

Testimony on behalf of the Moosehead Region Futures Committee

Name of witness: Eric C. Hince

Address of witness: Lot #5, Long Island (on Tussle Lagoon)
Lily Bay Twp., ME
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Campbell Hall, NY 10916

Topic of testimony: Navigational / Boating Safety Hazards in Lily Bay

Qualifications of witness:

- Intensive classroom and ship-based training in naval science / engineering, seamanship, navigation, and ship handling at the U.S. Naval Academy from 1982-1984.
- Active and experienced recreational boater / fisherman including recent but extensive boating experience on Moosehead Lake and Lily Bay.
- New York State Boating Safety Certified (Certificate C165328), including a 100% score on the written examination conforming to the standards of the National Association of State Boating Law Administrators (NASBLA).
- Red Cross First Aid and Adult CPR / AED certified
- Preparing to become a Registered Maine Guide in the areas of Recreation and Fishing (scheduled for examination in September 2007).

Testimony:

Navigational / Boating Safety Hazards in Lily Bay

No Boating Safety Certification Required. Although I and some small percentage of boaters and guides who enjoy Maine waters have undergone some formal training or certification in boating safety, Maine currently does not require watercraft operators to undergo boating safety training or certification. Moreover, the current (2007) Laws and Rules for Boating in the State of Maine are much more basic and less comprehensive than the NASBLA (National Association of State Boating Law Administrators) boating safety standards, which are those standards generally recognized and largely utilized by most states that have active boating safety certification requirements. Accordingly, it is important to consider that any development activity in the Moosehead Lake region that results in increased boat traffic on the lake will likely increase the number of uncertified and/or relatively inexperienced boaters on the water.

Navigation / Boating-Safety Hazards in Lily Bay. Lily Bay is widely recognized by local persons and experienced boaters as one of the most dangerous places to operate a watercraft on Moosehead Lake. A cursory review of any of the three different lake charts that are available for

Moosehead (Delorme, Maine Lake Charts, Navionics) shows that Lily Bay contains a much higher proportion of navigation aids (buoys) that mark hazardous areas and/or “safe” channels through otherwise rocky and hazardous waters than other areas of the lake. After my own recent experience (see below), comments I received from long-time, experienced boaters / guides on the lake concerning the conditions in Lily Bay include:

“I don’t go in there”

“...nothing but rock piles and stumps [in there]....”

The hazards of Lily Bay are numerous and somewhat unique to the geology / geography of this area and the history of Moosehead Lake. Prior to the construction of the dams on the East Outlet, much of the eastern shore of Lily Bay and the south shore of Lily Bay peninsula were dry lands bisected by small drainages such as Tussle Brook. Bedrock ledges and outcrops occur in many areas on the shoreline of the “mainland” and the numerous islands in Lily Bay. The surficial geology of the area is dominated by highly variable glacial deposits, which include innumerable glacial “erratics” – rocks and boulders of various shapes and sizes that were “left behind” on top of the land surface and shoreline of the lake after the glaciers retreated. In addition, the historical logging operations in and around Lily Bay left many stumps, logs and debris scattered around the shoreline. After the dams were constructed at the East Outlet, the elevation of the lake was raised to its currently accepted “full lake” elevation of 1029 feet above mean sea level. Many low lying but previously dry areas around the lakeshore, such as in Lily Bay, were drowned when the lake level was raised. As a result, many of the rocks / boulders, stumps and logs that had littered the previously “dry” shoreline became submerged (or partially submerged) hazards. Because the shorelines of Lily Bay are so shallow and hazardous, most of the navigation hazards remain uncharted and unmarked to this day. In fact, close inspection of the recently published charts from Maine Lake Charts and Navionics suggests that only limited mapping was conducted in and around many of the shorelines and shallow portions of Lily Bay. Most of these areas are “mapped” with shading patterns that indicate areas of shallow water with symbols (sometimes) that denote only the largest and most conspicuous rocks. These maps also mark several areas in Lily Bay with the warning “hazardous area,” (or similar caution statements), *including in the area of shoreline development proposed by Plum Creek.*

In short, Lily Bay is widely considered to present among the greatest challenges to boating safety in Moosehead Lake. The location and density of the proposed Lily Bay resort would place many new watercraft users on Lily Bay who are likely to be relatively inexperienced and unfamiliar with the local hazards in comparison to typical year-round and seasonal residents of the Moosehead Lake region. The combination of these factors is likely to result in an increase in the rate and number of boating accidents and in the number of personal illness / injury incidents that occur on Lily Bay waters. This will clearly increase the case load of the closest emergency services located in Greenville some 13 miles away.

Personal Case Study: Minor Boating Accident in Lily Bay (7/07). For the record, I am a Lily Bay Twp. property owner with waterfront property—Lot No. 5 on Long Island (on Tussle Lagoon). I purchased the property in late 2005 and have only recently begun to make improvements including a boat dock that enables me to utilize the property as a base of operation for fishing and boating on Moosehead Lake. I recently experienced first hand the types of

boating / navigational safety hazards present in Lily Bay when I was involved in a minor boating accident in early July 2007. After more than a day of planning (and months of anticipation!), including route / navigation planning using three different Moosehead Lake navigation references (Delorme's map, Maine Lake Charts Map, Navionics digital map), on the afternoon of 3 July 2007 my 9-year-old daughter Stephanie and I set out on a nearly 14-mile boat trek from our rented cottage at Wilson's on Moosehead (adjacent to the dam on the East Outlet of the Kennebec River) to our island property on Tussle Lagoon in Lily Bay. The weather was ideal with negligible wind or surface waves. The trip was uneventful and pleasant until we reached Lily Bay. After entering the waters in eastern Lily Bay near the cluster of islands that surround Long Island, I reduced my speed to "headway" (approximately 5-6 mph measured by GPS), and steered towards the right side of the apparent channel into Tussle Lagoon so as to stay as far away from existing docks and swim platforms as possible. As a result of my "courtesy," I hit an unmarked, submerged rock ledge surrounding the first island immediately outside Tussle Lagoon. I raised the main motor, engaged the auxiliary motor and continued into Tussle Lagoon where I tied up at my homeowner's association dock in order to assess the damage and determine a course of action. The damage incurred to my boat was minor (ultimately about \$120 for a new propeller on the main outboard engine). However, the propeller was damaged to the extent that it could not be operated safely at normal speeds without incurring damage to the lower unit (transmission). It was nearly 5 pm at this time, and by the time I tried calling the closest marina (Beaver Cove Marina), it was closed, with the following day being the national 4th of July holiday (!). I made repeated calls requesting information / assistance on VHF emergency channels 9 or 16; however, to my dismay, no one replied and it appeared that no one within radio range was monitoring either of these emergency channels at the time. I was effectively on my own (along with a worried 9 year old).

A short while later a neighbor who arrived at the dock commented that the damage "does not seem that bad" and suggested that I could get back to my camp at Wilson's "in a half hour." I did the math and realized I was facing more than a two hour boat ride at the maximum speed of my auxiliary motor (about 6 mph). I called my wife on my cell phone and briefed her on the situation, losing cell phone reception during the call. All we could hope for was that my wife heard the information concerning my intended route / time back to Wilson's camp and that she could relay the same information to the operators of Wilson's so they could maintain a look out for us as night approached. We left shortly thereafter and during the first part of the trip back it was clear that the main motor could not be operated at cruising speeds. This meant that I had to use my recently purchased "kicker" (auxiliary) motor to drive the entire almost 14-mile distance back across the lake at a top speed barely above 6 mph. Had we not had the auxiliary motor (a late spring 2007 purchase), my daughter and I could have faced a long, cold night in Lily Bay without food, proper clothing or shelter. More than 2.5 hours later, my daughter and I pulled into Wilson's safely. A "half hour" indeed!

Impact of Proposed Lily Bay Resort on Boating Safety / Accidents. My recent personal experience provides a case study that could easily be repeated, many times, with far less positive outcomes, should LURC approve the Plum Creek proposal to rezone a substantial portion of their lands in Lily Bay Twp. for purposes of constructing a "resort" facility. My own recent experience shows that even careful trip planning and extensive training / experience in navigation and boating safety provide no protection against the unknown and unmarked hazards

present in the water. *As noted above, the recently published high-resolution depth charts for Moosehead Lake from Maine Lake Charts and Navionics indicate that Plum Creek's area of proposed shorefront development contains shallow waters and numerous rocks, with several locations in the immediate area (e.g., Navionics' map) marked with the warning "hazardous area."* The very nature of a "resort" facility, taken together with the existing boating safety / hazardous conditions in Lily Bay, compounds the risk of increased boating accidents and other public-safety incidents. People who visit resorts are typically there for a short stay, e.g., a vacation. Accordingly, such short-stay resort guests are likely to have considerably less boating experience on Moosehead Lake than the relatively few year-round and seasonal residents already on Lily Bay. Resort visitors are also likely to be generally unfamiliar with the navigation and boating safety hazards in Lily Bay. Compare this to the current (recent) history of Lily Bay, which includes Lily Bay State Park and a limited amount of private residential and commercial development. Development in Lily Bay has been slow and highly regulated, e.g., mostly one-at-a-time single-family camps and businesses subject to any number of land-use restrictions, particularly near the water. Newcomers like myself -- I am preparing to build a single-family camp in an existing low-density LURC subdivision where a number of families have preceded me -- can gain "local knowledge" from the shared experiences of our neighbors that is extremely important for safely enjoying and avoiding the boating hazards in Lily Bay. Over time, the slow and steady growth under the current zoning has helped to minimize boating-safety problems via the sharing of such local knowledge. By contrast, the proposed Plum Creek resort could result in the rapid influx of many new "visitors" in a relatively short period of time. Relative to the few existing year-round and seasonal residents of Lily Bay, these resort visitors are likely to be inexperienced regarding the boating hazards of Lily Bay, and they do not stand to gain from the type of shared local knowledge that comes from adding neighbors "one at a time."

Impacts on Public Safety / Emergency Response Infrastructure. In preparation of this testimony I conducted some preliminary research on the existing capabilities / capacity of the local emergency services ("EMS") providers in the Greenville area that would presumably serve as first responders to boating accidents in Lily Bay. For purposes of this testimony, I am grouping the collective capabilities of several local and state agencies, along with personnel in the Greenville area, under the general umbrella of "EMS" -- namely, local fire, local police, local paramedics, state police and IF&W. In the course of my research I spoke with a medical doctor, a Greenville police officer and the Greenville Town manager (and EMS member) Mr. John Simko. From my discussions with Mr. Simko, he acknowledged that he and others on the board of selectmen were not yet very familiar with the details of the proposed resorts (including Lily Bay). I have been informed that Greenville maintains an "emergency response" committee that includes Mr. Simko, Mr. Murray (CEO of Dean Hospital), Mr. MacMaster (the Greenville police chief) and some of the wardens at IF&W. It is unclear as to the extent to which this committee has discussed means by which they would address the projected increase in emergency-response scenarios that would result from the proposed resort at Lily Bay. However, given that Mr. Simko has acknowledged a general lack of familiarity with the details of the resorts and their impacts on the local community, including the EMS system, it is likely that much additional discussion, planning and preparation would be required before the Greenville "EMS" system could reasonably be expected to handle the additional (and remote) case load that would be associated with the proposed Lily Bay resort and associated residential development.

From my initial research, the IF&W warden service operates one rescue boat that is usually docked at the end of Village Street (near the IF&W regional headquarters building). A very limited number of persons are trained to operate this rescue boat, specifically some of the IF&W wardens – notably Sgt. Adam Gormely. I called IF&W this afternoon (8/28/07) to inquire about the rescue boat, its capabilities and the number / qualifications of persons who could operate the boat, but...there was not one IF&W staff member trained / qualified to operate the rescue boat available to answer questions about the capabilities of the boat, let alone to operate it! In other words, if a boating accident occurred this afternoon, there was no one available to take the rescue boat out to help them!

There was some speculation, on the part of a well-intended Town employee I spoke with at Town Hall, that certain members of the Greenville Police department (located across town from the boat docked at IF&W) might also be trained to operate the IF&W warden service rescue boat. Accordingly, I called the Greenville Police Department and spoke to Officer Brian Hughes, who stated that he did not think anyone in the police department was trained to operate the boat, and more specifically, that it seemed unlikely a Greenville police officer would operate the boat independently of the IF&W warden service. Officer Hughes continued that he had actually experienced a situation recently when he was officer on duty whereby an IF&W warden called him and asked him to track down a private citizen (volunteer?) who could conduct an on-water rescue in the absence of an IF&W warden using their own private boat / equipment. Clearly, the lack of trained persons available and ready to use the one existing IF&W rescue boat for local on-water rescues, (let alone rescue operations in a remote area such as Lily Bay), is a grave concern that should be addressed, and remedied, prior to any LURC approval of the Plum Creek resort plan for Lily Bay.

In my personal and professional opinion, the predictable outcome of a LURC approval of Plum Creek's current proposed concept plan for rezoning their Lily Bay lands is that it would place many new and relatively inexperienced boaters on the waters of Lily Bay in a relatively short period of time compared to past / historical trends in development and recreation on Lily Bay. Past experience and data tell us that increased boating traffic and inexperienced boaters are both factors that lead to an increased rate and number of accidents on inland waters. Consequently, LURC's approval of the Lily Bay resort portion of Plum Creek's proposed concept plan would unnecessarily, and avoidably, increase the current risk of boating accidents in Lily Bay, both in terms of accident rates and total numbers. The proposed Lily Bay resort would place a significant additional burden on the limited emergency-services resources in the Greenville area.

Further on this (sub)topic--I would like to state that at the time of this writing (8/28/07), my research and testimony on the projected impacts of the Lily Bay resort on the local "EMS" resources is the proverbial "tip of the iceberg." I do not state this lightly – as my experience in trying, and failing, to track down a single person capable of operating the rescue boat this afternoon speaks volumes about the need for a much more detailed assessment of the current status and capabilities of the collective "EMS" resources in the Moosehead Lake region as a "benchmark" for the analysis and projection of the likely impacts and increased demands placed on the local "EMS" system that would occur as a result of the proposed Plum Creek development on Lily Bay. Accordingly, in preparation for my testimony at the public hearings, there are several persons whom I plan to reach out to in order to gain additional information and details to

share with LURC and the public on the issues raised above. These persons include, but may not be limited to:

- Mr. Geno Murray, CEO of Charles Dean Hospital in Greenville, who is also a trained EMS professional;
- Sgt. (Warden) Adam Gormely, IF&W (Greenville);
- Greenville Police Chief Scott MacMaster;
- Greenville Town Manager John Simko (follow up conversation)

EMS Response Scenarios. As noted above, the closest “EMS” personnel to the proposed Lily Bay resort are those located in Greenville, which is approximately 13 miles south on the Lily Bay Road from the proposed Plum Creek development (not including the travel distance from the Lily Bay Road along new roads that would lead to / through the resort). The travel distance on the water (e.g., via rescue boat) from Greenville to Lily Bay is similar, and presumably a rescue boat could respond more directly / faster to the scene of an on-water accident provided the location of the vessel in distress was known. Assuming the rescue boat took the shortest route to eastern Lily Bay (north through the marked channel between Lily Bay State Park and Sugar Island), and assuming a high rate of speed (40 mph) once underway, the rescue boat could in theory reach the closest portions of Lily Bay in perhaps 20 minutes under ideal water (wind, wave) conditions. The actual response time, even in favorable boating conditions, is likely to be considerably longer, as (a) it is uncertain as to whether or not a warden would be present on site at IF&W at any given time, (or even located nearby), who could operate the rescue boat; and (b) it is presumed that there would be at least some time required to board, prepare and launch the boat for a rescue operation. This could easily stretch the rescue boat response time to an hour or longer depending on the location of the accident in Lily Bay. Given the difficulties of locating and boarding another potentially small vessel on the water, particularly under rough conditions, the actual portal-to-portal response time is likely to be higher still.

Now, add to these response-time scenarios the unpredictable factor of wind and wave conditions, which can be particularly treacherous in Lily Bay. Lily Bay contains a long stretch of open water that is exposed to the common northwesterly winds for a distance of well over 15 miles. I have myself experienced dangerous boating conditions – wind gusts of over 30 mph and ocean-like swells of 6 to 7 feet in height – in Lily Bay during periods of strong winds from the northwest. These conditions change frequently, and on multiple occasions I have been out on the water fishing in Lily Bay in “good” conditions early in the morning only to face rapidly strengthening winds and waves later in the day. More often than not, boating accidents occur when watercraft operators are unprepared for and/or overcome by rougher than expected boating conditions, or at dusk and at night when operators may be fatigued or unable to see well enough to avoid navigation hazards. Accordingly, when lake conditions in Lily Bay include strong winds and waves, particularly when winds are coming from the northwest (which is often), a rescue-boat response scenario could be delayed significantly. Moreover, the often windy and rough conditions in Lily Bay make boat rescue operations more dangerous for all involved. A local resident recently recounted an experience to me whereby he was involved in the rescue of a boater in Lily Bay who got tangled in the rocks in shallow waters. The rescuers themselves had to fight the wind and waves to prevent their boats from being washed up on the rocks as well,

and ultimately swimmers had to be sent into the water, in very dangerous conditions, to help free this person (and their rental boat) from the rocky shores of Lily Bay.

I have also been informed that EMS personnel other than the IF&W warden service have participated in water rescues, notably the ambulance service. In the event the Greenville ambulance / EMS personnel participate, they would need to first travel up the Lily Bay Road approximately 11-13 miles, then continue along either existing local roads (e.g., through Lily Bay State Park) or along the presumed new roads that would be constructed to provide access to the proposed Lily Bay resort. As documented in the testimony from multiple persons at the recent DOT traffic study public hearing in Greenville, the Lily Bay Road from Greenville to Lily Bay is currently in a terrible state of disrepair. Poor sight lines, road surface and sub-base deterioration, excessive crowns / road curvature (in cross section), crumbling (or even missing) road shoulders, and poor drainage (in some locations) are among the many current problems with the Lily Bay Road. Combined with the large projected increase in traffic on the Lily Bay Road that would result from Plum Creek's development (i.e., many thousands of additional vehicle trips per day as described in the recent ME-DOT public hearing in Greenville), EMS personnel traveling the Lily Bay Road north to participate in a rescue would face a combination of unsafe road conditions (particularly for fast-moving emergency vehicles) and increased traffic. In the absence of the specific details of a hypothetical emergency response scenario, it is hard to expect that EMS personnel traveling the Lily Bay road by land would arrive at their land-side point of destination for participation in a water rescue in less than 15-30 minutes. Depending on the means by which land-based EMS personnel would participate in such a water rescue, significant additional difficulties or time may be required before such land-based EMS personnel could assist a person who becomes ill or injured on the water.

The third route for emergency responders is via air. Charles Dean Hospital in Greenville is part of the Eastern Maine medical network and maintains a helicopter-landing pad but does not maintain or operate its own aircraft. Dean Hospital has access to a group of three emergency medical helicopters that are maintained and operated out of Brewer, ME, approximately 15-20 minutes (by air) from Greenville. Given the difficulties of locating and boarding another potentially small vessel, the actual portal-to-portal response time is likely to be considerably higher. In conditions of high winds and waves, or even just steady winds from the northwest, an air-to-water direct rescue in Lily Bay could take much longer and could become dangerous to all involved. However, if we assume that in all rescue scenarios (by boat, road, or air) the location of the boat in distress was known and the weather conditions were favorable, a helicopter rescue would likely be the best and most rapid option for a potentially successful emergency rescue of an ill or injured person on the water in Lily Bay. The principal concern with a helicopter-assisted rescue, (aside from concerns for the safety of the first responders and victims alike), is the cost to the local and state taxpayers of Maine. Helicopter flight time and rescue operations are very expensive, and a single rescue operation could easily end up costing many tens of thousands of dollars. At the very least these costs should be evaluated and Plum Creek should provide for, at a minimum, means of paying for these costs (e.g., through creation of an "emergency response" fund or similar mechanism).

The demographics of persons with the desire and means to purchase second homes of the type that would be facilitated by Plum Creek's proposed Lily Bay residential development are such

that it is reasonable to expect that the median age of the purchasers of the residential lots would be high relative to the general population. Accordingly, it also follows that an influx of older persons would present an increased risk (per person / per day) of cardiac and other serious health crises among the new residents and visitors associated with the proposed Lily Bay development. A higher number of at-risk persons combined with a lack of early and sufficient access to the EMS system would unnecessarily place persons otherwise seeking to enjoy the outdoors at greater risk in the event of cardiac failure, a leading cause of death in the U.S. In most cases involving cardiac distress and arrest, the anticipated response times for a victim in Lily Bay to access first aid, an AED, EMS and ultimately the full medical system based in the Greenville area are so long that survival rates could not reasonably be expected to be very high.

Concluding Statements. In my personal and professional opinion the only clear-cut benefit of the possible LURC approval of Plum Creek's plan for the Lily Bay resort is one-way: it will profit Plum Creek at the expense of others, particularly the existing residents of the Moosehead Lake area from Lily Bay to Greenville. The impacts of LURC's approval of this resort include the aforementioned risks to public safety in terms of an increase in boating accidents, impacts to the public at large from increased traffic on Lily Bay Road (which is in need of major engineering work as well as maintenance), and impacts on the limited emergency-services infrastructure in Greenville. Regardless of the problems or merits of other portions of Plum Creek's proposed concept plan for the Moosehead Lake region, I urge LURC to categorically reject the proposed resort at Lily Bay for the aforementioned reasons. LURC and other Maine State agencies have a responsibility to protect the public safety and welfare. A good number of officials at LURC and other Maine State agencies are licensed professionals (e.g., P.E. licensed), and have an established legal responsibility to conduct their work in a manner that protects the safety and welfare of the public, in particular the existing residents of Maine and the Moosehead region. It is clear that the construction of the proposed Lily Bay resort in an extremely remote, unorganized territory would place great burdens on the current residents and on the already overextended public resources of the greater Greenville community. It would also place inexperienced visitors to the region at unnecessary risk. Resort visitors could come from anywhere—including major cities—where there is a presumption of a safety net all around them. Whereas long-term Mainers and persons familiar with conditions in the northwoods may have a more practical and grounded understanding of the limitations of the local "EMS" system, resort visitors may have no such understanding and may be wholly unprepared to be "on their own." Given that Plum Creek has provided no pro-active plan for mitigating and paying for the predictable impacts of their proposed developments (e.g., road improvements, EMS upgrades, more officers, more wardens...), I feel that LURC has no responsible alternative but to deny the Plum Creek concept plan unless Plum Creek withdraws that portion of their "plan" that pertains to the proposed resort at Lily Bay.

OATH

State of New York

County of _____

I, _____, being first duly sworn on oath, affirm that the foregoing pre-filed testimony is true, accurate, and correct to the best of my knowledge, information, and belief.

Signature

Name (printed)

Sworn to and subscribed before me this ____ day of August, 2007.

Notary Public (signature)

Notary Public (printed name)