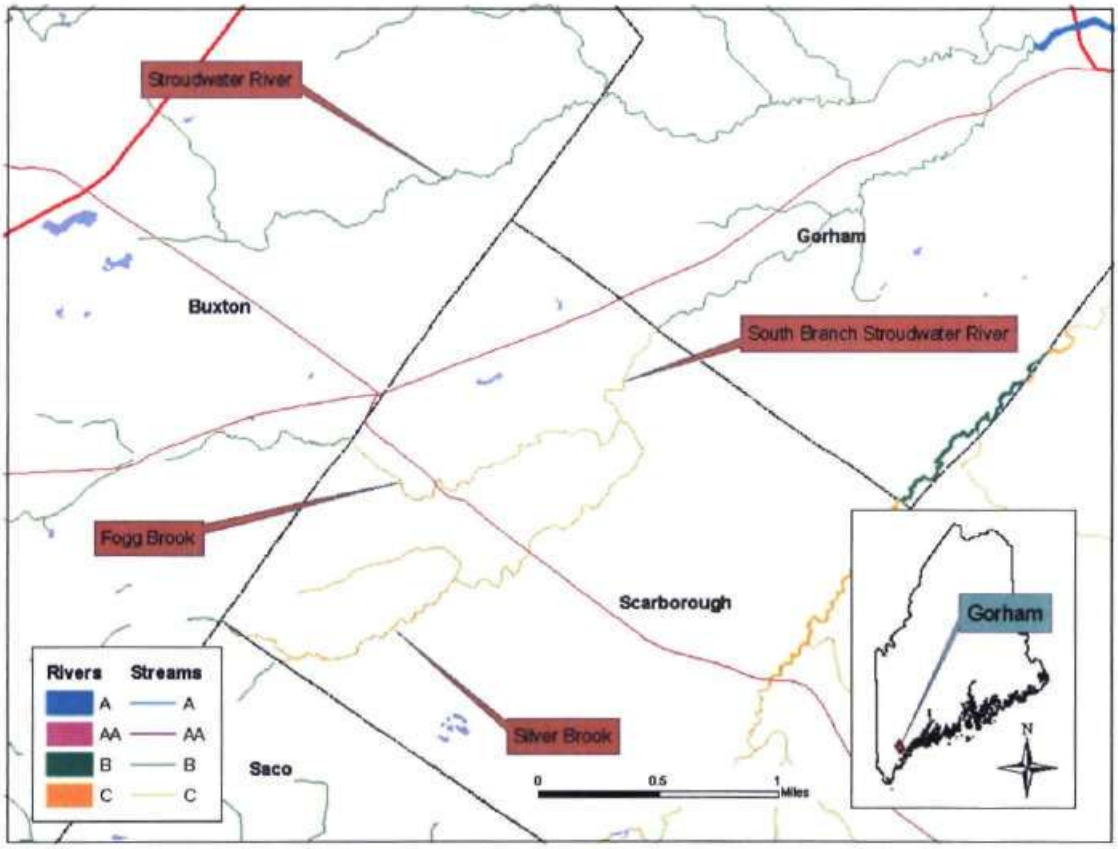
(1) All minor drainages, unless otherwise specified - Class C.

(2) Trout Brook, downstream of the first point where the brook becomes the town boundary between South Portland and Cape Elizabeth – Class C.



Stroudwater River, tributaries
South Branch Stroudwater River. Scarborough – clarify Class B status (0.5 miles)
Fogg Brook. Scarborough – clarify Class B status (1.2 miles)
Silver Brook. Scarborough – clarify Class B status (2.5 miles)
Proposal: Department of Environmental Protection
Basis: Ambiguous language in statute implies that portions of the Stroudwater River and certain upstream tributaries that flow through Scarborough are Class C; however the statute also states that the "Stroudwater River from its origin to tidewater - Class B". The proposal is to clarify that all of Stroudwater River is Class B.
Issues affected by reclassification: None
Recommend revising § 468.1 as follows:

B. Portland.
(1) All minor drainages unless otherwise specified - Class C.
(2) Stroudwater River from its origin to tidewater, including all tributaries - Class B.
C. Scarborough
(5) Stroudwater River from its origin to tidewater, including all tributaries - Class B.



Nonesuch River, tributary to the Fore River. Scarborough, Gorham – Clarify that Class B applies to upper Nonesuch River

Proposal: Department of Environmental Protection

Basis: Propose upgrade of upper reaches of the Nonesuch River to a point 0.5 mile downstream of Mitchell Hill Rd, Gorham, to Class B.

Due to default wording in the classification law the Nonesuch River changes from Class C to Class B and then back to Class C across town lines within the distance of less than 1 mile in Scarborough and Gorham. Propose upgrade to Class B near Mitchell Hill Rd, Gorham.

Issues affected by reclassification: None; attainment of Class B aquatic life standards documented in 2005.

Recommend revising § 468.1 as follows:

1. Cumberland County. Those waters draining directly or indirectly into tidal waters of Cumberland County, with the exception of the Androscoggin River Basin, the Presumpscot River Basin, the Royal River Basin and tributaries of the Androscoggin River Estuary and Merrymeeting Bay, entering above the Chops - Class B unless otherwise specified.

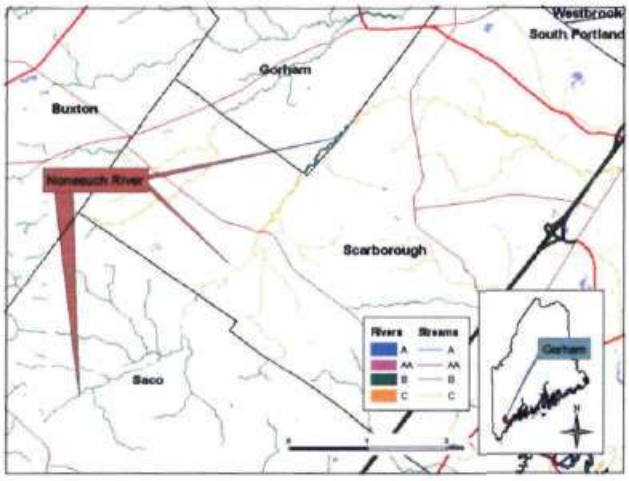
C. Scarborough.

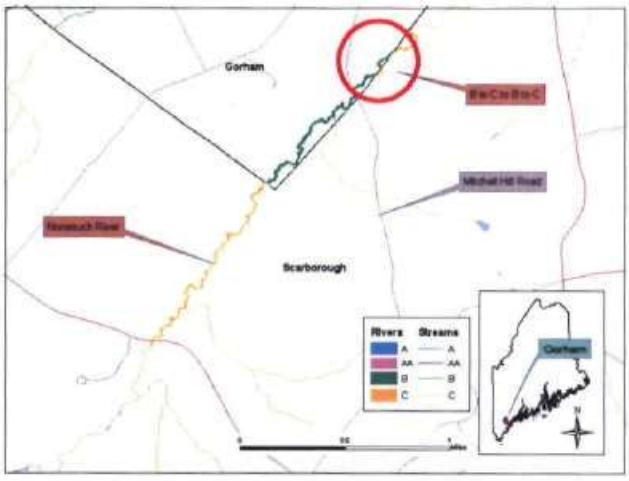
(1) All minor drainages - Class C unless otherwise specified.

(2) Finnard Brook - Class B.

(3) Stuart Brook - Class B.

(4) Nonesuch River- from the headwaters to a point 0.5 mile downstream of Mitchell Hill Rd crossing – Class B.





MINOR DRAINAGES

LINCOLN COUNTY

Pemaquid River, Bristol, including tributaries, freshwater riverine sections below Pemaquid Pond.

Upgrade from Class B to Class A (6 miles)

Proposal: The Nature Conservancy

Basis: The Pemaquid River connects several Class GPA ponds that have good water quality. This upgrade will preserve lake water quality.

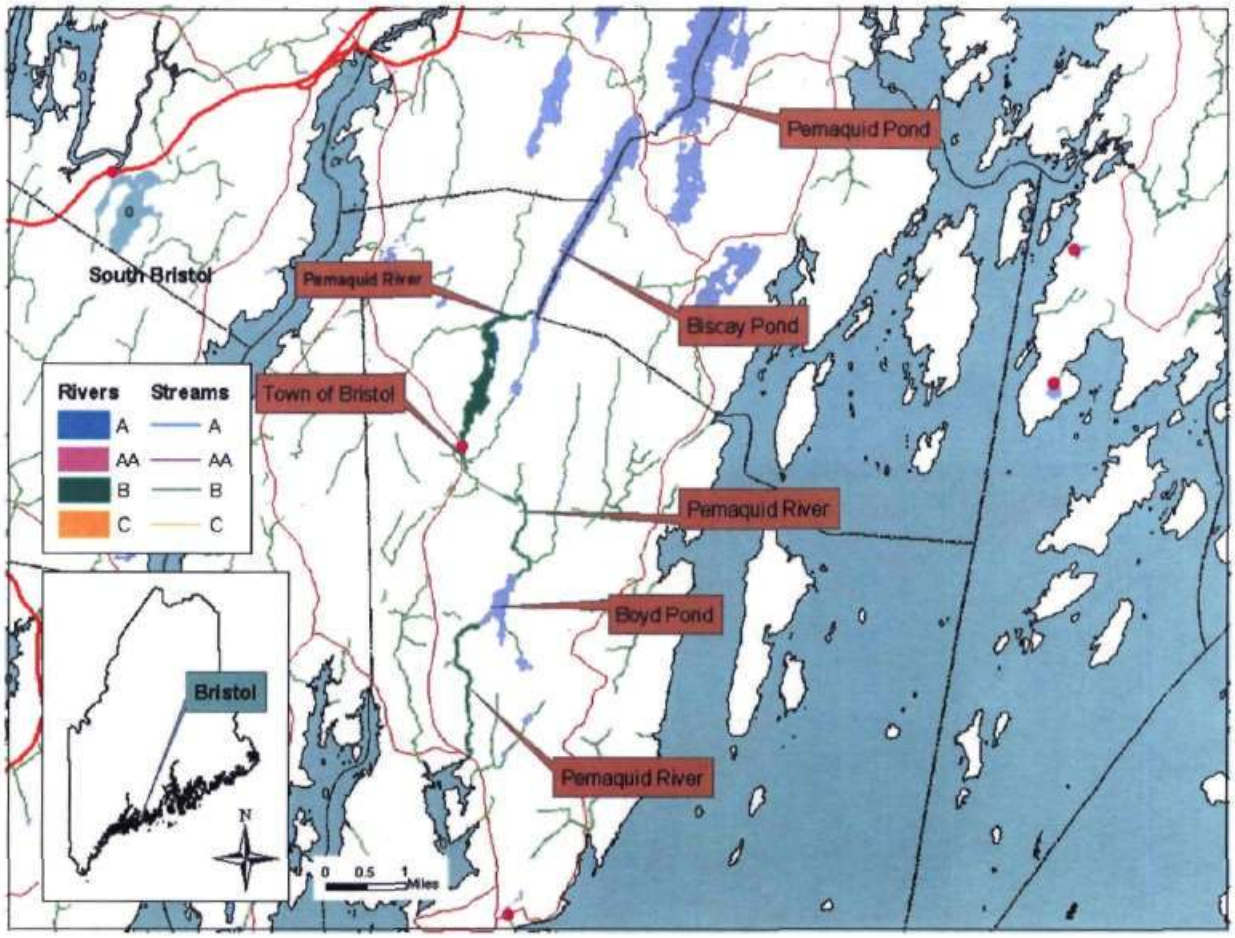
Issues affected by reclassification: None; reasonably expected to attain Class A standards

Recommend revising § 468.4 as follows:

4. Lincoln County. Those waters draining directly or indirectly into tidal waters of Lincoln County entering above the Chops, with the exception of the Sheepscot River Basin and tributaries of the Kennebec River Estuary and Merrymeeting Bay - Class B unless otherwise specified.

D ~~K~~. Bristol.

(1) Pemaquid River and its tributaries, all freshwater sections below Pemaquid Pond – Class A.



MINOR DRAINAGES

WALDO COUNTY

Ducktrap River, selected tributaries: Tucker Brook. Lincolnville - Class B to Class A (1.2 miles) Black Brook. Lincolnville - Class B to Class A (3.5 miles) Kendall Brook. Lincolnville - Class B to Class A (1.5 miles)

Proposal: The Nature Conservancy and the Atlantic Salmon Commission

Basis: The Ducktrap River was upgraded to Class AA for preservation of endangered Atlantic salmon. The Salmon Commission reports that the tributaries also have important salmon and other coldwater fishery values but are currently designated Class B. **Tucker Brook** has very cool water that offers very good summer refugia; actual physical habitat is of lesser importance, since this brook is very small, but it is home to a wild population of brook trout. Potentially an important brook trout source for the upper Ducktrap watershed. Canopy cover is 90% or better. **Black Brook** has cool water and is used by juvenile salmon for summer refuge. The habitat is of high quality for both brook trout and salmon. Wild brook trout from Black Brook probably help to populate the mainstem. Tributary habitat likely used for spawning for both salmon and trout. Canopy cover is nearly full, 75% or better. **Kendall Brook** comes out of Pitcher Pond (at dam) and does not support a cold-water fishery. Upgrade recommendation is based on current good water quality that should be maintained to protect the mainstem Ducktrap.

Issues affected by reclassification: None; reasonably expected to attain Class A standards. Much of the watershed is currently protected.

Recommend revising § 468.7 as follows:

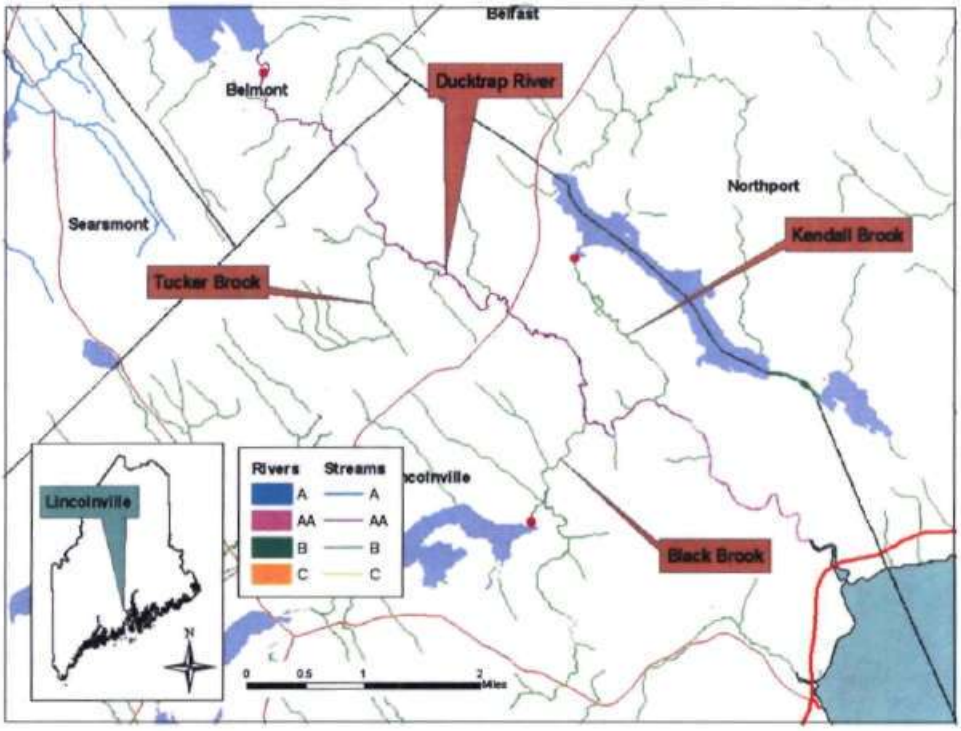
7. Waldo County. Those waters draining directly or indirectly into tidal waters of Waldo County - Class B, unless otherwise specified.

A. Ducktrap River from the outlet of Tilden Pond to tidewater - Class AA.

D ~~B~~. Black Brook (Lincolnville) - Class A.

E ~~C~~. Kendall Brook (Lincolnville) Class A.

F ~~D~~. Tucker Brook (Lincolnville) – Class A.



ESTUARINE AND MARINE WATERS

SAGADAHOC COUNTY

The Basin, including The Narrows, to the New Meadows River Estuary, Phippsburg - marine Class SB to Class SA (214 acres; 6.7 miles of shoreline)

Proposal: The Nature Conservancy and Friends of the Basin

Basis: The Basin is a tidal inlet in the New Meadows River estuary. The Basin has exceptional ecological and social value and is surrounded by one of the largest unfragmented forests along Maine's midcoast. Recently, through an anonymous donation, The Nature Conservancy established the 1,900 acre Basin Preserve, affording protection to over 4 miles of shoreline. The Basin supports highly productive and economically significant soft-shell clam beds, yielding an average of 53 bushels per acre. Back Cove alone yielded 320 bushels per acre in 2006 (Maine DMR, 2006 data). The Basin is also a favored anchorage for pleasure boats seeking overnight refuge.

Issues affected by reclassification: Similar to riverine Class AA, the SA classification prohibits discharges (though stormwater discharges are exempt) and prohibits alteration of the free flow of water. The Basin is reasonably expected to attain Class SA standards.

Recommend revising § 469.5 as follows:

5. Sagadahoc County.

B. Phippsburg.

(1) Tidal waters east of longitude 69`-50'-05" W. and west of longitude 69`-47'-00" W. - Class SA.

(2) Tidal waters of The Basin, including The Narrows east of a line drawn between 69°-51'-57" W and 43°-48'-14" N - SA

MINOR DRAINAGE

CUMBERLAND COUNTY

Long Creek, So. Portland, Westbrook; propose clarification of a segment of Long Creek in Westbrook

Clarify that Class C applies (0.3 miles approx)

Proposal: City of Westbrook

Basis: Long Creek is on the Section 303d list of impaired waters. Water quality goals and restoration strategies for Long Creek are hindered by the fact that two different classes are designated within a distance of less than 0.3 mile of one of the impaired segments. Due to default wording in the classification law Long Creek changes from Class C in So. Portland, to a 0.3 mile long segment in Westbrook that is Class B, then changing back to Class C as the stream crosses the town line for Portland and So. Portland. Propose clarification that Class C standards apply to Long Creek proper as it flows into and out of the town of Westbrook for a distance of approximately 0.3 mile near Sable Oaks Golf Course.

Recommend revising § 468.1 as follows:

1. Cumberland County. Those waters draining directly or indirectly into tidal waters of Cumberland County, with the exception of the Androscoggin River Basin, the Presumpscot River Basin, the Royal River Basin and tributaries of the Androscoggin River Estuary and Merrymeeting Bay, entering above the Chops - Class B unless otherwise specified.

Westbrook

1. Long Creek, mainstem- Class C

RECOMMENDED PROPOSAL FOR *LOWERING* OF CLASSIFICATION.

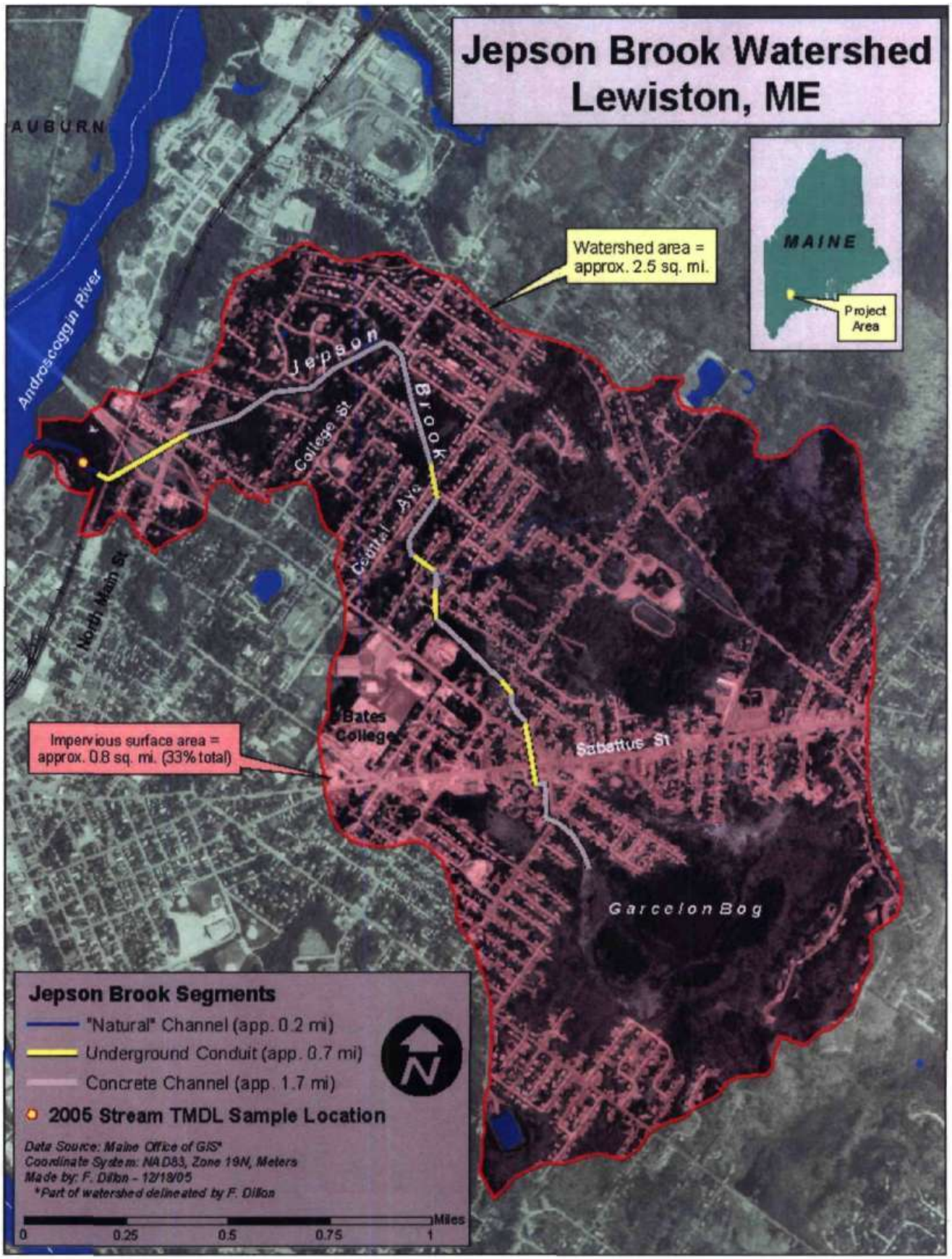
Jepson Brook, tributary to the Androscoggin River, petition for Use Attainability Analysis (UAA) to determine highest attainable goals; Class B (impaired). Propose to change designated uses of the channelized section to a lower, UAA-determined goal condition (2.09 miles); and to change the classification of the natural channel section to Class C (0.17 miles).

Proposal: as requested by City of Lewiston :

- The portion from the headwaters at Garcelon Bog to the underground pipe outlet west of Main Street - Rte 202 (a distance of - 2.09 miles) no longer be considered a water of the United States, and
- That the portion from the underground pipe outlet west of Main Street to the confluence with the Androscoggin River (a distance of -0.17 miles) be reclassified as a Class C water.

Basis: Jepson Brook in Lewiston is designated Class B but the stream is confined within a concrete channel for more than 80% of its length. Only the lower 800 feet before the confluence with the Androscoggin River remains as natural channel. The first documented stream channel alteration occurred in the mid-1970s. Jepson Brook is severely impaired due to the effects of a highly altered flow regime, poor water quality, and the elimination of habitat for aquatic life. It is on the 303d list of impaired waters.

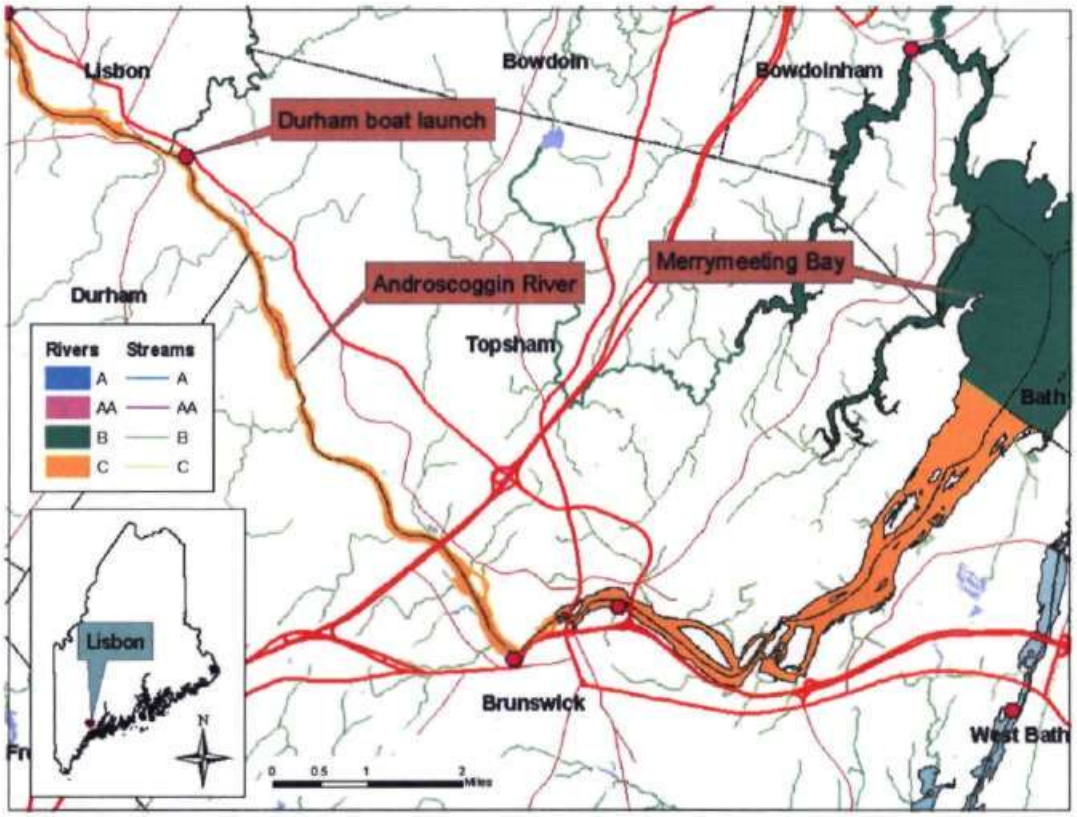
Issues affected by reclassification: Use Attainability Analyses are allowed by the Clean Water Act under very specific circumstances. UAA's are discouraged by Region 1 EPA and Maine has rarely supported downgrading of waterbodies. MDEP does not support the City of Lewiston's proposal that the channelized section of Jepson Brook "no longer be considered a water of the United States" because it is not permissible by State or federal law. However, because of the extreme nature of the impairment of Jepson Brook and the extremely high cost of restoration, combined with the low environmental benefit, MDEP supports the need for a Use Attainability Analysis of Jepson Brook to determine the highest attainable goal condition. MDEP agrees with the City of Lewiston that Class B is not an attainable goal for any segments of Jepson Brook. Class C *may* be attainable in the 800 foot natural channel section with improved flow, stormwater and water quality management in the watershed. Aquatic life criteria for Class C are not attainable in the channelized section, thus the UAA would establish site-specific, highest attainable goals for a concrete stream channel.


Jepson Brook Watershed
Lewiston, ME
AUBURN
Androscoggin River
Jepson Brook
College St
Central Ave
North Main St
Bates College
Sabattus St
Garcelon Bog
Watershed area = approx. 2.5 sq. mi.
Impervious surface area = approx. 0.8 sq. mi. (33% total)
MAINE
Project Area
Jepson Brook Segments
"Natural" Channel (app. 0.2 mi)
Underground Conduit (app. 0.7 mi)
Concrete Channel (app. 1.7 mi)
2005 Stream TMDL Sample Location
Data Source: Maine Office of GIS*
Coordinate System: NAD83, Zone 19N, Meters
Made by: F. Dillon - 12/18/05
*Part of watershed delineated by F. Dillon
0
0.25
0.5
0.75
1
Miles

PROPOSALS THAT ARE NOT BEING RECOMMENDED BY THE DEPARTMENT AT THIS TIME

ANDROSCOGGIN RIVER BASIN

Androscoggin River mainstem, Lisbon Falls, from Durham Boat Launch or Worumbo Dam, to mouth of the Androscoggin in Merrymeeting Bay (line between Pleasant Pt., Topsham and North Bath)
Propose Class C to Class B (14 miles approx).
Proposal: Proposed by Friends of Merrymeeting Bay (FOMB)
Basis: According to FOMB data, the conditions on this section of the Androscoggin River exceed those of a Class C waterway and for most samples, meet those of Class B water for dissolved oxygen.
Issues affected by reclassification: Water quality in this segment is affected by impoundments, numerous licensed discharges and densely populated areas, both within the segment itself and upstream of the segment. FOMB data document instantaneous and long-term average attainment of dissolved oxygen at operational loads, at their monitoring stations. However sampling intensity and number of sampling locations are insufficient to determine the likelihood of attainment of Class B water quality criteria at maximum licensed loads. While the Department has no reason to question the FOMB data, FOMB does not have an approved Quality Assurance Project Plan (QAPP). US EPA and the Department request that any data submitted for use in these matters have an approved QAPP. Additional monitoring data and an updated water quality model are needed to determine the likelihood of attainment of Class B standards at licensed loads.



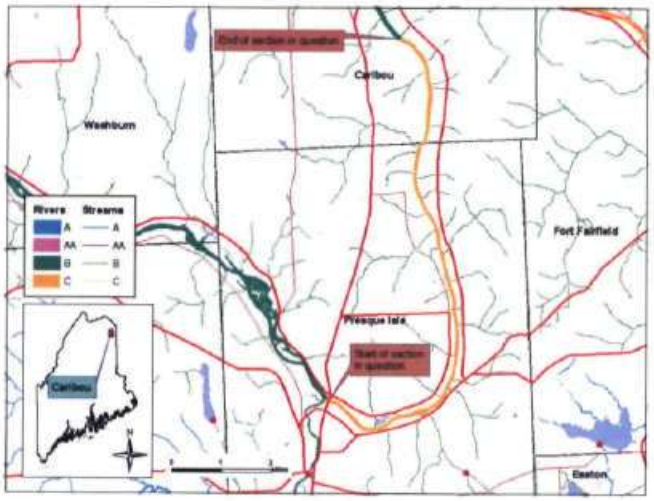
ST. JOHN RIVER BASIN, AROOSTOOK RIVER DRAINAGE

Segment A. Aroostook River from its confluence with Presque Isle Stream to a point located 3.0 miles upstream of the intake of the Caribou water supply, including all impoundments. Presque Isle, Caribou - Class C to Class B (10 miles)

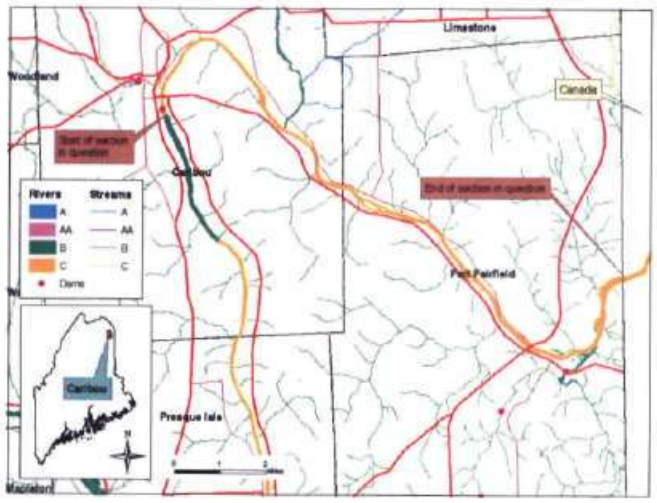
Segment B. Aroostook River from a point located 100 yards downstream of the intake of the Caribou water supply to the international boundary, including all impoundments. Caribou, Fort Fairfield - Class C to Class B (18 miles)

Proposal: Citizen proposal
Basis: Proposed by citizen based on the finding that some reaches show attainment of Class B dissolved oxygen criteria. 2001 biomonitoring studies also show attainment of Class B biocriteria in Segment A.
Issues affected by reclassification: Water quality is affected by point source discharges for both Segment A and Segment B. Segment A was proposed for upgrade in 2002. While attainment of water quality standards has been documented, waste water loads at the time of the monitoring, in 2001, were low (<10% of licensed loads). The Northern Maine Regional Office of MDEP recommends deferring this upgrade proposal until the 2012 review of water quality classification, because additional data are needed to determine the effect, on Class B attainment in the Aroostook, of planned promulgation of nutrient criteria.
MDEP Review of 2001 water quality data shows:

- Class B aquatic life and dissolved oxygen attainment has been documented
  - At low flow conditions, but not measured at maximum licensed loads
  - The water quality model predicts Class B dissolved oxygen attainment at maximum loading
- The water quality model also predicts large diurnal dissolved oxygen swings (6-10 mg/l)
    - This finding indicates high algal activity and probable nutrient issues
- MDEP will be promulgating new statewide nutrient criteria in 2009
  - The water quality model indicates *draft* Class B nutrient criteria may not be met at maximum loading
- Further river study is required
  - A new model is needed; algal activity may have exceeded the limits of the
  - existing model



Aroostook R. Segment A



Aroostook R. Segment B

Appendix A: Summary of Water Quality Classification System

Water Classification System

Purpose of Classification: Maine has had a water classification system since the 1950's. The classification system establishes water quality goals for the State. The classification system is used to direct the State in the management of its surface waters, protect the quality of those waters for the purposes intended by the Legislature, and where standards are not achieved, enhance the quality to achieve those purposes. As directed by the United States Clean Water Act, the classification standards establish designated uses, related characteristics of those uses, and criteria necessary to protect those uses.

While it is desirable for the actual quality of a water to achieve the standards in any proposal to upgrade a classification, classification assignments can and should be made where there is a reasonable expectation for higher uses and quality to be attained. Upgrades to classification are appropriate where it is socially or ecologically desirable to attain higher standards and where the technological and financial capacity exists to achieve those higher standards within a reasonable time. Once a classification assignment is made, and the uses and criteria are achieved, that goal is protected by the antidegradation provisions of the water quality statute, thus the law provides a mechanism for the State to continually move forward in the improvement and protection of water quality. Downgrades to classification have been infrequent and, as directed in State and federal law, are limited to situations where existing conditions do not afford the possibility to achieve the assigned class.

Water Quality Classes: The State has four classes for freshwater rivers (AA, A, B and C), three classes for marine and estuarine waters (SA, SB and SC), and one class for lakes and ponds (GPA). A summary of the criteria that apply for these classes is in Appendix A. The general structure of each standard is that the first paragraph contains designated uses and characteristics, the second paragraph sets water quality criteria and the third paragraph establishes special provisions or restrictions on discharges or other activities.

If one makes a close comparison of the standards, it can be seen that there is actually little difference between the uses or the qualities of the various classes. All attain the minimum fishable-swimmable standards established in the federal Clean Water Act. The classification system may be viewed as a hierarchy of risk, rather than one of use or quality; the risk being the possibility of a breakdown of the ecosystem due to either natural or human caused events. Ecosystems that are more natural in their structure and function can be expected to be more resilient to a new stress and to show more rapid recovery. Class AA, GPA and SA involve little risk since activities such as waste discharge and impoundment are prohibited by the Maine water quality classification law. The expectation to achieve natural conditions is high in these waters, and degradation is unlikely. Riverine Class A waters allow impoundment and very restricted discharges, so the risk of degradation while small, is greater than for riverine Class AA or marine SA since there is greater allowance for human activities in Class A waters. Class B and SB have fewer restrictions on activities but still maintain strict water quality criteria. Finally, Class C and SC have the least restrictions on human uses and activities and the lowest (but not low) water quality criteria. Class C and SC waters are still good quality, but the margin for error (degradation) in these waters, in the event of an additional stress being introduced (such as a spill or a drought), is the least. All water quality classifications for Maine waterbodies are designed to attain the Interim Goals of the U.S. Clean Water Act or higher.

Appendix A: Designated Uses and Criteria for Maine River and Stream Classifications

	Designated Uses	Dissolved Oxygen Numeric Criteria	Bacteria (*E. coli*) Numeric Criteria	Habitat Narrative Criteria	Aquatic Life (Biological) Narrative Criteria**
Class AA	Aquatic Life; Drinking Water; Fishing; Recreation	as naturally occurs	as naturally occurs	Free flowing and natural	No direct discharge of pollutants; as naturally occurs **
Class A	Aquatic Life; Drinking Water; Fishing; Recreation; Navigation, Hydropower; Industrial Discharge	7 ppm; 75% saturation	as naturally occurs	Natural	as naturally occurs **
Class B	Aquatic Life; Drinking Water; Fishing; Recreation; Navigation, Hydropower; Industrial Discharge	7 ppm; 75% saturation	64/100 ml (g.m.*) or 236/100 ml (inst.*)	Unimpaired	Discharges 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 to the resident biological community. **
Class C	Aquatic Life; Drinking Water; Fishing; Recreation; Navigation, Hydropower; Industrial Discharge	5 ppm; 60% saturation 6.5 ppm (monthly average) at 22° and 24°F	126/100 ml (g.m.*) or 236/100 ml (inst.*)	Habitat for fish and other aquatic life	Discharges 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. **

* "g.m." means geometric mean and "inst." means instantaneous level

**Numeric biocriteria in Maine rule Chapter 579, Classification Attainment Evaluation Using Biological Criteria for Rivers and Streams

Designated Uses and Criteria for Maine Marine Classifications

Class	Designated Use	Dissolved Oxygen	Bacteria	Aquatic Life
SA	Habitat for fish and estuarine and marine life Recreation in and on the water Fishing Aquaculture (not finfish) Propagation and harvesting shellfish Navigation	As naturally occurs	As naturally occurs	As naturally occurs
SB	Habitat for fish and estuarine and marine life Recreation in and on the water Fishing Aquaculture Propagation and harvesting shellfish Navigation Industrial process and cooling water supply Hydroelectric power generation	Not less than 85% of saturation	Enterococcus not higher than geometric mean 8/100ml or instantaneous of 54/100ml from 5/15 to 9/30 Not exceed criteria of National Shellfish Sanitation Program for shellfish harvesting	Support all indigenous estuarine and marine species Discharge not to cause closure of shellfish beds
SC	Habitat for fish and estuarine and marine life Recreation in and on the water Fishing Aquaculture Propagation and restricted shellfish harvesting Navigation Industrial process and cooling water supply Hydroelectric power generation	Not less than 70% of saturation	Enterococcus not higher than geometric mean 14/100ml or instantaneous of 94/100ml from 5/15 to 9/30 Not exceed criteria of National Shellfish Sanitation Program for restricted shellfish harvesting	Maintain structure and function of the resident biological community

***Note**: See MRSA Article 4-A §464 Classification of Maine Waters for complete text.*

Appendix B: Response to Comments Received

Appendix B is organized in the order the proposals were presented to the Board for consideration. The table provides a cross-reference to the appropriate section of LD 330.

I. ESTUARINE AND MARINE WATERS -- UPGRADE

Sagadahoc County	[LD 330 Sec. 23	Pg 1 of comments]

- The Basin, including The Narrows, to the New Meadows River Estuary, Phippsburg - marine Class SB to Class SA (214 acres; 6.7 miles of shoreline)

II. FRESH WATER -- UPGRADES

Androscoggin River Basin	[LD 330 Sec. 2 & Sec. 3	Pg 1 of comments]

- Abbott Brook, including all tributaries, Lincoln Plantation – Class A to AA (4 miles)
- Aunt Hannah Brook, including all tributaries, Dixfield Class B to Class A (5 miles)

Kennebec River Basin	[LD 330 Sec. 4 & 5	Pg 2 of comments]

- Kennebec River from downstream of the Shawmut Dam to confluence with Messalonskee Stream, excluding all impoundments. Fairfield, Clinton, Benton, Waterville, Winslow - Class C to Class B (~ 5.35 miles)

Kennebec River, tidal sections of tributaries including, for example

- Bond Brook. Augusta - Class C to Class B (0.25 miles)
- Cobbosseecontee Stream. Gardiner - Class C to Class B (0.25 miles)
- Togus Stream. Randolph, Pittston - Class C to B (0.4 miles)

Penobscot River Basin	[LD 330 Sec. 6 & 7	Pg. 5 of comments]

- Seboeis Stream, tributaries. T4 R9 NWP, T3 R9 NWP, Seboeis Plt, Mattamiscontis TWP, Maxfield, Howland - Class B to Class A (*miles undetermined*)
- Alder Stream and its tributaries; tributary to the Piscataquis River. Dover-Foxcroft, Atkinson, Orneville TWP, Milo - Class B to Class A (18 miles)
- Souadabscook Stream, selected tributaries, Upgrade from Class B to Class A West Branch Souadabscook Stream, Newburgh, Hampden (10 miles) Brown Brook/Reeds Brook, Hampden (6 miles)
- Mattamiscontis Stream, tributaries. Class B to Class A (*miles undetermined)*

Presumpscot River Basin	[LD 330 Sec. 8	Pg. 6 of comments]

- Crooked River, at Scribner's Mill, Harrison/Otisfield – Upgrade to Class AA (0.1 miles)

Saco River Basin	[LD 330 Sec. 9	Pg 9 of comments]

- South River and its tributaries, tributary to the Ossipee River, Parsonsfield – Upgrade Class B to Class A (4 miles)

Salmon Falls River Basin	[LD 330 Sec 14	Pg 10 of comments]

- Little River and its tributaries, tributary to the Salmon Falls River. Berwick, No. Berwick, Lebanon - Class Upgrade B to Class A (21 miles)

St. John River Basin	[LD 330 Sec. 12 & 13	Pg 10 of comments]

- Beaver Brook and its tributaries, T14 R6 WELS, T14 R5 WELS, T13 R5 WELS, Portage Lake, Ashland, Castle Hill (West Branch, 13 miles, East Branch, 10 miles, below confluence, 9 miles) Upgrade Class B to Class A
- Gardner Brook and its tributaries, T14 R5 WELS, T13 R5 WELS, Wade – Upgrade Class B to Class A (8 miles)
- Violette Stream and its tributaries, from source to the confluence with Caniba Brook. T17 R3 WELS, Van Buren, Upgrade Class B to Class A (6 miles, approx.)

III. MINOR DRAINAGES

Lincoln County	[LD 330 Sec. 19	Pg 11 of comments]
• *Pemaquid River, Bristol, including tributaries, freshwater riverine sections below Pemaquid Pond. – Upgrade from Class B to Class A (6 miles)*		

Waldo County	[LD 330 Sec. 20, 21 & 22	Pg 12 of comments]
• *Ducktrap River, selected tributaries: Tucker Brook. Lincolnville – Class B to Class A (1.2 miles) Black Brook. Lincolnville – Class B to Class A (3.5 miles) Kendall Brook. Lincolnville – Cleas B to Class A (1.5 miles)*		

IV. RECOMMENDED STATUTORY CLARIFICATION OF ASSIGNED CLASSIFICATION

- **Grand Falls Flowage, St. Croix drainage** - Princeton, Indian TWP Reservation, Baileyville, Fowler TWP - clarify that GPA classification (not riverine Class B) applies [LD 330 Sec. 10 Pg 12 of comments]
- **Long Creek** - So. Portland, Westbrook; proposal to clarify the water quality classification of a segment of the mainstem of Long Creek located in Westbrook (0.3 miles approx.) [Proposed Amendment to LD Pg 13 of comments & App. B-1]
- **Trout Brook** – Cape Elizabeth, South Portland – clarify Class C status (0.7 miles) [LD 330 Sec. 15 & 18 Pg 15 of comments]
- **Nonesuch River, tributary to the Fore River** - Scarborough, Gorham – Clarify that Class B applies to upper Nonesuch River. [LD 330 Sec. 17 Pg 16 of comments]
- **Stroudwater River, tributaries South Branch Stroudwater River** - Scarborough – clarify Class B status (0.5 miles); Fogg Brook. Scarborough – clarify Class B status (1.2 miles); Silver Brook. Scarborough – clarify Class B status (2.5 miles) [LD 330 Sec. 16 & 17 Pg 16 of comments]
- **St. John River** – Fort Kent change the landmark used to designate class change from Class A to B [LD 330 Sec. 11 Pg 17 of comments]

V. RECOMMENDED PROPOSAL FOR UAA TO LOWER CLASSIFICATION

Jepson Brook, tributary to the Androscoggin River - petition for Use Attainability Analysis (UAA) to determine highest attainable goals; Class B (impaired). Propose to change designated uses of the channelized section to a lower, UAA-determined goal condition (2.09 miles); and to change the classification of the natural channel section to Class C (0.17 miles). [Pg 17 of comments]

VI. PROPOSALS CONSIDERED BUT NOT RECOMMENDED

- **Lower Androscoggin River.** Proposal by Friends of Merrymeeting Bay et.al. to upgrade from Class C to Class B. [Pg. 19 of comments]
- **Aroostook River.** Proposal by Mr. Steve Sutter, resident of Aroostook County, to upgrade two segments from Class C to Class B. [Pg. 21 of comments]

RESPONSE TO COMMENTS RECEIVED ON BEP-SUPPORTED UPGRADE PROPOSALS

Proposal for The Basin (The Nature Conservancy; Friends of the Basin)

Marine, Sagadahoc County
The Basin, including The Narrows, to the New Meadows River Estuary, Phippsburg – upgrade from marine Class SB to Class SA (214 acres; 6.7 miles of shoreline)

Recommend revising § 469.5.B as follows:

5. Sagadahoc County.

B. Phippsburg.

(1) Tidal waters east of longitude 69`-50'-05" W. and west of longitude 69`-47'-00" W. - Class SA.
(2) Tidal waters of The Basin, including The Narrows east of a line drawn between 69°-51'-57" W and 43°-48'-14"N – Class SA.

General comments in support expressed by: Nick Bennett, Natural Resources Council of Maine; Steve Hinchman, Conservation Law Foundation; Landis Hudson, Maine Rivers.

Paraphrased comments received in support

Richard M. Kelly, Friends of the Basin
James Sidel, Friends of the Basin
Nancy Sferra, The Nature Conservancy

1. The Basin has exceptional ecological and social value and is surrounded by one of the largest unfragmented forests along Maine's midcoast.
2. The Nature Conservancy established the 1,900 acre Basin Preserve, affording protection to over 4 miles of shoreline.
3. The Basin supports highly productive and economically significant soft-shell clam beds, yielding an average of 53 bushels per acre.
4. The Basin is a favored anchorage for pleasure boats seeking overnight refuge.

No comments in opposition

Proposal for Abbott Brook (MDIFW)

Abbott Brook, including all tributaries, in Lincoln Plantation – upgrade from Class A to AA (4 miles)

Recommend revising 467.1.C as follows:

C. Androscoggin River, Upper Drainage; that portion within the State lying above the river's most upstream crossing of the Maine-New Hampshire boundary - Class A unless otherwise specified.
(4-A) Abbott Brook and tributaries (Lincoln Plantation) – Class AA

General comments in support expressed by: Nick Bennett, Natural Resources Council of Maine; Steve Hinchman, Conservation Law Foundation; Landis Hudson, Maine Rivers; Maine Department of Inland Fisheries and Wildlife;

No comments in opposition

Proposal for Aunt Hannah Brook (MDEP)

Aunt Hannah Brook, including all tributaries, in Dixfield - upgrade from Class B to A (approx. 4 miles)

Recommend revising § 467.1.D as follows:

D. Androscoggin River, minor tributaries - Class B unless otherwise specified.

(8) Aunt Hannah Brook and its tributaries (Dixfield) – Class A.

General comments in support expressed by: Nick Bennett, Natural Resources Council of Maine; Steve Hinchman, Conservation Law Foundation; Maine Department of Inland Fisheries and Wildlife; Landis Hudson, Maine Rivers

No comments in opposition

Proposal for the Kennebec River mainstem (MDEP)

Kennebec River from downstream of the Shawmut Dam to confluence with Messalonskee Stream, ~~including~~ excluding all impoundments. Fairfield, Clinton, Benton, Waterville, Winslow - upgrade from Class C to Class B (~~11~~ 5.35 miles). **Note**: On September 18, 2008 at the BEP Public Hearing, the Kennebec River proposal was revised by the Department as follows:

Recommend revising § 467.4.A as follows:

A. Kennebec River, main stem.

(10) From the Fairfield-Skowhegan boundary to ~~its confluence with Messalonskee Stream, including all impoundments~~ the Shawmut Dam - Class C.

(10-A) From the Shawmut Dam to its confluence with Messalonskee Stream, ~~including~~ ***excluding*** all impoundments – Class B.

Paraphrased comments received in support of the 9/18/08 proposal (impoundments excluded)

Robert J. Nadeau, SAPPI Fine Paper, Skowhegan, Maine

Michael Barden, Maine Pulp and Paper Association, Augusta, Maine

1. The data supporting the Kennebec upgrade is "very limited (one or two samples) and almost 10 years old.
2. There is insufficient data to determine if Class B water quality criteria are met during periods of high temperature and low flow.
3. Upstream discharges would be placed in non-compliance due to excursions of water quality criteria (WQC) by the upgrade.
4. The classification system was intended to apply to free-flowing rivers; all Maine impoundments without discharges above them are classified GPA which does not have numeric criteria for dissolved oxygen (DO).
5. The 2000 Kennebec River modeling report (David Miller) indicates that Class B instantaneous DO standard of 7 ppm is not attained at all times in the Hydro Kennebec (H-K) impoundment (rivermile 18.5); this is confirmed by an August 13, 1997 DO reading of 6.5 ppm near rivermile 20 in the H-K impoundment.
6. Biocriteria attainment is also questionable in the deepest sections of the H-K impoundment (39 feet) as evidenced by occasional non-attainment of Class C biocriteria in the Shawmut impoundment. Biomonitoring data are not available for the H-K and Lockwood impoundments.

7. Public hearing comments implied that MDEP "must recommend water classification upgrades whenever water quality data shows higher standards are achieved". This is an untenable interpretation because most waters in Maine could be expected to meet the standards of Class A at some time during the year while failing to attain standards during critical conditions.
8. State law 38 MRSA §646(4)(D) requires the MDEP evaluate compliance with WQC at 7Q10 (critical conditions). MDEP also uses licensed discharge loads to ensure compliance during worst case conditions.

MDEP Response

We disagree that the data in support of the upgrade is "very limited". A well-calibrated water quality model exists for the segment in question, based on 28 sampling locations from Madison to Richmond, collected during two different years. The Department also disagrees with the contention in comment #4 that the classification system was intended to apply only to free-flowing rivers. There are many impounded segments of rivers in Maine that retain riverine classifications and 38 MRSA §464(10) provides for "Existing hydropower impoundments managed under riverine classifications". Further, with respect to comment #6, Chapter 579 (the biocriteria rule) references standard sampling habitat requirements that restrict sampling for assessment of aquatic life use attainment to habitats that have hard-bottom, periodically scoured substrates. To assess attainment of aquatic life use (biocriteria) the Department samples habitats other than the deepest sections of the impoundments.

We do agree that data specific to the Hydro-Kennebec and the Lockwood impoundments are not sufficient to confirm dissolved oxygen and biocriteria attainment in those impoundments at critical conditions. While the water quality modeling report from 2000 indicates that diurnal DO swings below the Class B instantaneous standard of 7 ppm are likely to occur in a portion of the H-K impoundment, the modeling report also makes the following points:

- Nutrients, algal growth, and point sources are the most important causes of water quality impacts;
- There are indications that nutrient loading may become a major water quality issue in the future;
- The paper mills are the major source of phosphorus and MDEP should work with the paper mills to investigate methods to reduce phosphorus loading through process controls.

The Water Quality Classification law finds that it is "the State's objective to restore and maintain the chemical, physical and biological integrity of the State's waters". The Department views that the proposal to upgrade the above described segment, of the Kennebec River (excluding impoundments) to Class B is consistent with the Legislature's goal. The Department agrees that it is appropriate to secure the missing impoundment data and to implement all reasonable and cost-effective measures to reduce phosphorus loading from the mills' discharges with the intention of proposing the upgrade of the impoundments if and when the Department deems those measures, or other appropriate measures, are sufficient to secure attainment of Class B criteria.

Paraphrased comments received in partial support of the 9/18/08 Kennebec proposal (impoundments <u>excluded</u>)

Nick Bennett, Natural Resources Council of Maine, Augusta, Maine
Steve Hinchman, Conservation Law Foundation
John Burrows, Atlantic Salmon Federation
Landis Hudson, Maine Rivers

1. The Kennebec is an exceptional river and has seen dramatic improvements in quality and ecological health but the work is not finished.
2. It has been described by MDIFW as "one of the best brown trout rivers on the East Coast". It holds great economic importance for central Maine and it deserves greater protection than its current Class C designation.
3. The U.S. Departments of Commerce and Interior are considering whether it is appropriate to expand the Endangered Species listing for Atlantic salmon to the Kennebec and other rivers and upgrading this section would count in Maine's favor.
4. The entire Class C segment of the Kennebec River (Skowhegan boundary to Messalonskee Stream) was proposed by NRCM for upgrade to Class B in 2002 based on outstanding fishery values but was not passed.
5. The Board is specifically prohibited in the Clean Water Act from considering waste discharge as a designated use. If the Kennebec River is meeting Class B water quality criteria the Department must upgrade to Class B
6. The Department initially proposed to upgrade only from the Shawmut Dam to Messalonskee Stream (about half of the 2002 proposal) and then, at the public hearing the Department changed the posted proposal to exclude impoundments due to weather-related failure to secure necessary data to confirm attainment in the impoundments.
7. MDEP has had six years to collect the necessary impoundment data and has not done so.
8. Available data indicates this section of the Kennebec either already attains or has a reasonable expectation of attaining all standards and criteria for Class B.
9. MDEP should upgrade the entire remaining 15 mile Class C segment to Class B
10. If the Board adopts the MDEP recommendations to upgrade only the free-flowing sections then it should ask MDEP for a written plan and commitment to collect the necessary data to upgrade the entire Class C segment.

MDEP Response

The Department agrees that decisive action to upgrade the Kennebec has been hampered by the limited data from the impounded sections and we agree the data should be collected and expeditiously analyzed to establish a factual basis for determining the reasonableness of attainment of Class B water quality criteria in all parts of the Class C segment. We also agree that assimilation of waste discharges is not an allowable designated use. However, Maine law allows for wastewater discharges that do not cause the receiving waters to fall below the standards of their designated classification (38 MRSA §464(4).

Maine water quality law (38 MRSA §464(4)(D) and the MDEP antidegradation policy (MDEP Antidegradation memo from Brian Kavanah 6/13/2001, Doc.#DEPLW0267) specifically require the MDEP to evaluate discharger compliance with water quality criteria at "critical conditions" using actual or modeled 7Q10 flows ("10 year low flow") and licensed loads. Models are developed based on licensed loads and low river flows in order to present a clear understanding of the effects of critical conditions to ensure that resources will be protected for all allowed activities. The SAPPI mill discharges at approximately 65%-75% of their licensed BOD limit and 25%-30% of TSS limit during the summer. The 7Q10 modeling from 2000 does show excursions of Class B dissolved oxygen criteria in several parts of the segment. As noted above in response to SAPPI and MPPA comments, MDEP views that it is appropriate to secure the missing impoundment data and to implement all reasonable and cost-effective measures to reduce phosphorus loading from the mills' discharges. The DEP will propose to upgrade the impoundments if and when those measures, or other appropriate measures, are sufficient to secure attainment of Class B criteria under critical conditions, per the Department's antidegradation policy.

It is important to note that all of Maine's water quality classes are designed to be protective of all fish, including salmonids, based on statutory requirements provided in 38 MRSA Section 465.

Proposal for Kennebec River, tidal sections of tributaries (MDEP)

Proposal includes upgrade of all tidal portions of tributaries including: Bond Brook (Augusta) - upgrade from Class C to Class B (0.25 miles); Cobbosseecontee Stream (Gardiner) - upgrade from Class C to Class B (0.25 miles); Togus Stream (Randolph, Pittston) - upgrade from Class C to B (0.4 miles)

Recommend revising § 467.4.I as follows:

I. Kennebec River , minor tributaries – Class B unless otherwise specified.

(2) All tidal portions of tributaries entering between ~~Edwards Dam~~ the Sidney, Vassalboro, and Augusta townline and a line drawn across the tidal estuary of the Kennebec River due east of Abagadasset point – Class ~~C~~ B unless as otherwise specified.

(a) Eastern River from head of tide to confluence with Kennebec River – Class C.

General comments in support expressed by: Nick Bennett, Natural Resources Council of Maine; Steve Hinchman, Conservation Law Foundation; Landis Hudson, Maine Rivers.
Specific comments in support: John Burrows, Atlantic Salmon Federation

- The tidal Kennebec tributaries are important waterbodies for Atlantic salmon, sea-run trout, and other native diadromous fish species and they deserve the additional protections of Class B.

No comments in opposition

Proposals for Tributaries of the Piscataquis River (The Nature Conservancy)

Seboeis Stream tributaries in T4R9 NWP, T3R9 NWP, Seboeis Plt, Mattamiscontis TWP, Maxfield, Howland - upgrade from Class B to Class A (*miles undetermined*)
Alder Stream, and its tributaries; tributary to the Piscataquis River in Dover-Foxcroft, Atkinson, Orneville TWP, Milo - upgrade from Class B to Class A (18 miles)

Recommend revising 467.7.E.(2) as follows:

(2) Piscataquis River, tributaries - Class B unless otherwise specified.

(m) ~~Sebois~~ Seboeis Stream, including East and West Branches, and tributaries - Class A.

(n) Alder Stream and its tributaries – Class A

General comments in support expressed by: Josh Royte, The Nature Conservancy; The Sweetwater Trust; Nick Bennett, Natural Resources Council of Maine; Steve Hinchman, Conservation Law Foundation; Landis Hudson, Maine Rivers.
No comments in opposition

Proposal for Tributaries to Mattamiscontis Stream (The Nature Conservancy)

Mattamiscontis Stream, tributaries. upgrade from Class B to Class A *(miles undetermined)*

Recommend revising § 467.7.F as follows:

F. Penobscot River, minor tributaries - Class B unless otherwise specified.
(11) Mattamiscontis Stream, and tributaries - Class A.

General comments in support expressed by: Dan Kusnierz, Penobscot Indian Nation, Josh Royte, The Nature Conservancy; Nick Bennett, Natural Resources Council of Maine; Steve Hinchman, Conservation Law Foundation; Landis Hudson, Maine Rivers.
No comments in opposition

Proposal for tributaries to Souadabscook River - West Branch Souadabscook Stream, Brown's Brook, (MDEP)

Selected tributaries of Souadabscook Stream, upgrade from Class B to Class A
West Branch Souadabscook Stream in Newburgh, Hampden (10 miles), Brown Brook (also called Reeds Brook) in Hampden (6 miles)

Recommend 38 MRSA § 467.7.F.(7-A) be enacted to read:
(7-A) Tributaries of Souadabscook Stream - Class B, unless otherwise specified
(a) West Branch Souadabscook Stream (Hampden, Newburgh) – Class A
(b) Brown Brook (Hampden) – Class A

Comments in support expressed by: Norm Dube, Maine Dept. Marine Resources; Nick Bennett, Natural Resources Council of Maine; Steve Hinchman, Conservation Law Foundation; Landis Hudson, Maine Rivers; John Burrows, Atlantic Salmon Federation

- Removal of the Grist Mill Dam opened up Souadabscook Stream to Atlantic salmon, shad, and river herring;
- The tributaries also provide valuable salmon habitat and should be protected by upgrade to Class A

No comments in opposition

Proposal for Crooked River (MDIFW)

Crooked River, at Scribner's Mill, Harrison/Otisfield - upgrade Class A to Class AA (0.1 miles)

Recommend changing §467.9.B as follows:

B. Presumpscot River, tributaries - Class A unless otherwise specified.
(1) All tributaries entering below the outlet of Sebago Lake - Class B.
(2) Crooked River and its tributaries, except as otherwise provided, excluding existing impoundments ~~and excluding that area of the river previously impounded at Scribners Mill~~ - Class AA.

Paraphrased comments received in support

Nick Bennett, Natural Resources Council of Maine; Lee Dassler, Western Foothills Land Trust; Burgess K. Smith, Upland Headwaters Alliance; Nathan Whalen, Portland Water District; Rocky Freda, Dick Walthers, Lee Margolin, Mollyockett Chapter of Trout Unlimited; Bart Hague, Maine Congress of Lake Associations, landowner and conservation easement grantor; Dusti Faucher, President, Friends of the Presumpscot River; William Oleszerzuk, Sebago Chapter Trout Unlimited; Jeff Reardon, New England Conservation Director, Trout Unlimited, National Office; Roger Wheeler, Friends of Sebago Lake; Tom Henderson, Greater Lovell Land Trust; Ron Faucher, CPESC; Peter Lowell, Lakes Environmental Association; Francis Brautigam, Maine Department of Inland Fisheries and Wildlife; J.R Burrows, Atlantic Salmon Federation; Landis Hudson, Maine Rivers

1. Largely undeveloped watershed and very high quality water
2. Unparalleled recreational resource
3. Largest tributary to Sebago Lake (provides >30% of the inflow)
4. Sebago Lake is the drinking water supply to over 200,000 people (1/6th of the State's population)
5. Reclassification to Class AA for the entire length would protect the Crooked River and its aquatic life resources from the detrimental effects of damming and impoundment
6. A dam would interfere with critical aquatic life access to this natural corridor that provides aquatic connectivity to high quality refuges in the upper Crooked River
7. Proposed dam would compromise salmon access to 66% of the available spawning habitat of the mainstem river
8. Crooked River supports diverse native fish and aquatic insect assemblages
9. The Crooked provides major spawning habitat for native strain of Sebago Lake landlocked salmon
    a. One of 4 indigenous populations of landlocked salmon in Maine
    b. One of State's 7 most significant fishery rivers (MDOC Maine Rivers Study, 1982)
    c. Replacement costs of wild salmon parr approximately $97,000/year
    d. Replacement cost of wild adults in Sebago approximately $500,000 to $1,000,000
10. 50,000 open water angler trips; 25-30% targeted to salmon fishing
11. Designated as Outstanding River segment (Title 12 MRSA Section 402)
12. Purpose of the Outstanding River designation is protection of the Crooked River's fishery resource.

Paraphrased comments received in opposition

Brad A. Plante, Town Manager of Harrison; Gordon and Lucy Reynolds,(no address or affiliation); Curt Reynolds, citizen, Conway, NH; William Wright, MD, Society for the Preservation of Old Mills (SPOOM), McLean VA,; Gerry Smith, citizen, Harrison; Budne and Diane Reinke, SPOOM, Silver Spring, MD; Carol Mead, citizen, North Bridgton, ME; Matt Tate, SPOOM, Hillsboro, WV; Richard Sykes, State Representative, Bridgton, Harrison, Lovell, Stow and Sweden; Muffett Crowell, The Village Voice newsletter, Harrison; Robert Vitale, Waterwheel Factory, SPOOM (no address); Elaine Smith, Harrison Historical Society; Martha Scribner Denison, Scribner's Mill Preservation, Inc, Harrison; Martin E. Thompson, Thompson's Mills, Oregon; Wendy Gallant, citizen, Harrison; Ralph C. Hatt, citizen, Westbrook, ME; Jean F. Hankins, "unofficial" town historian, Otisfield; Henry Hamilton, Otisfield Historical Society; Roy Clark, President and Officers of the 350-member Scribner's Mill Preservation, Inc, Otisfield; Jim Hamper, State Representative, Otisfield, Oxford, Mechanic Falls; Hal Ferguson, Chairman and Board of Selectmen, Town of Otisfield

1. Most of the Crooked River is already Class AA

2. The opponents of the Scribner's Mill dam re-development application are the entities who pushed the petition to reclassify the Crooked River to Class AA. It appears that the proposal to reclassify the Crooked River is an attempt to stop the Scribner's Mill Project;
3. The action to upgrade the Crooked River would deny the mill re-development application the use of 1847 State-deeded legal water rights;
4. Scribner's Mill Inc has property rights under the Mill Act (Title 38 MRSA §651) to construct a dam and use the water, however we need a permit from MDEP and the Corps of Engineers.
5. The negotiation process regarding the dam application should be allowed to continue to completion; the decision to reclassify should at least be delayed until the pending application by Scribner's Mill Preservation, Inc.(SMP, Inc) has been acted upon;
6. The Scribner's Mill site is historically significant; The Scribner's Mill is one of only 25 Up/Down Sash Saws in the U.S. and of these 25, is the only one with the potential to demonstrate early lumbering practices and the production of actual wood products;
7. It is unique because it is still on the original site; original or exact replicas of buildings, original 1847 equipment and has the potential to use the original source of power;
8. The site is a cultural resource of national importance that can provide valuable place-based and hands-on learning experiences. This mill will demonstrate a "green" technology, of particular importance in the context of the current energy crisis; local third grade students have been privileged to visit Scribner's Mill to learn about their past.
9. Too much of our past has already been lost; this site is important for our local cultural heritage; much of the wood for local, historically important houses, churches, schools and silos was milled at the 150 year old Scribner's Mill site. The mill site is a center-piece of the Town of Harrison's "Back to the Past" celebration, which brings hundreds of visitors to Town.
10. All water used mechanically will be returned to the River;
11. Adequate flows for fish passage will be present in the River and it could be argued that this is the most "fish-friendly" way to operate a saw-mill given the environmental effects of diesel or coal-fired power plants ;
12. Opposition to this project seems to be reacting to mis-information and scare tactics; there is no reason a water-powered mill cannot coexist with fish populations and the fishing industry
13. A parallel situation was resolved in Oregon with the Thompsons's Mills project where the mill's water use was limited to "demonstration milling" and solutions were found for other issues via an Inter-agency Task Force; fish passage issues should be accomplished in 2009.
14. Those interested in the Scribner's Mill project were not given proper notice about the reclassification initiative

MDEP Response:

MDEP agrees with comments submitted "In Support", that the Crooked River is a natural resource of exceptional value to the State of Maine, particularly in terms of the native fisheries it supports and the economic benefits, to the region, from recreational uses of the River. MDEP also has heightened interest in activities in the Crooked River watershed due to concerns with source-water protection pertaining to the River's significance to the water supply for the City of Portland and surrounding communities. MDEP also recognizes the exceptional historical value of the Scribner's Mill project but our recommendation to support reclassification to Class AA has the objective to establish management goals for the River that optimize overall public benefits. Periodic review of water quality classification is required by Maine water quality law, to determine if existing class assignments are appropriate (Title 38 MRSA §464.2). This law states:

"The Legislature finds that the proper management of the State's water resources is of great public interest and concern to the State in promoting the general welfare; in preventing disease; in promoting health; in providing habitat for fish, shellfish and wildlife; as a source of recreational opportunity; and as a resource for commerce and industry. The Legislature declares that it is the State's objective to restore and maintain the chemical, physical and biological integrity of the State's waters and to preserve certain pristine state waters."

MDEP's review of the upgrade proposal is based upon the water quality merits of the proposal which document the Crooked River's status relative to the Legislative intent, as stated above, *"to preserve certain pristine waters"*. The Crooked River is one of only five Class AA rivers in southern Maine. The AA classification is designed to preserve the "pristine" natural values of Maine's aquatic resources by prohibiting any wastewater discharges and requiring that AA rivers be "free-flowing and natural", among other provisions.

Regarding Comment #2-In Opposition, we do not agree that the Department has exercised a bias by proceeding with the reclassification initiative. Reclassification has been conducted as a separate proceeding, distinct from proceedings carried out in the Department's review of the permit application on the Crooked River that was submitted under the Maine Waterway Development and Conservation Act. For purposes of making water reclassification recommendations to the Legislature, the Board need not consider or decide the effect of any future statutory reclassification on pending permit applications or issued licenses.

With regard to Comment #3-In Opposition that "the action to upgrade the Crooked River would deny the mill re-development application the use of 1847 State-deeded legal water rights," we note, as acknowledged in Comment #4-In Opposition, that the exercise of any water rights is subject to receipt of a valid permit from Maine DEP.

Regarding the adequacy of notice to the public about the reclassification process the Department regrets that key individuals and organizations were not aware of the public process. Outreach actions of the Department included 30 and 40 direct outreach telephone conversations with appropriate representatives of towns and interest groups in Maine with waterbodies proposed for changes in classification. Outreach specific to the Crooked River included contacting the Town Clerk of Harrison, Maine who directed the MDEP to the Harrison code enforcement officer who was contacted by telephone and email. Follow up emails were sent directly to all call recipients and a website link and attachments showing the 2008 proposals were provided. Additionally the Department emailed information about the reclassification proposals to a distribution list of over 100 contacts throughout Maine. The Department also submitted newspaper press releases prior to the public meetings in June and placed a legal public notice prior to the Board Hearing in October.

Proposal for South River (The Nature Conservancy)

South River and its tributaries, tributary to the Ossipee River, Parsonsfield – upgrade from Class B to Class A (4 miles)

Recommend revising § 467.12.B as follows:

B. Saco river, tributaries, those waters lying within the State – Class B unless otherwise specified.

(4) Ossipee River Drainage, those waters lying within the State - Class B unless otherwise specified.

(b) South River and its tributaries (Parsonsfield), those waters lying within the State – Class A

General comments in support expressed by: Josh Royte, The Nature Conservancy; Nick Bennett, Natural Resources Council of Maine; Steve Hinchman, Conservation Law Foundation; Landis Hudson, Maine Rivers
No comments in opposition

Proposal for Little River (The Nature Conservancy)

Little River and its tributaries, tributary to the Salmon Falls River. Berwick, No. Berwick, Lebanon - Upgrade Class B to Class A (21 miles)

Recommend revising § 467.16.B as follows:

B. Salmon Falls River, tributaries, those waters lying within the State - Class B unless otherwise specified.

(1) Chicks Brook (South Berwick, York) - Class A.

(2) Little River and its tributaries (Berwick, North Berwick, Lebanon) – Class A

General comments in support expressed by: Josh Royte, The Nature Conservancy; Nick Bennett, Natural Resources Council of Maine; Steve Hinchman, Conservation Law Foundation; Landis Hudson, Maine Rivers
No comments in opposition

Proposal for Beaver Brook (The Nature Conservancy)

Beaver Brook and its tributaries, T14 R6 WELS, T14 R5 WELS, T13 R5 WELS, Portage Lake, Ashland, Castle Hill – upgrade from Class B to Class A (West Branch, 13 miles, East Branch, 10 miles, below confluence, 9 miles)

Recommend revising § 467.15.C(2) as follows:

(2) Aroostook River, tributaries, those waters lying within the State - Class A unless otherwise specified.

(l)Beaver Brook and its tributaries (T14 R6 WELS, T14 R5 WELS, T13 R5 WELS, Portage Lake, Ashland, Castle Hill) – Class A.

General comments in support expressed by: Josh Royte, The Nature Conservancy; Nick Bennett, Natural Resources Council of Maine; Steve Hinchman, Conservation Law Foundation; Landis Hudson, Maine Rivers
No comments in opposition

Proposal for Gardner Brook (Steve Sutter, citizen)

Gardner Brook and its tributaries, T14 R5 WELS, T13 R5 WELS, Wade – upgrade from Class B to Class A (8 miles)

Recommend revising § 467.15.C(2) as follows:

(2) Aroostook River, tributaries, those waters lying within the State - Class A unless otherwise specified.

(m) Gardner Brook and its tributaries (T14 R5 WELS, T13 R5 WELS, Wade) – Class A.

General comments in support expressed by: Nick Bennett, Natural Resources Council of Maine; Steve Hinchman, Conservation Law Foundation; Landis Hudson, Maine Rivers; Steve Sutter, citizen
No comments in opposition

Proposal for Violette Stream (The Nature Conservancy)

Violette Stream and its tributaries, from source to the confluence with Caniba Brook, T17 R3 WELS, Van Buren – upgrade from Class B to Class A (6 miles, approx.)

Recommend revising § 467.15.F as follows:

F. St. John River, minor tributaries, those waters lying within the State - Class A unless otherwise specified.

(1) Except as otherwise classified, all minor tributaries of the St. John River entering below the international bridge in Fort Kent, those waters lying within the State - Class B, unless otherwise specified.

(7) Violette Stream and its tributaries, from source to the confluence with Caniba Brook (T17R3, Van Buren) – Class A.

General comments in support expressed by: Josh Royte, The Nature Conservancy; Nick Bennett, Natural Resources Council of Maine; Steve Hinchman, Conservation Law Foundation; Landis Hudson, Maine Rivers
No comments in opposition

Proposal for Pemaquid River (The Nature Conservancy)

Pemaquid River, Bristol, including tributaries, freshwater riverine sections below Pemaquid Pond - upgrade from Class B to Class A (6 miles)

Recommend revising § 468.4 as follows:

4. Lincoln County. Those waters draining directly or indirectly into tidal waters of Lincoln County entering above the Chops, with the exception of the Sheepscot River Basin and tributaries of the Kennebec River Estuary and Merrymeeting Bay - Class B unless otherwise specified.

D ~~A~~. Bristol.

(1) Pemaquid River and its tributaries, all freshwater sections below Pemaquid Pond – Class A.

General comments in support expressed by: Josh Royte, The Nature Conservancy; Nick Bennett, Natural Resources Council of Maine; Steve Hinchman, Conservation Law Foundation; Landis Hudson, Maine Rivers
No comments in opposition

Proposal for tributaries to the Ducktrap River (The Nature Conservancy)

Ducktrap River, selected tributaries: Tucker Brook. Lincolnville - Class B to Class A (1.2 miles) Black Brook. Lincolnville - Class B to Class A (3.5 miles) Kendall Brook. Lincolnville - Class B to Class A (1.5 miles)

Recommend revising § 468.7 as follows:

7. Waldo County. Those waters draining directly or indirectly into tidal waters of Waldo County - Class B, unless otherwise specified.

A. Ducktrap River from the outlet of Tilden Pond to tidewater - Class AA.

D ~~B~~. Black Brook (Lincolnville) - Class A.

E ~~C~~. Kendall Brook (Lincolnville) - Class A.

F ~~D~~. Tucker Brook (Lincolnville) – Class A.

General comments in support expressed by: Norm Dube, Maine Dept. Marine Resources; Mark Whiting, MDEP; Nick Bennett, Natural Resources Council of Maine; Steve Hinchman, Conservation Law Foundation; Landis Hudson, Maine Rivers; John Burrows, Atlantic Salmon Federation.
Paraphrased comments in support:

1. Upgrades for Tucker, Black Brook and Kendall are justified
2. All tributaries rank high for salmon and brook trout quality
3. Black Brook has some of the best Atlantic salmon rearing areas in the watershed;

No comments in opposition

COMMENTS RECEIVED ON RECOMMENDED STATUTORY CLARIFICATION OF ASSIGNED CLASSIFICATION BY MAINE BEP

Proposal for Grand Falls Flowage (MDEP)

Grand Falls Flowage, St Croix drainage. Princeton, Indian TWP Reservation, Baileyville, Fowler TWP - clarify that GPA classification (not riverine Class B) applies

Recommend revising § 467.13 as follows:

13. St. Croix River Basin.

A. St. Croix River, main stem.

(2) Those waters ~~of the~~ impounded in the Grand Falls Flowage including those waters between Route 1 (Princeton and Indian Township) and ~~Black Cat Island~~ Grand Falls Dam - Class ~~B~~ GPA .

General comments in support expressed by: Steve Hinchman, Conservation Law Foundation;
Comments neither for nor against:
William Beckwith, US Environmental Protection Agency

- What is its attainment status with regard to the Class B DO criteria that are currently applicable, and has there been any analysis against Maine's biological criteria?

MDEP Response:
The dissolved oxygen profile of Grand Falls Flowage (GFF) demonstrates it acts like a lake. The maximum depth of dissolved oxygen measurement is about 6 meters and the maximum measured depth on available maps is a little over 7 meters. GFF has a very dendritic shape with numerous "fingers" of relatively isolated water in the embayments of tributaries, thus there could be areas of lower dissolved oxygen due to characteristics of basin shape and hydrology; however MDEP would have no interest or ability to intervene to change any naturally occurring patterns of low DO levels in GFF if not caused by human activities. The clarification that this is all Class GPA would function to make standards and prohibitions on activities more stringent, rather than loosening management standards on the waterbody. No discharges are allowed to GPA waters thus there can be no loading that might lower DO. GPA Shoreland Zoning and Natural Resource Protection Act provisions for lakes are in general more stringent than those for Class B rivers and streams. MDEP does not have biomonitoring data on Grand Falls Flowage.

Proposal for Long Creek (City of Westbrook)

Long Creek, So. Portland, Westbrook; propose clarification of a segment of Long Creek in Westbrook. Clarify that Class C applies (0.3 miles approx)
Recommend revising § 468.1 as follows:

1. Cumberland County. Those waters draining directly or indirectly into tidal waters of Cumberland County, with the exception of the Androscoggin River Basin, the Presumpscot River Basin, the Royal River Basin and tributaries of the Androscoggin River Estuary and Merrymeeting Bay, entering above the Chops - Class B unless otherwise specified.

J. Westbrook

1. Long Creek, mainstem only - Class C

Paraphrased comments received in opposition:
Steve Hinchman, Conservation Law Foundation

1. The anti-degradation provisions of the U.S. Clean Water Act (CWA) require that existing uses and the water quality necessary to sustain those uses must be protected;
2. Further, a state may not downgrade the class of a segment if that would eliminate or impair an existing use.
3. Conservation Law Foundation (CLF) opposes the recommendation to clarify the classification of Long Creek; it was designated Class B in Westbrook in 1990; there is no ambiguity in the classification and the Department does not contend the stream was mislabeled.
4. There is no process to "clarify" a longstanding classification;
5. The board may not recommend downgrading waters that fail to attain a designated use unless it has been determined through a Use Attainability Analysis (UAA) that that use is not attainable through effluent limits or national performance standards.

6. There has been no attempt to regulate stormwater discharges on Long Creek
7. CLF has filed a petition with US EPA seeking to determine if stormwater discharges (from hotels, golf courses, office buildings, big-box stores) contribute to non-attainment in Long Creek
8. The State must require pollution controls and determine whether Class B is legally attainable, and then conduct a UAA before a downgrade can be proposed.
9. The Board should reject the proposed lowering of standards and instead direct the Department to implement stormwater controls as needed to meet water quality standards.

MDEP Response:
The Department supports the City of Westbrook proposal to manage all of the Long Creek mainstem as Class C because in extensively developed urban areas such as Long Creek, Class C represents a realistic and attainable goal and the short Class B segment cannot be expected to attain Class B standards unless the entire upper Class C segment is restored to Class B as well. We do not agree that the current classification is unambiguous; it is the Department's conclusion that the portion of Long Creek that flows through Westbrook was "mis-labeled". To explain, prior to the 1986 revision of water quality standards all of Long Creek was Classified C as stated in the Protection and Improvement of Maine Waters 1971, Title 38 Chapter 3 §369 Coastal Streams: Cumberland County:

1. *"All coastal streams, direct and indirect segments thereof, draining to tidewater of Cumberland County, not otherwise specified - Class C*

- In the1986 revision of water quality standards, §369 was rescinded and replaced with §468. At that time all of Long Creek remained as Class C per §468.1.A . Class C was used as the default class for Cumberland County and those waters that were of higher recommended quality continued to be identified by segment.
- In 1990, classifications in §468 were revised and rewritten using a format where Class B was established as the default classification for Cumberland County (to be consistent for all counties in the state), and waters of higher or lower quality were identified by segment, or in the case of certain municipalities (Portland, South Portland, Scarborough) by all segments in those municipalities. Small headwater segments crossing municipal boundaries were not specifically identified as changed in the general default language, and thus the confusion of class assignment for certain stream fragments that cross town boundaries or serve as town boundaries.

Two examples, in addition to Long Creek, of such classification fragments are included in this ReClassification proposal: Trout Brook, where half the stream channel is Class B and half the stream channel is Class C, as directed by town boundary class defaults; and the Nonesuch River which changes from Class C to Class B and then back to Class C across town lines within the distance of less than 1 mile in Scarborough and Gorham (see following two proposals).

The history of Long Creek is that it had always been Class C, for its entirety, as far back as Maine has had a classification system (1950s), until the change of format in 1990. It is reasonable to assume that the intent, by noting the specific designation waters in South Portland and Portland as Class C by the Legislature, was that Long Creek would continue to be managed as Class C. It would not have been the intent of the Department to recommend these small stream fragments should have a different management class or that these small fragments could be effectively managed with multiple classes. This is a simple error that occurred when the law was revised to improve consistency, but which of itself, created inconsistency for certain streams.

We agree with comments #1 and #2 regarding antidegradation protection of existing uses and the need for Use Attainability Analyses prior to lowering the standards that apply to a waterbody. However the State has clarified illogical or erroneous classifications of waterbodies in the past, where the Department deemed that management activities would be clarified and no change in actual water quality would result from the change. For example, in 2003 the Department proposed and the BEP and Legislature supported changing the classification of the Dennys River from Class AA to Class B in a small tidal section. It was found that tidewater extended upstream of the Route 1 boundary of the Class AA segment therefore pushing "Class B water" upstream into the Class AA reach. The Class AA to Class B boundary was moved upriver about 0.5 mile to address this error. This change was made without declaring a downgrade and without a UAA because there was no actual change in water quality management goals for the segment. In the case of Long Creek, the 0.3 mile long segment in question is currently on the 303d list of impaired waters and *does not* attain Class B standards. The Department is not proposing to change the B classification of the tributary in Westbrook that enters from the north. The mainstem of Long Creek is Class C above and below the segment in question. MDEP practices a data-driven monitoring and assessment process that has considerable credibility. It requires demonstration of attainment of biological criteria, dissolved oxygen and bacteria standards of the assigned classification. From a technical basis Long Creek cannot be expected to attain Class B in the short segment in Westbrook only. To attain Class B standards for the short Class B segment in Westbrook would inevitably require restoration actions on the Class C upstream waters that would in effect impose an upgrade to Class B standards for the segments of Long Creek in South Portland. A Use Attainability Analysis requires a significant investment of human and fiscal resources to accomplish and the 0.3 mile Class B segment of Long Creek would not be a candidate for Use Attainability Analysis. In most instances the Department would agree with the statements made in comments #5-9 but, as described above, unique circumstances exist for Long Creek that led the Department to reach the conclusions that it did.

Proposal for Trout Brook (MDEP)

Trout Brook. Cape Elizabeth, South Portland – clarify Class C status (0.7 miles)

Recommend revising § 468.1 as follows:

A-1. Cape Elizabeth

(1) Trout Brook, those waters which form the town boundary with South Portland – Class C

D. South Portland.

(1) All minor drainages, unless otherwise specified - Class C.

(2) Trout Brook, downstream of the first point where the brook becomes the town boundary between South Portland and Cape Elizabeth – Class C.

No comments received

Proposal for Nonesuch River (MDEP)

Nonesuch River, tributary to the Fore River. Scarborough, Gorham –Clarify that Class B applies to upper Nonesuch River

Recommend revising § 468.1 as follows:

1. Cumberland County. Those waters draining directly or indirectly into tidal waters of Cumberland County, with the exception of the Androscoggin River Basin, the Presumpscot River Basin, the Royal River Basin and tributaries of the Androscoggin River Estuary and Merrymeeting Bay, entering above the Chops - Class B unless otherwise specified.

C. Scarborough.

(1) All minor drainages - Class C unless otherwise specified.

(2) Finnard Brook - Class B.

(3) Stuart Brook - Class B.

(4) Nonesuch River- from the headwaters to a point 0.5 mile downstream of Mitchell Hill Rd crossing – Class B.

General comments in support expressed by: Betty McInnes, representing the District Board of the Cumberland County Soil and Water Conservation District; Nick Bennett, Natural Resources Council of Maine; Steve Hinchman, Conservation Law Foundation; Landis Hudson, Maine Rivers; John Burrows, Atlantic Salmon Federation.

No comments in opposition

Proposal for tributaries of the Stroudwater River (MDEP)

Stroudwater River, tributaries: South Branch Stroudwater River. Scarborough – clarify Class B status (0.5 miles); Fogg Brook. Scarborough – clarify Class B status (1.2 miles)
Silver Brook. Scarborough – clarify Class B status (2.5 miles)

Recommend revising § 468.1 as follows:

B. Portland.

(1) All minor drainages unless otherwise specified - Class C.

(2) Stroudwater River from its origin to tidewater, including all tributaries - Class B.

C. Scarborough

(5) Stroudwater River from its origin to tidewater, including all tributaries - Class B.

General comments in support expressed by: Betty McInnes, representing the District Board of the Cumberland County Soil and Water Conservation District; Nick Bennett, Natural Resources Council of Maine; Steve Hinchman, Conservation Law Foundation; Landis Hudson, Maine Rivers; John Burrows, Atlantic Salmon Federation.

Specific comments in support: Lee Edwards, Land and Water Use Committee of the Stroudwater Village Association;

1. DEP should place a higher priority on restoration of the Stroudwater River
2. Any improvements in water quality on the Stroudwater River will also improve the Fore River and Casco Bay
3. State and federal action on the Stroudwater Rver is long overdue

No comments in opposition

Proposal to change classification landmark, St. John River (MDEP)

St. John River. Fort Kent – Change the landmark used to designate class change from Class A to B

Recommend revising § 467.15 as follows:

15. St. John River Basin.

A. St. John River, main stem.

(2) From a point located one mile above the foot of Big Rapids in Allagash to a point ~~one~~ **one-half** mile above the confluence with the Fish River ~~the international bridge~~ in Fort Kent, those waters lying within the State, including all impoundments - Class A.

(3) From a point ~~one~~ **one-half** mile above the confluence with the Fish River ~~the international bridge~~ in Fort Kent to the international bridge in Madawaska, those waters lying within the State, including all impoundments - Class B.

Comments neither for nor against:

William Beckwith, US Environmental Protection Agency

- Would the amount of river miles of Class A be lowered with the new landmark?
- If so can you designate the transition as "the measured distance from the Fish River to the former location of the International Bridge"?

MDEP Response:

In response to this suggestion the Department has revised the draft language above to make the classification transition correspond to the currently existing location of the boundary, which is one-half mile upstream of the Fish River confluence. The Department agrees that the proposal as originally worded would have changed the amount of Class A versus Class B river miles by a small amount.

No comments in opposition

Proposal to conduct a Use Attainability Analysis of Jepson Brook (City of Lewiston)

Jepson Brook, tributary to the Androscoggin River, petition for Use Attainability Analysis (UAA) to determine highest attainable goals; currently Class B (impaired). Based on findings of the UAA, expected future changes in designated uses of the channelized section may be a lower, UAA-determined goal condition (2.09 miles); and the classification of the remaining natural channel section may change from Class B to Class C (0.17 miles).

Paraphrased comments received in support:

David Jones, Director of Public Services, City of Lewiston

1. Channelization and alteration of Jepson Brook was originally begun in the 1960's due to severe flooding of residential areas
2. The Class B classification was assigned as a default, not based on actual monitoring of the stream; it has had problems for a long time;
3. Removal of the channelized sections of the stream is not economically feasible;
4. Most of the stormwater for a big part of the City goes to Jepson Brook and then to the Androscoggin River
5. The City of Lewiston agrees that a Use Attainability Analysis is needed in Jepson Brook

Paraphrased comments received in opposition:
Steve Hinchman, Conservation Law Foundation

1. The Department has never tried to implement effluent controls on stormwater discharges to Jepson Brook, nor implement channel restoration or "daylighting" of underground sections to improve water quality, thus the Department has no basis for determining that attainment is not possible.
2. The Department should first identify, through a TMDL process and/or residual designation authority, those discharges that contribute to non-attainment to identify where pollution controls should be implemented.
3. The Department should also analyze potential modifications to restore or improve hydrologic conditions.
4. The Board may not recommend downgrading waters that fail to attain a designated use unless it has been determined through a Use Attainability Analysis (UAA) that that use is not attainable through effluent limits or national performance standards.
5. The UAA should only be used as a measure of last resort.

MDEP Response:
The purpose of a Use Attainability Analysis (UAA) is to determine the highest attainable condition of a waterbody, balanced against the socio-economic costs required to achieve it. Regarding Comment #1-In Opposition, we disagree that the Department has no basis for determining that attainment is not possible. The Department's judgment, based on 20 years of biological assessment experience, is that Class B biological criteria cannot be attained due to the extent of channelization and watershed impervious cover. The narrative aquatic life standard for Class B requires that there be "no detrimental change in aquatic life". Jepson Brook is severely impaired due to the elimination of habitat for aquatic life caused by confinement of the stream in a concrete channel. More than 80% of the length of the stream is channelized with underground channelization making up 27% of the length. Only the lower 800 feet before the confluence with the Androscoggin River remains as natural channel. Other causes of impairment include the effects of a highly altered flow regime, poor water quality, and absence of upstream refugia that could provide a source for re-colonization of aquatic life. The Garcelon Bog headwaters are less developed than the lower watershed but the Bog does not provide a source of stream-adapted organisms.

The suggestion that the Department or the City of Lewiston should first embark on channel restoration, "daylighting" and/or removal of stormwater discharges prior to embarking on a UAA is not tenable due to the exorbitant costs associated with those remedies and the remoteness of success achieving Class B standards. Moreover, the UAA process itself will require a thorough evaluation of potential remedies. While effluent controls on stormwater might be expected to lower levels of bacteria and toxic chemicals in Jepson Brook it will not result in attainment of all standards of Class B. 33% of the Jepson Brook watershed is covered by impervious surfaces (IC) and the MDEP Percent Impervious Cover TMDL Guidance has documented that Class B biocriteria attainment rarely occurs above 8%. Moving directly to a UAA is a more efficient process that will address questions raised by Conservation Law Foundation.

The Department recognizes that a UAA is required to justify lowering the designated uses of a waterbody and to establish what is the highest attainable use of the waterbody, within the context of the socio-economic realities that exist. We agree with Comment #5-In Support that a UAA is needed in Jepson Brook to establish the best management outcome for the Brook and to determine the highest attainable uses.

COMMENTS RECEIVED ON PROPOSALS NOT SUPPORTED BY MAINE BEP

Proposal for Lower Androscoggin River (Friends of Merrymeeting Bay)

Androscoggin River mainstem, Lisbon Falls, from Durham Boat Launch or Worumbo Dam, to mouth of the Androscoggin in Merrymeeting Bay (line between Pleasant Pt., Topsham and North Bath). Propose Class C to Class B (14 miles approx).

Paraphrased comments received in support of the Lower Androscoggin proposal
Ed Friedman, Friends of Merrymeeting Bay; Laurence Faiman and DeWitt John, Androscoggin River Alliance; Angela Twitchell, Brunswick Topsham Landtrust; John Berry, Merrymeeting Audubon Society; Steve Hinchman, Conservation Law Foundation; Nick Bennett, Natural Resources Council of Maine; Peter Milholland, Friends of Casco Bay; Donald Gerrish, Town of Brunswick; Board of Selectmen, Town of Durham; James A. Bennett, City of Lewiston; Michelle Jones and Board of Selectmen, Town of Topsham; Normand Lamie, Auburn Sewerage District; Elizabeth Bouve; Susan Chadima, Monty and Moe Kalloch; William Van Twisk; Ruth Gabey; Helen c. Watts, PE, SECB; Jean Baker Stein; Lois Kilby-Chesley; Stephen Bamberger; Jim Gillies; Ralph Pope; Chester Gillis; Kathryn Thorson, private citizens and members of FOMB

1. Friends of Merrymeeting Bay (FOMB) has 6 yrs of water quality data showing attainment of Class B dissolved oxygen standards; bacteria criteria are nearly always in attainment;
2. FOMB data has been used by MDEP as the basis for the upgrade of other rivers in the past (e.g., the lower Kennebec River)
3. FOMB has collected high quality data and has followed good quality assurance practices; the data should be used to justify this upgrade;
4. Friends of Casco Bay (FOCB) has assisted FOMB in providing training and sample collection protocols, kit preparation and quality assurance measures and has re-trained oversight of FOMB volunteers since 1999; Friends of Casco Bay has had an EPA approved Quality Assurance Project Plan (QAPP) since 1995
5. Both FOCB and FOMB collect DO, pH, temperature, salinity, and water clarity; FOMB also collects turbidity and coliform data.
6. The CWA and Maine water quality law state "where existing water quality standards specify designated uses less than those which are presently being attained the state *shall* revise its standards to reflect the uses actually being attained"; thus, if a given waterbody meets a classification higher than its designated use the Board *must* recommend that it be upgraded;
7. It is illegal and illogical for the Department to require a showing of attainment of WQC for a proposed higher class at "maximum licensed loads"- no facilities operate at maximum licensed loads. The Board's analysis must be based on *existing* water quality, not modeled water quality at maximum loads.
8. Class B standards are currently being attained so it is our understanding that no additional expenditures, now or in the future would be required to accomplish this upgrade. There will be no adverse economic impacts to existing industrial uses of the Androscoggin River because Class B has been met for years;
9. Clean rivers enhance local economy and provide an economic boon to surrounding communities; can't understand how it could have an adverse impact; the Androscoggin River deserves to finally be on par with the other important rivers in the state.

No comments in opposition

MDEP Response:

The Department does not agree that the six years of data collected by Friends of Merrymeeting Bay (FOMB) demonstrate attainment of Class B standards in the Lower Androscoggin River. Unfortunately FOMB did not seek any information about data quality and sampling design requirements needed to justify a water quality classification upgrade prior to embarking on their sampling program or submitting their upgrade proposal. Data were not shared or discussed with MDEP until the proposal was submitted on June 30, 2008. This resulted in lack of opportunities for MDEP to advise FOMB about sampling design requirement and data quality objectives for data intended for MDEP decision-making. The Department has a long standing policy that data to be used in formal water quality assessment decisions (such as 305b or 303d "impaired waters" listing or ReClassification) require, at a minimum, technical consultation with MDEP in the developmental stages and approval of the intended sampling design approach, data elements, and provisions for data quality assurance. Alternatively MDEP will accept an EPA-approved Quality Assurance Project Plan (QAPP), which is required of entities receiving federal water quality funding. These practices have been followed by Friends of Casco Bay (EPA-approved QAPP), the Saco River Corridor Commission, the Sheepscot Valley Conservation Association, Presumpscot Riverwatch and the Penobscot Indian Nation, among others, and consequently the Department regularly uses available data from such organizations when making assessment decisions. In regard to comment #2, FOMB data was helpful as corroborative evidence; however the upgrade of the Kennebec River in 2002 was based on a well-calibrated river model using MDEP data from two intensive surveys taken over two sampling years.

MDEP agrees that the data points that have been collected by FOMB show attainment of Class B DO criteria at sampled times and locations. However, the sampling design followed by FOMB is insufficient to confirm attainment throughout the segment at critical conditions. Maine water quality law allows for wastewater discharges that do not cause the receiving waters to fall below the standards of their designated classification (38 MRSA §464(4). Maine water quality law (38 MRSA §464(4)(D) and the MDEP antidegradation policy (MDEP Antidegradation memo from Brian Kavanah 6/13/2001, Doc.#DEPLW0267) specifically require the MDEP to evaluate discharger compliance with water quality criteria at "critical conditions" using actual or modeled 7Q10 flows and licensed loads,. Models are developed based on licensed loads and low river flows in order to acquire a clear understanding of the effects of critical conditions to ensure that resources will be protected for all allowed activities.

FOMB maintains 3 sampling stations (apparently at boat ramps- no specific site description was provided). Dissolved oxygen readings are apparently taken from wadable depths (no depth records are provided). The Department has not initiated an intensive monitoring survey of the Lower Androscoggin River due to strategic planning decisions relative to other priority segments of the Androscoggin and other major rivers. Thus, there is no water quality model for the Lower Androscoggin River, there is no depth transect data from impounded areas, no cross-sectional transect data and no diurnal dissolved oxygen data. Further no analysis has been conducted to examine correlations between loading data and observations of attainment, nor any examination of correlation of observed DO attainment with river flow data. There is also no recent biomonitoring data to confirm attainment of aquatic life uses.

MDEP has cause for concerns about attainment because portions of the segment are impounded by two dams downstream of the Worumbo Dam (Pejepscot Dam and Brunswick Dam) raising concerns about the effect of altered hydrologic conditions on dissolved oxygen attainment and potentially on attainment of biocriteria as well. The Lower Androscoggin also receives input from several major Class C tributaries that have significant eutrophication/nutrient issues (Little Androscoggin River; Sabattus River) and issues

with licensed loads into the upper river are well-recognized. The Lower Androscoggin River does not receive significant inputs from high water quality tributaries that might ameliorate these combined effects.

Due to the above considerations, we do not agree that it is responsible or accurate to make the contention in Comment #8 that "no additional expenditures, now or in the future" would be required to accomplish this upgrade. MDEP has not conducted an analysis of what provisions might be required to secure attainment of the standards and criteria for Class B under critical conditions, as required. There exists a real possibility that additional expenditures would be necessary to improve wastewater treatment for some or all dischargers on the Androscoggin River.

The Department strongly agrees that clean, healthy, aesthetically-appealing rivers provide many tangible and intangible benefits to the State and to local economies and citizens. The Department's position is that progress toward that end requires a well-developed understanding of the actual economic impact, for all users of the river, of imposing more stringent water quality standards on any proposed segment.

The Department would propose working directly with FOMB and other citizen's organizations on the Androscoggin to craft an ambient water quality monitoring program under the auspices of our newly launched Volunteer River Monitoring Program. This program will formalize and expand our relationship with citizen organizations by providing technical assistance and equipment for water quality monitoring. We would welcome the participation of FOMB and others on the Androscoggin in this effort.

Proposal for the Aroostook River

Segment A. Aroostook River from its confluence with Presque Isle Stream to a point located 3.0 miles upstream of the intake of the Caribou water supply, including all impoundments. Presque Isle, Caribou - Class C to Class B (10 miles)
Segment B. Aroostook River from a point located 100 yards downstream of the intake of the Caribou water supply to the international boundary, including all impoundments. Caribou, Fort Fairfield - Class C to Class B (18 miles)

Paraphrased comments received in support of the submitted proposal:
Steve Sutter, Presque Isle, Maine; Pamela and Wayne Sweetser, Presque Isle, Maine; Nick Bennett, Natural Resources Council of Maine; Steve Hinchman, Conservation Law Foundation;

1. The Aroostook River was proposed for upgrade from Class C to Class B in 2002 and 2008;
2. The 2002 Aroostook River Data Report shows that all sampled locations from Presque Isle Stream to the Canadian border met and often exceeded Class B dissolved oxygen (DO) standards of 7 ppm.
3. The USGS site near Caribou also recorded July and August DO readings of 8.4 and 9, respectively.
4. Paul Mitnik stated that the Aroostook River water quality modeling report was based on an excellent 7Q10 dataset and resulted in a well-calibrated model that predicted attainment of Class B DO from Presque Isle to Caribou at maximum loads .
5. A risk of algae blooms was predicted by the model but algae blooms are already prohibited by the "swimmable" standard and should not be used to prohibit an upgrade;
6. The modeling report states that phosphorus should be reduced by more than 50% to eliminate algae blooms; the most important sources of phosphorus are McCain Foods in Presque Isle;

7. If phosphorus has not been reduced since the 2004 modeling report recommendations then the Board should be concerned that MDEP has failed to carry out its responsibility to protect Aroostook River water quality
8. BOD_5 and TSS standards were issued in 1977 by US EPA and treatment technologies have undoubtedly improved since then. Most recent EPA data shows BOD_5 loads of discharges on the Aroostook are most likely below 35% of maximum licensed loads.
9. The river showed attainment of Class B biocriteria one mile downstream of McCain Foods in August 2001 during a drought that resulted in 7Q10 flows;
10. In August 2001 total phosphorus (TP) was measured by MDEP at 3 stations between Presque Isle and Caribou when McCain was discharging at 76% of licensed loads; the range of TP was 11-26 ppb. According to Draft phosphorus limits proposed by MDEP for the new nutrient criteria rule, the measured phosphorus concentration in the Aroostook River in August 2001 was closer to Class A phosphorus criteria than Class B.
11. MDEP's assertions are weak that an upgrade requires attainment at maximum loadings and under a *pending* nutrient criteria scenario but they are being used to thwart a strong upgrade proposal;
12. Waste assimilation is not a designated use of Maine waters
13. This upgrade proposal should be recommended to the Legislature based on Title 38 MRSA 464.4.F(4) that states: "When the actual quality of any classified water exceeds the minimum standards of the next higher class that higher water quality must be maintained and protected. The Board shall recommend to the Legislature that that water be reclassified in the next higher class."
14. We realize that it may increase taxes and result in loss of profits to industry to find alternative repositories for industrial and human waste but as ordinary citizens whose only agenda is an environmentally viable future for our children and grandchildren that includes clean air, water and soil we earnestly support the upgrades of the Aroostook River.
15. If the Board adopts the MDEP recommendations and does not propose the Aroostook for upgrade then it should require MDEP to explain what it has done to improve water quality in the Aroostook River during the last four years and to submit a written plan and commitment for upgrade by a date certain.

Paraphrased comments received in opposition to the submitted proposal:
Douglas Hahn, McCain Foods; Nathan Berry and Barbara Pitcairn, LEAD: Leaders Encouraging Aroostook Development; Alan Hitchcock, Caribou Utilities District; Timothy Hobbs, Maine Potato Board

1. A healthy river has a beneficial effect on the economy and tourism of Aroostook County and we do not oppose improving water quality
2. The re-designation of the segment of the Aroostook River from Washburn to Caribou is premature due to an incomplete picture of the river's health and the undefined impact on McCain Foods and other river dischargers
3. Upcoming nutrient criteria, mandated by US EPA, create a situation of uncertainty and make it necessary to conduct further biomonitoring and nutrient studies to predict whether the Aroostook will meet Class B or even Class C nutrient criteria;
4. The struggling economy and increased fuel costs make it imperative to be realistic about any new regulations that could affect the ability of industries to operate profitably in Aroostook County
5. An upward reclassification may have serious implications for future industrial development in towns and cities along the Aroostook River.
6. The City of Caribou formerly had 3 potato processing plants discharging to the Caribou Utilities District (CUD) treatment plant and CUD still retains the right to petition MDEP for an increase in its current permit limits if and when any new industry locates in Caribou; reclassification may negatively impact this effort.

7. Upward reclassification is not reversible.

MDEP Response:
We agree that upgrade of the Aroostook River from Presque Isle to Caribou should occur as soon as factual information can be obtained about what would be required of dischargers in order for the River to attain all applicable standards and criteria for Class B. The 2004 Aroostook River Modeling Report showed sampled and modeled attainment of dissolved oxygen criteria for Class C and Class B at all sampled locations. The potential for lower dissolved oxygen levels than measured or modeled is a possibility due to wide diurnal swings of dissolved oxygen (6-10 mg/L) caused by the high nutrient loads, but the risk of non-attainment in terms of the upcoming guidance for nutrient indicators is the more immediate cause for postponing upgrade to Class B. Maine's draft nutrient indicators are based not only on nutrient concentrations but also on evidence of the *effects* of excess nutrients on system responses such as excessive periphyton growth, algae blooms, abnormal pH and other indicators of detrimental effects. The high levels of plant growth (periphyton and floating algae) that are caused by high available nutrients often cause a paradoxical effect of lowering water column nutrient concentrations because the plant growth rapidly strips the dissolved phosphorus from the water. For this reason, the somewhat low phosphorus concentrations observed in the Aroostook River do not reassure MDEP that there is not a nutrient problem. The Aroostook River is a good example of why MDEP has designed the nutrient rule to consider environmental *effects* of nutrients rather than concentration alone. The 2004 modeling report predicted likely algal blooms in 13 to 23 river miles from Presque Isle to Fort Fairfield with Chl *a* levels predicted as high as 17 ppb. The modeling report also recorded extensive growths of periphyton and pH levels near 9.0. The Aroostook River receives such a high phosphorus load that it is no longer phosphorus limited. Point sources at licensed conditions account for about 87% and 96% of the total BOD and total phosphorus (TP) loads. Large reductions of point source phosphorus may be needed to reduce algae to a non-eutrophic state in the Aroostook River, but the ultimate level of reduction required to ensure attainment with the draft nutrient criteria is the unknown. Permits issued to the Aroostook River dischargers since the issuance of the 2004 Aroostook River Modeling Report have contained phosphorus limits and/or monitoring requirements consistent with the findings of the report. And consistent with the report, the permits include notes that phosphorus limits may need to be re-evaluated in the future after nutrient criteria are finalized and after any additional data is collected on the river.

The Water Quality Classification law states that it is "the State's objective to restore and maintain the chemical, physical and biological integrity of the State's waters". The new nutrient rule will introduce a means to address long-standing concerns with phosphorus, whether the river remains Class C or is upgraded to Class B. The Department's position on reclassification in general is that it is appropriate to provide as complete information as possible about what financial or other obligations could be imposed upon dischargers who will be directly affected by the change in criteria. The Department agrees with the importance of aggressively implementing all reasonable and cost-effective measures to reduce phosphorus loading from the Aroostook River discharges; the upcoming nutrient rule will be instrumental in providing the regulatory structure to accomplish the improvements.

Appendix B-1: DEP Supplemental Basis Statement

Long Creek Reclassification Proposal

January 16, 2009

Maine Department of Environmental Protection
Supplemental Basis: Long Creek Reclassification Proposal

History of the Water Quality Classification of Long Creek

The history of Long Creek is that it had always been Class C, for its entirety, as far back as Maine has had a classification system (1950s). During the 1989-90 revision of the classification chapters (enacted in 38 MRSA §§ 467-469) a number of changes were made to make the classification law more consistent in structure. Department staff (Dave Courtemanch), in redrafting the law in 1989, did not purposely intend to create small fragments of stream reaches with different, alternating classes along their length. There is no valid biological basis for making a portion of Long Creek located only within one town a higher class in 1990 than the rest of the stream. There is nothing in the legislative or Department record to indicate this segment was evaluated separately and distinctly and then specifically upgraded to Class B. It would not have been the intent of the Department to recommend that small stream fragments should have different management classes or to suggest that these small fragments could be effectively managed with multiple classes. In this specific case, the Westbrook segment is approximately 0.3 miles in length. It is not feasible to expect that specific management actions could be taken within the small sub-watershed area of this small segment so as to make it reach Class B, when segments both above and below were Class C. An explicit upgrade of this small segment would have been nonsensical.

That a small segment of Long Creek located within the boundaries of Westbrook is Class B is a drafting oversight, similar to what happened for Trout Brook, as described in the Department's Response to Comments. Other classification inconsistencies have been corrected when the Department, in the course of working in those waters, has identified an ambiguity or error (e.g., the Dennys River, as described in the MDEP Reclassification Proposal Response to Comments).

How did this happen?

- Prior to the 1986 revision of standards all of Long Creek was Classified C (38 MRSA § 369, Cumberland County, paragraph 1).
- In 1986, section 369 was rescinded and replaced with section 468. All of Long Creek, including the Westbrook segment, remained specifically designated as Class C per Section 468.1.A. Class C was used as the default class for flowing waters in small watersheds for Cumberland County and those waters that were of higher recommended quality continued to be identified by segment.
- In 1990, classifications in section 468 were revised and rewritten (LD 2244) and Class B was established as the default classification for flowing waters in small watersheds in Cumberland County. Waters of higher or lower quality, including Long Creek, were specifically identified by segment or, in the case of certain municipalities (Portland, South Portland, Scarborough), by all segments in those municipalities.
- The error occurred when Westbrook was not listed with the other three towns that encompassed the main stem and tributaries of Long Creek in the 1990 revisions contained in section 468. This had the effect of making that segment Class B as a result of the change in default classification for flowing waters in small watersheds.
- Small headwater segments crossing municipal boundaries were not identified or recommended for upgrade by this change in the general default language.

It is very important to recognize that while the state has used an alphabetic classification code since the 1950s, water quality standards associated with each letter code have been raised over time. Any inference that Class C standards represent the same water quality condition, especially as it was defined prior to 1986 and after 1986, is not correct. As a consequence, it can be stated that all Class C waters have experienced an upgrade of water quality standards even though their letter code designation has not changed. Notably, prior to 1986 designated uses for Class C waters did not include potable water supply or water contact recreation uses as are now required. More stringent and updated bacteria criteria using *E. coli* are now required. Prior to 1986, dissolved oxygen standards could fall to 4 parts per million in Class C waters, whereas today an instantaneous minimum of 5 ppm and a monthly average of 6.5 ppm are required. Most important, in 1986 the Legislature added narrative aquatic life standards which the Department has now implemented as numeric criteria (Chapter 579). These criteria have been the foundation of the impaired listing of Long Creek and many other waters.

Attainment Status of Long Creek

All of Long Creek was placed on Maine's §303d list of impaired waters in 1990 for failing to attain Class C standards. The 1990, 1992 and 1994 State of Maine Water Quality Assessment Reports all list Long Creek with the following language; note especially the description of Long Creek's location and water quality classification:

> *Long Creek (Class C; South Portland & Westbrook; 3 miles)*
> *Water quality sampling and analysis of watershed characteristics including land use, the effects of point source discharges (if present) and the extent of marshes and bogs indicate that this waterbody segment does not attain the dissolved oxygen standard of its classification. Most of the dissolved oxygen deficit seems to be due to urban runoff in the watershed.*
>
> *State of Maine 1990, 1992 and 1994 Water Quality Assessments, Appendices*

In 1999, with funding from a US EPA watershed assessment grant, MDEP sampled the small segment in Westbrook that is the subject of this reclassification proposal, for benthic macroinvertebrates (Biomonitoring Station number 411-Log# 854-"Sable Oaks"). Sampling results showed that the segment did not attainment Class B biocriteria, but did attain Class C biocriteria. Excursions of Class B and C dissolved oxygen criteria were also measured in 1999 and 2000 in the 0.3 mi. Westbrook segment. In summary the Westbrook segment of Long Creek is not currently attaining Class B biocriteria and is not attaining Class C dissolved oxygen criteria.

What are the implications of this classification error on the residual designation decision for Long Creek?

EPA's residual designation decision imposes a NPDES permitting requirement on certain stormwater discharges to Long Creek. Correcting the Long Creek classification error does not significantly affect the overall direction of restoration work, nor the amount of work needed to fix the priority areas of the watershed located downstream from the small Westbrook segment, whether this work is accomplished through NPDES permitting or other controls. If anything, EPA's findings confirm that the entire length of Long Creek currently fails to meet many Class C criteria. This supports the Department's conclusion that it did not intend to upgrade the .3 mile Westbrook segment to Class B.

The basis of the Department's position in this matter is that affected parties, citizens, and the Department itself should not be held to illogical classification requirements applied in error, nor should a use attainability analysis be required to correct what is clearly a mistake.