

ESP 421.

Dr. Travis Wagner.

I. Title.

Conflict over Maine Department of Environmental Protection's Water Quality
Reclassification Initiative: A Natural Resource Policy Paper

Executive Summary

The Maine Department of Environmental Protection (MDEP) has made a formal proposal to the Maine Legislature to upgrade the water quality classifications of over 400 miles of Maine rivers and streams that are currently under-protected, as mandated by the Clean Water Act's anti-degradation provision. However, this has provoked a natural resource conflict, with an array of environmental groups and the Penobscot Nation lobbying and testifying in support of the proposed reclassifications, and representatives of the towns of Millinocket, Patten, and Island lobbying and testifying against the proposed reclassifications. Reclassification proponents often cited potential ecological, cultural and recreational benefits of the reclassifications, such as potentially ensuring clean enough water for the restoration of historic Atlantic salmon runs, increasing the potential for water-based recreation, and "locking in" Maine's progress towards cleaner water. Reclassification opponents uniformly cited fear that the proposed reclassifications would damage their towns' economies by preventing certain business uses of local waterbodies, particularly mill discharge. The conflict here can be most fully explained as a clash of cultural perspectives of waterbodies, with opponents primarily viewing rivers from an economic perspective and identifying limits on their usage with the recent loss of historic Maine mill jobs, while proponents focused on waterbodies' intrinsic ecological, cultural, and recreational values, as well as the necessity to upgrade water quality classifications due to the anti-degradation provision. It is notable that while there is considerable evidence that increased water quality protections bring an array of ecological, cultural, and recreational benefits, from potentially restoring fish runs to enabling traditional Penobscot Nation sustenance fishing practices, no opponents could offer any examples of current or proposed business projects or other economic ventures that could be negatively impacted by the proposed reclassifications. Several of the stakeholder group representatives interviewed expressed sympathy for the opposing groups' values, with reclassification proponents in particular hoping for remediation of opposing towns' economic plight, but none

were willing to give ground on their preferred solution. Several potential solutions to this conflict were analyzed using decision matrix tables. To avoid alienation of opposing stakeholders, several potential mitigation measures, such as water quality education and certification programs, were considered as potential future measures to ease stakeholder conflict. However, given the clear evidence that it would be a beneficial measure and the legal mandate given by the Clean Water Act, legislative passage of MDEP's proposed water quality reclassifications is the optimal solution to this natural resource conflict at this time.

II. Policy Problem

A. Brief Description of the Problem.

Over 400 miles of Maine rivers and streams are currently categorized in a water quality level lower than their actual water quality status. (For example, the West Branch of the Penobscot River is currently categorized as a Class C waterbody but meets Class B standards). This under-categorization leads to under-protection, as Class B waterbodies have stricter pollution protections than Class C waterbodies. The Maine Department of Environmental Protection (MDEP) has made a formal proposal to the Legislature to upgrade the water quality classification and protections for these 400 miles of Maine waterbodies in an effort to solve the under-protection problem. However, the bill has divided stakeholders, provoking a natural resource conflict.

B. Root Cause Analysis of the Problem

1. Symptoms of the Problem

Under-Classification of Maine Waterbodies

The Maine DEP is required to issue reclassification recommendations every three years but has not done so since 2011. After an abortive attempt in 2014, the current reclassification initiative began in 2017 (Meidel, S., personal communication, February 22, 2019). This is mandated by Maine's statutory antidegradation policy, a legacy of the Clean Water Act, which requires upgrading of water quality classifications to meet their real-world attainments (MDEP,

2018b). Over 400 miles of rivers and streams have been identified as requiring reclassification (MDEP, 2018a). The years-long period in which statutory upgrading did not occur has led to a large discrepancy in these waterbodies' water quality and regulatory protections for that water quality. The existence of 400 miles of under-protected rivers and streams is the cause for MDEP's current water quality reclassification initiative. It is also a symptom of the controversial nature of the issue, as it is evidence of previous conflicts over earlier proposals delaying reclassification in the past.

Opposing Testimonies

Testimony and comments submitted to the Maine Board of Environmental Protection (BEP) between August and December 2018 neatly outlined the differences of opinion between the major stakeholders in this conflict. As the BEP is a major decision-making body in the environmental policymaking process relevant to this natural resource conflict, BEP hearings on the issue functioned as a clearinghouse of stakeholders' perspectives on the issue. Furthermore, the stakeholders present were not merely stating their opinions, but actively engaging in the environmental policymaking process by endeavoring to influence the BEP's decision on the issue.

An alliance of the Penobscot Nation, environmental groups including The Nature Conservancy (TNC), the Natural Resources Council of Maine (NRCM), and the Atlantic Salmon Federation, and an array of private citizens and other entities submitted comments in support of MDEP's proposed reclassifications (MDEP, 2018a). According to MDEP (2018a), these comments primarily cited environmental, legal, and social factors, such as complying with the anti-degradation policies of Maine, easing the path to the restoration of sea-run fisheries, and maintaining the waterbodies' recreational and scenic value. These basic values were also commonly cited in interviews of supporters of the proposed reclassifications.

Representatives of the towns of Millinocket, Patten, and Island Falls, Maine submitted comments in opposition to several of the proposed reclassifications. Specifically, Patten representatives opposed the upgrading of Fish Stream from Class B to Class A, Millinocket representatives opposed the upgrading of the West Branch of the Penobscot River and Millinocket Stream from Class C to Class B, and Island Falls representatives opposed the upgrading of the West Branch of the Mattawamkeag River from Class B to Class A (MDEP, 2018a). These comments primarily cited concern that the reclassifications would deter

economic development in their communities, with Councilor Madore of Millinocket colorfully describing the reclassification process as “a giant iron hand clasp upon the mouths and nostrils of our economy” (MDEP, 2018a). Economic anxiety as the primary source of opposition to the proposed reclassifications appeared further confirmed by the results of interviews of Millinocket and Patten representatives.

The submission of comments to the Board of Environmental Protection eventually resulted in the BEP’s unanimous vote on December 6, 2018, to send the proposed reclassifications to the Legislature (MDEP, 2018b). The promulgating of drastically different positions on the validity and desirability of the proposed reclassifications during the BEP review process served as a critical symptom of the existence of a natural resource conflict.

Public Acrimony and Ongoing Lobbying

Other symptoms of the ongoing conflict include efforts from both reclassification proponents and opponents to win over the Maine public via major media outlets. In an interview with WABI TV, Don Wetherill of MDEP said that “We actually feel like we’re overdue on this,” portraying the reclassifications as a much-needed measure to set goals for water quality (Tadlock, 2018). Tadlock (2018) further noted that Wetherill acknowledged the possibility that if MDEP’s bill passes, the upgrading of the West Branch of the Penobscot from Class C to Class B could prevent some types of industrial development in Millinocket. In the same story, Councilman Michael Madore of Millinocket stated that “The impact of changing the classification would do nothing as far as cleaning up the water or keeping it clean, but it would do a great deal of harm on being able to bolster our economic future” (Tadlock, 2018).

Ray Owen, a former commissioner of the Maine Department of Inland Fisheries and Wildlife, published an op-ed in the widely read *Bangor Daily News* supporting the proposed reclassifications (Owen, 2019). Owen (2019) cited Maine’s history of extremely high levels of water pollution, the outstanding progress made in the last few decades, and the potential for future improvement (including the potential return of Atlantic salmon runs) as reasons to support the reclassifications, particularly those in the Penobscot watershed. (Notably, the Penobscot watershed encompasses all of the most controversial reclassifications, including Fish Stream, the Mattawamkeag River, and Millinocket Stream)

Furthermore, many of the stakeholders that testified before the BEP intend to continue their involvement with the environmental policymaking process. It is the professed plan of several proponents and opponents of the reclassifications, including representatives of MDEP, the Atlantic Salmon Federation, the town of Millinocket, and the Penobscot Nation, to testify before the Legislature. As of April 15, 2019, the bill does not yet have an LD number or public hearings scheduled, ensuring that there will be many future opportunities for stakeholders' voices to be heard (NRCM, 2019).

2. Root Causes of the Problem

a. Primary Root Causes

Economic Anxiety

One major primary root cause of conflict over MDEP's proposed reclassifications is economic anxiety. Across BEP testimony, media stories, and personal interviews, the primary reason for opposition cited by reclassification opponents was the fear that upgrading local waterbodies would deter future investment in their communities. It was particularly evident in the case of Millinocket, where after the collapse of the Great Northern Paper Mill, many in the town have pinned their hopes on attracting a similar industry to that site. Councilor Michael Madore of Millinocket stated that "When we lost Great Northern Paper, we had a 4500-people drop in population, we lost 4000 jobs, our economy tanked. We have worked very hard to get back to a level of stability in the community and developing the mill site is paramount to going ahead and moving forward on this." (Madore, M., personal communication, March 19, 2019). The representatives of Island Falls echoed this sentiment of economic apprehension in their testimony before the BEP. Their comments stated that "We are deeply concerned that an upgrade to Class A can only be counter to our economic development efforts in attracting new business to our area and along this stream." (MDEP, 2018a).

Town Manager Raymond Foss of Patten also expressed concern that the reclassifications could arrest economic activity in his community, but an aside comment was notably revealing. Mr. Foss stated in passing that "...I'm not sure the burden is real onerous, but I also didn't want to just be silent when the selectmen and townspeople were raising the issue." (Foss, R., personal communication, March 1, 2019). This may indicate that widespread, communal economic anxiety has pushed otherwise potentially neutral local figures to intervene as opponents of the proposed reclassification.

Pervasive View that Reclassification is Unnecessary

In addition to opposing the upgrades on economic grounds, all opponents interviewed felt that reclassification of their local waterbodies was unnecessary because they were already in attainment of the higher classifications. Town Manager Raymond Foss of Patten stated that “To my mind, if we’re successfully getting it to that level or beyond, to actually turn it into a rigid threshold standard just seems like overkill.” Mr. Foss also added “Like I say, ‘If it’s not broke, why fix it?’ It seems to me that’s what this process is attempting to do, to say ‘Good, we’ve gotten to that level, so we should bake it in a cake now and say that forever forward it has to maintain that level.’” (Foss, R., personal communication, March 1, 2019). Councilor Madore of Millinocket concurred, stating that “Right now, as a C classification, we are meeting a B standard anyway, according to the MDEP. To then go ahead and classify it... would have a very adverse effect on us being able to develop the site.” (Madore, M., personal communication, March 19, 2019). From the perspective of “If it ain’t broke, don’t fix it,” and without a full understanding of the Clean Water Act’s purpose and history, upgrading protections on waterbodies already relatively clean may indeed appear arbitrary and capricious to these stakeholders.

Proactive Campaigns to Reclassify Specific Waterbodies

The Nature Conservancy, the Penobscot Nation, and others (such as the Friends of Merrymeeting Bay), chose to proactively engage in the MDEP’s reclassification process by submitting water quality data for specific waterbodies along with requests to upgrade their classification (MDEP, 2018b). It is notable that these stakeholder-submitted requests were responsible for two of the most controversial proposed reclassifications, with the Penobscot Nation requesting the upgrade of the West Branch of the Penobscot River to Class B and The Nature Conservancy requesting the upgrade of Fish Stream to Class A (MDEP, 2018b). While entirely consistent with these organizations’ stated missions and cultural values, these actions have led to some feelings of disenfranchisement among local communities who were not consulted. While perhaps unavoidable given the already oppositional dominant paradigm, they have also potentially reinforced distrust between the stakeholder groups.

b. Secondary Root Causes

Decline of Maine Mill Industries and View of Recreation as an Insufficient Alternatives

A major secondary root cause of the conflict must be the decline of Maine's mill industries, and the closely associated view that recreational activities are an insufficient replacement economic driver for rural Maine communities. Notably, Maine has lost 13,000 paper manufacturing jobs since 1990, and 2,000 since December 2013 (McLaughlin, 2015). Given this profound "letdown" by a once-vital industry, it might be expected that former mill communities would focus on alternative economic pathways, potentially including the use of their local wildlands as hubs of outdoors recreation. However, Millinocket and Patten representatives surveyed disagreed. Councilor Madore of Millinocket described advocates of recreation as a replacement for mill industries as "the kind of person that would try to sell you a pig in a poke" and spoke disparagingly of the "recreational concerns" of "weekend kayakers" as opposed to the opponents of the proposed reclassifications, who "were there to look out for our communities" (i.e. by fighting any potential restriction on future mill discharges). (Madore, M., personal communication, March 19, 2019). Raymond Foss of Patten did not discuss recreation when listing the portions of Patten's economy affected by the Fish Stream reclassification, or indeed at all (Foss, R., personal communication, March 1, 2019).

However, this focus on industry over recreation as the pathway to economic success is opposed by the anecdotal findings of local journalists. Miller (2017) found that the nearby Katahdin Woods and Waters National Monument has been a primary component of a revitalization of the economies of both Millinocket and Patten, with upticks in foot traffic to local businesses and boosting the local real estate market. Indeed, a hardware store in Patten recently added a large new "outdoor" section specifically to capitalize on the new recreation market (Miller, 2017). Although the current leaders of Millinocket and Patten may disagree, recreation may be the best long-term economic growth pathway for their towns. This despite the fact that, ironically, outdoor recreation potential could be harmed by the very discharge-heavy industries they are endeavoring to win back.

Misunderstanding of the Clean Water Act's Regulations and Goals

One major secondary root cause of the conflict was a lack of understanding among stakeholders in opposition of the goals and regulatory structure of the Clean Water Act. First,

some argued that opponents were discounting the importance of water quality regulations precisely due to their prior success. Owen (2019) noted in his op-ed that he had never thought the Penobscot River would reach Class B level cleanliness, and that its advances have been due to water quality advocates' incremental work of decades. Several reclassification proponents also highlighted the importance of the Clean Water Act's anti-degradation provision, which mandates a continual push for improved water quality. John Burrows of the Atlantic Salmon Federation stated that "Under the Clean Water Act, we're always supposed to be striving to constantly upgrade classifications when criteria are being met, with water chemistry and certain other things. It's one of the ultimate goals of the Clean Water Act, that continuous striving for improvement." (Burrows, J., personal communication, March 15, 2019). Susanne Meidel of the MDEP neatly encapsulated the specific relevance of this "anti-degradation" policy of the Clean Water Act, noting that towns' concerns of potential future negative impacts could not arrest a statutorily mandated process. She stated that "Everybody's hoping to bring business into towns, and we very much hope that those towns will be able to attract business. But in the absence of any concrete plans, we were bound by the statutory requirement to propose the upgrade, because the higher water quality classification was already attained." (Meidel, S., personal communication, February 22, 2019).

Fundamental Value Differences over the Importance of Rivers

One extremely important secondary root cause of the natural resource conflict is the existence of fundamental value differences between stakeholders over the importance of rivers in society. Both Councilor Madore of Millinocket and Manager Foss of Patten acknowledge the value of clean water but make it clear that it needs to be evaluated in tandem with (and subordinate to) the importance of economic development. Madore states "Though I certainly am not opposed to either clean water or recreation, both have their say in it, there has to be a balance." (Madore, M., personal communication, March 19, 2019). Foss stated that "I don't think that either Patten or Crystal or Island Falls or any of the other opponents are saying that we don't want to maintain the purity of the water, but I don't think we or Island Falls want the additional burden." (Foss, R., personal communication, March 1, 2019).

In a sharp contrast of priorities, proponents of the reclassifications view local rivers' water quality as both economically valuable (betraying perhaps a different cultural assessment of the economic value of natural resources) and intrinsically valuable, worth protecting in their

own right. Dan Kusnierz of the Penobscot Nation's water quality monitoring program stated that "So we now have millions of fish coming back that historically were here but were eliminated from the watershed for many years. One thing that it's really important for is to help maintain that improvement that's happened. There's a lot of water quality improvements that have taken place, and the river is just a much cleaner and healthier place than it was for a long time." (Kusnierz, D., personal communication, March 21, 2019). Mr. Kusnierz, as a representative of the Penobscot Nation, clearly values renewed fish passage and the river's public health value highly. John Burrows of the Atlantic Salmon Federation offered a very similar statement of values, saying "For decades now, we've been working to restore access to habitat, remove dams, build fish ways, and now there's been these upgrades and improvements in water quality in a lot of these streams that flow to the mainstem. It's a real testament, because it's not that long ago that the Penobscot was fairly heavily polluted, and now it's certainly much cleaner in many places. It's great to be able to secure that for the future and lock in those upgrades, for fish and wildlife and for people who use the river." (Burrows, J., personal communication, March 15, 2019). David Courtemanch of The Nature Conservancy concurred, with an eloquent defense of the reclassification program on economic grounds as well as intrinsic value grounds. "Often, attainment of higher classification means there has been a public investment of cleanup dollars...Reclassification protects that investment so that any new development is not allowed to appropriate that investment. Clean water is not an economic burden." (Courtemanch, D., personal communication, March 19, 2019).

Contributing Cause: Distrust of Environmental Groups

All opponents consulted expressed varying degrees of distrust, at times bordering on resentment, of environmental groups supporting the reclassifications. Councilor Madore of Millinocket stated that "You know, areas like ours do not get the same considerations, or have the same ability to voice, as these environmental groups... They're waiting for us to fail, so that they can go ahead and pounce and set their own agenda." He also described the Penobscot Nation's goals as "they want it to return to a pristine river unimpeded by anybody other than the Penobscot Nation, as it was 150 years ago." (Madore, M., personal communication, March 19, 2019). Manager Foss of Patten expressed concern that The Nature Conservancy was arbitrarily adding to his town's economic woes, claiming that even the local TNC property

manager “was surprised that his organization had made that request and that he didn’t see why it was necessary.” (Foss, R., personal communication, March 1, 2019).

This likely contributes to and reinforces the stakeholder groups’ distinct culture values around waterways by constructing an adversarial relationship paradigm. When opposing stakeholder groups begin to demonize each other (or, in this case, one unilaterally demonizes the other), resolution of natural resource conflicts to the satisfaction of all parties becomes increasingly unlikely. In such an adversarial framework, compromise might be seen as weakness. For example, suppose Mr. Madore were to suddenly announce that he was supporting MDEP’s reclassifications in an effort to increase the Millinocket area’s water-based recreation potential. After hearing repeated jeremiads against environmental groups as bad-faith actors “waiting for us to fail,” his supporters would be unlikely to stand by him.

c. Tertiary Root Causes

Competition from Chinese Mills

The decline of Maine’s mill industries is due to many factors, ranging from global consumers’ movement to reading on screens to mill-specific equipment problems (Fishell, 2014). However, one major contributor is foreign competition, particularly from China. McLaughlin (2015) discusses the “dramatic growth” in China’s paper pulp production over the last few decades, and links it to concurrent declines in the Maine paper pulp industry. Since China’s accession to the WTO in 2001, trade barriers between the US and China have fallen, likely facilitating the rise of the growing Chinese paper industry. Researchers have also noted that since China’s accession to the WTO, its imports of wood pulp and recovered paper from nations such as the United States and Canada have increased (Tang et al., 2015). This likely indicates the movement of second-order pulp processing and manufacturing jobs to Chinese soil.

Such buffeting of a time-honored Maine industry by global macroeconomic forces may have created a “siege mentality” among residents of communities formerly supported by paper mills and has likely substantially contributed to economic anxiety in those communities. This in turn has likely led to increased opposition to actions such as the proposed reclassifications which appear to have the potential to prevent a hypothetical return of mills.

Cultural View of Waterbodies centered on Economic Value

The representatives of Millinocket and Patten interviewed had a strong cultural connection to historic industries that relied on being able to discharge heavily into local waterbodies, particularly the paper mill industry. This cultural connection was heavily cited in personal interviews. Michael Madore, town councilor of Millinocket, described with audible longing the days when “At one time, Millinocket was an economic driver for Penobscot County, and for the seven communities that surround us. They don’t take any of that into consideration, that we’ve worked very hard to get ourselves back from the loss of Great Northern Paper.” (Madore, M., personal communication, March 19, 2019). Raymond Foss of Patten began his interview statements by proudly recounting the founding of Patten and went on to discuss his fears that the reclassification of Fish Stream could negatively impact a wood pellet mill in the town. (Raymond Foss, personal communication, March 1, 2019) As long as Maine river communities’ leaders mentally intertwine their towns’ identities and economic futures with discharge-heavy industry, it is unlikely that water quality reclassifications can proceed unopposed.

Cultural View of Waterbodies centered on Intrinsic Natural and Spiritual Values

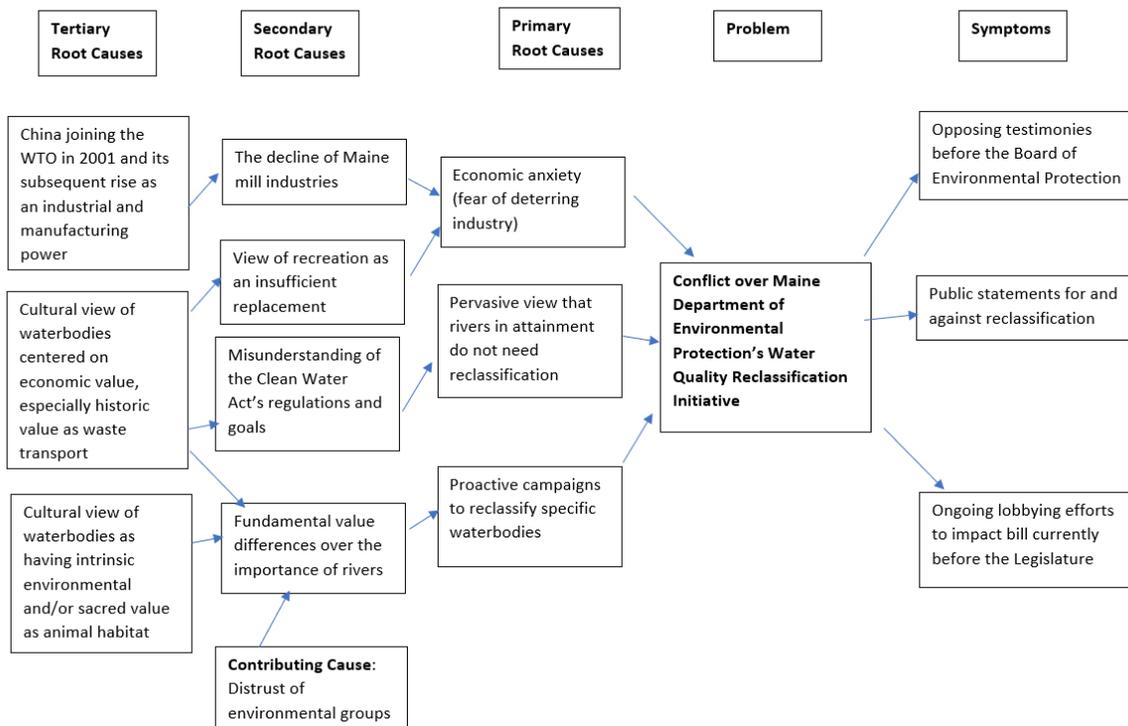
All proponents of the reclassifications surveyed averred strong personal and emotional connection to the ideal of clean, free-flowing waterways, and felt that the proposed reclassifications would help further that goal. Landis Hudson, executive director of Maine Rivers, neatly expressed this view in her statement that “Clean water, beautiful rivers, trout streams---- those are valuable.” (Hudson, L., personal communication, March 26, 2019). The *raison d’être* of several environmental group stakeholders, such as NRCM and The Nature Conservancy, stems from this conception of clean rivers, among other natural resources, being inherently valuable.

A notable special case here is that of the Penobscot Nation, which has been connected to Maine’s rivers millennia longer than any other stakeholder group currently involved in the reclassifications conflict. Dan Kusnierz of the Penobscot Nation’s water quality program stated that “The tribe has sustenance fishing rights, they connect lots of different types of plants, fish, wildlife. The river’s just central to the culture of the tribe.” He also stated that the proposed upgrading of several waterbodies in the Penobscot watershed “helps the tribe to be able to restore some of those things that have been lost or degraded.” (Kusnierz, D., personal

communication, March 21, 2019). The Penobscot Nation website also discusses the profound importance of water resources to the Penobscot people, and in particular the importance of good water quality in allowing the safe practice of traditional lifeways, such as sustenance fishing (Penobscot Nation, n.d.). The distinct incompatibility of such cultural values with historic mill-type industries is a major underlying cause of the fundamental differences in values between stakeholder groups.

C. RCA Model of the Problem

ESP 421 Root Cause Analysis of Conflict over Maine Department of Environmental Protection's Water Quality Reclassification Initiative



III. Stakeholder Perspectives of the Problem.

A. Key Stakeholders

Key stakeholders that support MDEP's proposed water reclassification initiative include MDEP itself, the Penobscot Nation, The Nature Conservancy, and the 34-group Maine Environmental Priorities Coalition, whose members include the Atlantic Salmon Federation and

Maine Rivers. Four major stakeholder groups are on the public record as opposing MDEP's proposed water reclassification initiative: the Maine towns of Patten, Millinocket, and Island Falls, and the development group Our Katahdin (who could not be reached for comment).

B. Stakeholders' Perspective of the Problem

The array of stakeholders in support of MDEP's proposed water reclassification initiative generally view the natural resource conflict as stemming from opponents' misunderstanding of water quality regulations, differing cultural valuation of waterbodies, or both. Ms. Meidel of MDEP, Mr. Courtemanch of TNC, and Mr. Burrows of the ASF all primarily cited misunderstanding of water quality regulations, while Ms. Hudson of Maine Rivers and Mr. Kusnierz of the Penobscot Nation primarily cited cultural differences.

The three opponent community leaders, from Patten, Millinocket, and Island Falls, uniformly cited perceived negative impacts on economic development as the primary reason for their opposition. Mr. Madore of Millinocket and Mr. Bowers of Island Falls also expressed distrust and dislike of environmental groups and/or MDEP. Notably, all of the opponents made a point of professing that they did not object to clean water or good water quality in general, but that they believed reclassification of their community's waterbody to be unnecessary and economically harmful.

C. Policy Goal

The policy goal for this natural resource policy paper is to resolve the conflict over the DEP's current water quality reclassification scheme. Any viable solution must comply with Maine's statutory anti-degradation policy. Ideally, it should also endeavor to "win over" opposing stakeholders to some degree, if feasible.

IV. Stakeholder Solutions

- A.** Stakeholder 1: Susanne Meidel. Ms. Meidel is the MDEP Water Quality Standards and Criteria Director. She was interviewed for this project via telephone on February 22, 2019. Ms. Meidel's preferred solution was the passage of MDEP's complete suite of water quality reclassifications, based on the legal necessity of this action under the

Clean Water Act's anti-degradation provision. However, she also expressed empathy for towns such as Millinocket that were suffering from economic depression, stating that "We very much hope that those towns will be able to attract business. But in the absence of any concrete plans, we were bound by the statutory requirement to propose the upgrade." She also discussed the importance of public input in and support for the reclassification process, stating that "We want to ensure that we don't create any problems and that the public understands why we're doing this." Ms. Meidel may be characterized as a "proponent willing to compromise." Notably, for proponents, "compromise" in this context does not mean altering the proposed reclassifications (no interviewed proponents suggested this) but expressing some desire to assuage opponents' concerns as part of a solution to the conflict.

- B.** Stakeholder 2: Raymond Foss. Mr. Foss is the Town Manager for Patten, Maine. He was interviewed for this project via telephone on March 1, 2019. Mr. Foss nominally opposes the proposed reclassifications and his professed optimal solution would be their failure to pass the Legislature. Referring to the proposed reclassifications, Mr. Foss stated that "It restricts uses to a greater extent...If it's not broke, why fix it?" However, he appears resigned to the likelihood that the reclassifications will occur, does not intend to appear before the Legislature, and hints that his nominal opposition may be primarily due to a desire to placate his constituents, stating that "I'm not sure the burden is real onerous, but I also didn't want to just be silent when the selectmen and townspeople were raising the issue." Mr. Foss may be characterized as an "opponent willing to compromise."
- C.** Stakeholder 3: John Burrows. Mr. Burrows is the Director of New England Programs for the Atlantic Salmon Federation. He was interviewed for this project via telephone on March 15, 2019. Mr. Burrows' proposed solution is the enactment of the water reclassifications, alongside a local movement towards more sustainable industrial use of the river with modern technology in order to address opponents' economic anxieties. In support of the reclassifications, Mr. Burrows cites the potential for restored fish passage, stating that "[the Penobscot watershed] really is the lifeblood of endangered Atlantic salmon... It's great to be able to secure that for the future and lock in those upgrades." However, like Ms. Meidel, he acknowledges and wishes to remediate the economic anxiety of opponents, stating that "I understand the concerns, but I do think that they're overblown, because there's nothing to prevent industrial use of the river, particularly using more modern technology...I think it's really important to hear from the

communities who feel that this is a negative thing, and then from folks who are proponents.” Mr. Burrows may be characterized as a “proponent willing to compromise.”

- D. Stakeholder 4: Michael Madore. Mr. Madore is a Town Councilman at Millinocket, Maine. He was interviewed for this project via telephone on March 19, 2019. Mr. Madore strongly opposes the proposed reclassifications, and his proposed solution is that they not occur. Mr Madore’s opposition is primarily rooted in his concern that it would damage Millinocket’s economy, particularly the town’s quest to find a new tenant for an old mill site. He also expressed sentiments that recreational and environmentalist stakeholders’ concerns were less valid than those of Millinocket, stating that “We have worked very hard to get back to a level of stability in the community, and developing the mill site is paramount to going ahead and moving forward on this. So, of course, our perspective is different that somebody trying to be a weekend kayaker or is looking for a certain species of fish that was fished on the Penobscot 100 years ago.” Mr. Madore may be categorized as an “uncompromising opponent.”
- E. Stakeholder 5: Dave Courtemanch. Mr. Courtemanch is a Freshwater Science and Policy Specialist at The Nature Conservancy Maine Field Office. He was interviewed for this project via email on March 19, 2019. Mr. Courtemanch’s preferred solution is the passage of MDEP’s water quality reclassification initiative. Unlike Ms. Meidel and Mr. Burrows, he also portrayed opponents’ position as essentially meritless and to some degree selfish and duplicitous. He stated that “Often, attainment of higher classification means there has been a public investment of cleanup dollars... Reclassification protects that investment so that any new development is not allowed to appropriate that investment. Clean water is not an economic burden.” It must also be noted that Mr. Courtemanch was one of the primary authors of Maine’s 1986 water reclassification law (still in effect) and thus has the highest degree of subject matter expertise of any stakeholder interviewed. Mr. Courtemanch may be characterized as an “uncompromising proponent.”
- F. Stakeholder 6: Dan Kusnierz. Mr. Kusnierz is the Water Resources Program Manager for the Penobscot Indian Nation. He was interviewed for this project via telephone on March 21, 2019. Mr. Kusnierz’s proposed solution is the passage of MDEP’s water quality reclassification initiative, with a local movement towards sustainable economic development. Mr. Kusnierz made clear that the passage of the reclassifications was a

vital priority of the Penobscot Nation, stating that “When improvements in water quality are made, we need to make sure that we don’t slide backwards....One thing that it’s really important for is to help maintain that improvement that’s happened.”

However, he also stated that “I think there’s a lot that can be done [about Millinocket’s economic troubles] without damaging water quality. There’s folks up in that area that are trying to use the environment, and use the natural resources of that area, as part of their economy. Instead of focusing on the river as a place to just take waste, I think it’s important to look at it as important to the economy as well.” Mr. Kusnierz may be characterized as a “proponent willing to compromise.”

- G. Stakeholder 7: Landis Hudson. Ms. Hudson is the Executive Director of Maine Rivers. She was interviewed for this project via email on March 26, 2019. Her proposed solution was the passage, in toto, of the proposed water reclassifications. Ms. Landis’ solution was grounded in her strong belief in clean water’s importance, as evidenced by her statement “Clean water is the basis of life... Clean water, beautiful rivers, trout streams-- -- those are valuable.” Notably, Ms. Hudson, like Mr. Courtemanch, did not appear to believe that opponents’ arguments were in good faith or had any moral standing, stating that requesting unfettered economic development of a waterbody was equivalent to “eventually asking someone else to pay for cleaning up externalities.” Ms. Hudson may be characterized as an “uncompromising proponent.”
- H. Stakeholder 8: Anthony Bowers. Mr. Bowers is a Town Selectman for Island Falls, Maine. He was interviewed for this project via email on April 3, 2019. Under his email signature, Mr. Bowers described himself as a “Proponent of small town survival and multigenerational family business.” His preferred solution was grounded in that framework of ensuring his town’s “survival,” and his view that the water quality reclassification initiative posed a threat to that survival. Mr. Bowers opposes the reclassification initiative categorically, stating that “it would hamper our survival.” His proposed solution is not upgrading the waterbodies’ classifications. He also attacked MDEP’s decision-making process, describing their decision as “very poor and one sided” and unspecified pro-reclassification persons speaking on the issue as “a joke.” Mr. Bowers may be categorized as an “uncompromising opponent.”

V. Policy Solution

A. Decision Matrix Tables

One potential policy solution would be the simple “victory” of the reclassification proponents, without substantial efforts made to conciliate opposing stakeholders. This is an example of the continued implementation of a command-and-control environmental quality standards instrument, specifically the upgrading of water quality standards. This may also be the most likely outcome. In the Decision Matrix Table below, this option has been designated as “I.”

Another potential policy solution the plans to upgrade water quality restrictions with a market-based “cash for water quality” scheme. This could involve paying an agreed-upon amount to a town at the end of a year if their waterbodies meet agreed-upon quality parameters during that year. In the Decision Matrix Table below, this option has been designated as “II.”

Continue with the reclassification, but as a measure to provide some solace to opposing communities, introduce a certification program tying water-based recreation to water quality attainment level. For example, there could be a government-issued voluntary label/certificate for water-based businesses to “boast” of their local waterbodies’ cleanliness. It could even become part of advertising, like “Joe’s River Kayak Tours: On a Class A Waterbody!” This would add economic value when water quality classification increases. In the Decision Matrix Table below, this option has been designated as “III.”

Continue with the reclassification and add an education program to share the reason and process of the reclassification with affected communities (potentially through town halls, workshops, etc). This could also include instruction in some of the economic uses of cleaner water, like ecotourism, water-based recreation, and fishing of potential new sea-run fisheries. In the Decision Matrix Table below, this option has been designated as “IV.”

Continue with the reclassification, but as a measure to provide some solace to opposing communities, begin land acquisition and/or conservation easements of affected riverside properties. The state or interested environmental organizations could buy riverside property for conservation purposes, or just buy “discharge rights,” in essence paying current owners to not discharge into the river. This would, however, likely be expensive. In the Decision Matrix Table below, this option has been designated as “V.”

This decision matrix table does not consider the possibility of inaction on this issue (i.e. a complete victory for the opponents of reclassification) as that would be a violation of Maine’s obligations under the Clean Water Act’s anti-degradation provision, and could not be legally

pursued as a policy strategy under the current statutory and regulatory structure (Meidel, S., personal communication, February 22, 2019).

Policy Instrument Evaluation Criteria	#I Reclassification program goes forward unmodified	#II Market-based program	#III Certification program	#IV Education program	#V Land acquisition and/or conservation easements
Technological Feasibility	10 (no new tech needed)	10 (no new tech needed)	10 (no new tech needed)	10 (no new technology needed)	10 (no new technology needed)
Cultural/Social Feasibility	5 (substantial opposition in towns such as Millinocket and Patten)	3 (would likely meet with substantial opposition, from government “budget hawks” to environmentalists who feel that clean water is a right, not to be bought)	7 (many would likely support the addition of a certification program as long as it remains strictly voluntary)	6 (many would likely support this, although as government-sponsored information it could be attacked as “propaganda”)	6 (hard to oppose offers to pay you more for your land or for doing nothing, but could still be attacked as need-less government intervention)
Political Feasibility	9 (passed BEP unanimously, Democratic pro-environment majority in Legislature).	2 (extremely unfeasible, given high costs and excellent track record of existing water quality regulations)	8 (most would support, long-term opponents would likely remain recalcitrant)	7 (most would likely support, but could be opposed on affordability grounds)	5 (many in Legislature would likely oppose on affordability grounds)
Affordability	10 (costs state nothing to impose new discharge	4 (would likely incur extremely high costs in ongoing	9 (water quality data already available, cost of	7 (would require payment of likely	5 (would likely require substantial funding to

	limits on waterbodies already being monitored)	payments to communities)	certificates likely minimal)	educators, development of “lesson plans,” physical events in communities, etc)	institute wide-scale purchase of valuable riverside property)
Potential Negative Unintended Consequences	8 (few potential negative unintended consequences expected, as “continuous upgrades” policy is long-standing and successful)	2 (could create expectation that towns should be paid for ensuring clean water, damaging the idea that clean water is inherently valuable)	7 (could potentially indirectly harm businesses on Class B or C waterways if consumers grow to expect a Class A certification).	6 (could stir up opposition with perceptions of government “talking down to people” or “picking winners” by boosting recreation)	3 (could create a perverse incentive where communities complain about new regulations in order to attract a land-buying program)
Total Score:	42	21	41	36	29

B. Recommended Solution

With an Evaluation Criteria score of 42, continuing the reclassification program with no changes is the current highest-ranked policy instrument, and is this paper’s recommended solution to the natural resource conflict at hand. As has been extensively discussed, continuing the reclassification program with no changes is acceptable to many environmental groups, the Penobscot Nation, and the DEP, but not to representatives of Patten, Millinocket, and Island Falls. Adding a certification program could win support as a low-cost way to help spread the economic benefits of cleaner water but could be held back by bureaucratic inertia and the undeniable fact that the existing water quality regulation system has been extremely beneficial for Maine’s water quality. Adding an education program would likely be attacked on affordability grounds, and potentially also on grounds of government overreach. However,

while continuing the reclassification program which no changes is the most feasible solution, both the education and certification programs deserve further consideration for future efforts to integrate water quality improvement and economic development. The low-cost certification program in particular could be independently implemented by a pro-reclassification party such as The Nature Conservancy or the Penobscot Nation.

C. Critique/Limitations of Recommended Solution

It is evident that the passage of MDEP's proposed water quality reclassification initiative will inflame many of the opposing stakeholders and exacerbate stakeholder divisions. Upgraded water quality may serve as a convenient scapegoat for political leaders' problems, such as Mr. Madore of Millinocket's apparent inability to recruit a new tenant for the disused mill site. As famously occurred with the case of the spotted owl in Oregon timberlands, environmental protection efforts may be blamed for harmful macroeconomic trends. It is not a stretch to imagine that in the near future, a politician could win election or reelection in Millinocket, Island Falls, or Patten by inveighing against the treachery of MDEP and environmental groups "from away" in hamstringing their town's economy with unneeded regulations. For this reason, a long-term goal of reclassification proponents should be to propound supplementary efforts to reduce the perceived conflict between water quality and economic growth, perhaps by the certification or education efforts described above.

VI. Conclusion

In sum, MDEP's proposed water quality reclassification initiative has divided stakeholders, provoking a natural resource conflict. Although the reclassification is mandated by the Clean Water Act's anti-degradation provisions, some communities feel that it would impose an intolerable economic burden by restricting their potential uses of local bodies. In contrast, environmental groups and the Penobscot Nation hail the measure as an indicator of how far Maine has come in cleaning up its surface waters, with the potential to help restore long-lost fish passages and facilitate recreational and traditional cultural practices. The issue has revealed and exacerbated cultural divides, with some stakeholders questioning the bona fides and moral standing of opposing groups. At first glance, it may seem that this is another example of the oft-repeated "development versus preservation" conflict. However, in this case, the

balance of evidence indicates that the water quality reclassifications would support both sustainable development and preservation. The affected communities' fear of economic harm appears to primarily be a culturally rooted phantasm, as none of them can point to any current or near-future instance in which the reclassifications would negatively impact any existing or proposed commercial development. Furthermore, local journalists report that the fastest-growing component of several of these communities' economies is in fact ecotourism, which could only be boosted by enforcing better water quality.

As MDEP's proposed water quality reclassification initiative is both statutorily mandated and has the potential to facilitate an array of ecological and economic benefits, its passage through the Maine Legislature is an optimal solution to this natural resource conflict.

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