

**RESPONSE TO COMMENTS RECEIVED ON
MAINE DEP-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 (4+ 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 excluded)

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 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) Seboeis 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, Mollycokett 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.

(a) 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.

(1) 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.

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.

B. Black Brook (Lincolnville) - Class A.

C. Kendall Brook (Lincolnville) - Class A.

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 DEP**

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 the 1986 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 DEP

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. BOD₅ and TSS standards were issued in 1977 by US EPA and treatment technologies have undoubtedly improved since then. Most recent EPA data shows BOD₅ 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.