Merrymeeting News



The Newsletter of Friends of Merrymeeting Bay • PO Box 233 • Richmond Maine 04357 • 207-666-1118 • www.fomb.org

Friends of Merrymeeting Bay (FOMB) is a 501(c)(3) nonprofit organization. Our mission is to preserve, protect, and improve the unique ecosystems of the Bay through:

Education

Conservation & Stewardship

Research & Advocacy

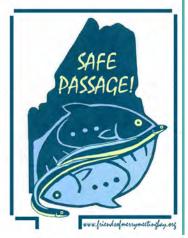
Member Events

Support comes from members' tax-deductible donations and gifts.

Merrymeeting News is published seasonally and is sent to FOMB members and other friends of the Bay. Article hyperlinks and color images are available in our online edition at www.fomb.org

For more information, contact:

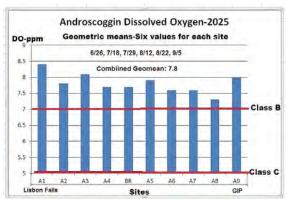
Ed Friedman Chair 207-666-3372 edfomb@comcast.net



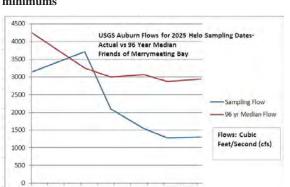
Androscoggin River Water Quality Requires Classification Upgrade

Under federal and Maine law, a water quality standard is composed of narrative or quantitative criteria, designated uses, and an anti-degradation policy. The Clean Water Act (CWA) and Maine's anti-degradation policy require that "[w]hen the actual quality of any classified water exceeds the minimum standards of the next highest classification, that higher water quality must be maintained and protected. **The board shall recommend** to the Legislature that the water be reclassified in the next higher classification." Simply put, if actual data show that the lower Androscoggin in fact meets the standard for Class B water, then *the Maine Board of Environmental Protection (BEP) has a nondiscretionary duty to recommend to the legislature that it be so classified*.

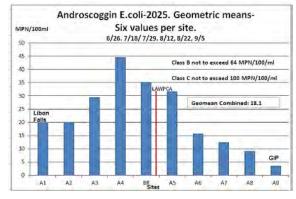
On October 16, FOMB Chair Ed Friedman, our attorney Scott Sells, and Peter Rubins of Grow L+A testified before the BEP in support of Grow L+A's proposal to upgrade the Androscoggin River to Class B from Worumbo dam in Lisbon Falls to Gulf Island Pond to reflect actual water quality. When the classification is less than actual water quality, there is room to pollute and degrade while still meeting the lower classification. At the BEP hearing, Friedman detailed FOMB's intensive 2025 water sampling methods and results, while Sells elaborated on the legal basis for an upgrade. The BEP will hold a deliberative session in the near future, and we hope they will follow the law, making an upgrade recommendation to the legislature. You'll find complete FOMB testimony and water quality data in the Chemical section of our web Cybrary (11th item down).



Dissolved oxygen easily surpasses Class C, B (and A) minimums



Four of six sampling runs taken at flow levels far lower than 96 year median



E. coli bacteria counts well below Class C and Class B maximums



Testimony at the BEP. L-R: FOMB attorney Scott Sells, FOMB Chair Ed Friedman, Grow L+A representative Peter Rubins

A Trip Through Time

A while ago I read Stephen Hawking's *A Brief History of Time*. The book spent years on the best sellers list. I read it shortly after reading *Cosmos* by Carl Sagan. Both authors had a great ability to render complex theories into layperson terms, somewhat digestible, provided you had a good appetite. Pondering time is an excellent sleep facilitator. Thinking about Einstein's "space time" and the theory of relativity is a sure-fire method for sleepy time.

Someone once quipped that "Time was invented to prevent everything from happening at once." Funny when you think about it—all the births, deaths, droughts, storms, forest fires, shopping trips, mail deliveries, continental drift, dinosaurs, and filling the wood box all happening at once. "No time like the present," as dad tells me to fill the wood box, takes on new meaning. I would so much like to hear those words again.

The metaphor of rivers and time has long been used to the point of cliché. There is a reason for that. Rivers are like time. I would say rivers ARE time. They have a beginning, both physically and temporally, and an end much the same. There are currents and eddies large and small, fast and slow. You can learn a lot about time by watching a river. In *A Brief History of Time*, Hawking describes the arrow of time—how it only goes in one direction, from beginning to end, not the other way around. Only one way, like a river, downhill. If it were otherwise, then we might very well show up at our destination before we have left. Right back to preventing everything from happening at once.

Time flies when you are having fun. We have a time machine at work. It is an amazing thing, and it really does travel through time. We all love it. It can carry a full crew of four and all their gear. I am the pilot for now. Eventually, my time will come, and another will take my place. We are going to head up the Kennebec from head tide in Augusta to Waterville, a mere 17 miles. On this trip we will travel back in time thousands of years and then right back into the present. So much for Hawking and his one-way arrow. But, none who have taken this trip return the same as when they left. No one steps in the same river twice, right?

We back the 20-foot-long Oquawka jet time machine boat down the ramp and launch it. The crew loads the gear, everything we need for the day: nets, measuring boards, data sheets, buckets,



The time machine. Photo: Craig Kimg

chest waders, life jackets, and most importantly lunches. The time machines propulsion unit has been replaced. A brand-new Mercury 250 horsepower 4-stroke outboard with an American Turbine jet pump. The jet pump company's logo is "We make every river longer." They are not lying.

Jet boats are capable of traveling in very shallow water. It is their forte. Conventional drives would be pounded to pieces within seconds where we are about to travel. It is a drought, and the river is incredibly low, as low as I have ever seen it. And I've seen it for a long time. Median flows for this time of year are usually north of 3,000 cubic feet per second. Current flow is at 2,000 cubic feet per second and falling. We will need every bit of time-traveling jet boat advantage we can get.

The Mercury roars to life. All eight cylinders are thrumming. I pull away from the dock as the crew finishes stowing gear and putting on their life vests. I slowly idle upriver past Fort Western built in 1754. We trim the boat to be level side to side and keep most of the weight aft to keep the steering as precise as we can. After the motor has warmed, I call out "launching in five, four, three, two, one," and ram the throttle lever to full. The boat surges forward and within 4 seconds is on plane as we approach the downtown railroad trestle. We're already in 1855 and are rapidly traveling back in time as we pass Edward's dam built in 1837. By the time we pass Cushnoc Island much of the metropolitan Augusta area has disappeared. In another thousand yards we cross under the new bridge and little evidence of humanity is left.

A Trip Through Time, continued from page 2



"...boulders usually well underwater are now exposed." Photo: Ed Friedman

Time travel can be perilous. In this drought, boulders usually well underwater are now exposed. Even worse are the boulders that were deeper and now lurk just below the surface. We look for tell-tale boils—any indication that some hidden object may be present. Crashing into things while in a jet boat violates time-travel laws. Such violations can very well end your time. We have memorized the route up the river. Where you start your turns, how hard you turn in, how long you hold the turn, and when to exit the turn on a new heading. Timing is everything.

The crew is alert. Ready. Watching the approaching shallow water. We are in Sidney, approaching the "Braids." Here the river is very shallow. The gravel bottom shifts year to year, flood to flood. Heavy objects like big boulders and whole trees can modify the channels in varying flows. We aim for the "Vs." They face upstream. We go for the outer edge of the V. The apex of the V marks one of those pesky enforcers of time travel. Never drive into the apex of

a V. We weave through the shallow water at speed. The jet boat paradox comes into effect. The faster the time machine goes, the less water it needs. The shallower it gets, the faster we go. Not because I'm adding power. We're at full power. The time machine is getting a better hydraulic grip on the bottom 4 inches away.

We exit the Braids and approach Six Mile Falls. It had another name. In another time it was called "Neguamkeag." The one thing I know about this native name is bad. Dangerous. All you have to do is look at it—a set of ledges and rapids spans the river here. We have to shift hard from one side of the river to the other in a boulder field to hit a chute of water twenty feet wide and then skid the boat right 120 degrees in 40 or so feet, returning to full power and exiting the ledges in a hard left turn into another boulder field of large glacial erratic's trapped above the ledges. This whole transition takes 8 seconds. It doesn't feel like 8 seconds. It seems to take forever and be instantaneous at the same time. Here we are on the ancient Kennebec. There is no sign of people past or present. We flash past our second sample site

I worry that the drought which has the Kennebec this low will have the Sebasticook River even lower. Site one is at the confluence of the Kennebec and Sebasticook, once the site of a large native village and then the site of colonial Ft. Halifax in the waning years of the incessant war between France and England over these rich new territories. By 1757 the native village was long gone, but their artifacts show up regularly. I always look.

headed for site one.

Here the time machine falters, or its pilot does. It's too shallow. Scary shallow, with jagged boulder cobble fields. The flow from the Sebasticook



A 250 million year old time traveller Photo: John Lichter

A Trip Through Time, continued from page 3

is extremely low, so we turn about and prudently head back to site two. We do our sampling, reload our gear, and head to site three. Time speeds up when we head down river. In another six sites we are nearly back to the present. We finish site eight B, and our sampling season is complete. Except for that annoying site one. We'll have to take the Ford F-150 time machine up to Ft. Halifax on Route 201 to finish that one. We trailer the Oquawka time machine and head back to the shop. Just in time.

Nate Gray

St. Croix's Salmon Falls Restored

In 2008, FOMB filed a Clean Water Act citizens' suit to reopen the St. Croix River to river herring. The fishway at Grand Falls dam, third on the river, had been blocked since 1995 by an act of the legislature. Our lawsuit led to revived herring passage at the dam. Over the last few years, Milltown, the first dam on the river (at the former flooded Salmon Falls near Calais) was removed. The Woodland Pulp Mill in Baileyville, badly in need of improved fish passage, is now the first dam on the river. Photos below from Point of View Helicopter Services show the progression of Milltown Dam removal and site restoration, as well as Woodland Pulp Mill and its very lengthy fishway.

Ed Friedman

Photos: Point of View Helicopter Services



Beginning of Milltown dam removal, USA on right, 2023



Dam removed, USA on left, 2024



Woodland mill with fishway circled



Site restoration underway, Canadian side seeded and ball fields, 2025

More Time Machine

From: Fishery Management in the Androscoggin River,

MDIF&W Fisheries Research Bulletin No. 7, 1967

In 1884, the Commissioner reported: "Our poverty of resources has prevented us from properly stocking the Androscoggin River. Dams multiply faster on the river than we (the Department) can cope with. Manufacturers not only obstruct the river with monstrous dams, but, by the criminal neglect of the Legislature in providing restrictive laws, the bed of the river is covered with waste matter that destroys both spawning beds as well as food for fish. Poisonous matter from Brunswick factories destroyed the spawning grounds "of shad and alewives and drove

"For the most part, recommendations from the various pollution surveys made on the Androscoggin River since 1930 go unheeded." them away. Although fishways are built in the dams at Brunswick they are inadequate - they are not built to plan or design of our engineers. "[So far as is known, this was the end of the only attempt ever made to restore runs of anadromous fish to the Androscoggin River] (Pg. 10).

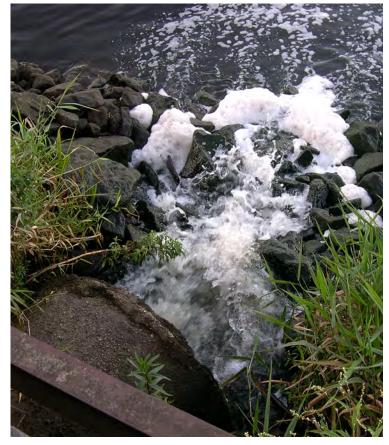
The Kennebec River, which joins the Androscoggin River as it enters Merrymeeting Bay, can also be placed in the "cesspool" category. Pollution from industries and municipalities create such deplorable conditions on the lower Kennebec that large fish kills are reported annually (Pg. 33).

To date, efforts to regulate pollution have been directed toward the prevention of a public nuisance; but very little, if anything, has been done to make the

Androscoggin River suitable for recreational uses or for clean water industrial use. For the most part, recommendations from the various pollution surveys made on the Androscoggin River since 1930 go unheeded (Pg. 33).



Pulp mill lagoon wastewater headed to the Androscoggin-Photo: Point of View Helicopter Services



Sewer discharge into the Androscoggin Photo Ed Friedman

Fall Bay Day 2025

The good news is that on September 30, in picture-perfect weather, about 173 fourth graders from four area schools (Bowdoin, Bowdoinham, Pittston-Randolph, North Yarmouth Academy, and Williams-Cone in Topsham) descended on the Merrymeeting Bay Wildlife Management Area in Bowdoinham for another outstanding Fall Bay Day. The bad news is that due to a lack of volunteers, we had to turn away another hundred kids from Georgetown and Fisher-Mitchell in Bath.

Bay Day registration operates on a first come, first serve basis, so it's important to watch for our email invitation and respond quickly. At the organizational end we have a constant balancing act to manage between student attendance, volunteer chaperones, and presenters as we strive for a session size of about 10-12 students.

Spring Bay Day will be May 12 at Chop Pt. School. Please contact Ed Friedman, 666-3372 if you'd like to join our regular volunteers.

Our hands on sessions this fall were: Anadromous Fish Printing, Tree Walk, Bugs, Environmental Art, Bird Walk, Fish Migrations, Conservation Canines, Bird Banding, Archaeology, Caring for Critters, Nest Building, Beach Seining, and Watershed Modeling.

Photos by Ed Friedman, except where noted.

Continued on page 7



Alewife finds a turbine bypass



Around the mandala Photo: Adele Morgan



Nova Scotia toller and friends Photo: Becky Bowes



Predatory seal



A banded bird

Fall Bay Day, 2025, continued from page 6

Thanks to...

Presenters: Nate Gray, Karen Mayo, Leslie Anderson, Cathy Reynolds, Charlotte Agell, Will Broussard, Elizabeth Walker, Wendy Van Dyke, Elise Wright, Sarah Bodine, Dave and Sue Robichaud, Althea Laprey, Cyndie Lamoreau, Dana Cary, Linda Hornbeck, Kathi McCue, Betsy Steen, Shannon Nelligan, Jason Bartlett, Eric Ham, Kent Cooper, and Lirella Jaen.

Chaperones: Mike Curran, Jamie Rea, Martin McDonough, Jane Yurko, Pam Hanson, Adele Morgan, Tina Phillips, Dan Smith, Phil Brzozowski, Theo Curran, Ray Hall, Elise Straus-Bowers, Becky Bowes, Martha Spiess, Joe Trafton, Ned Schuller, and Julie Rea.



Archaeology

Thanks to Rebecca Bowes for newsletter layout.

Special thanks to:

Ed Friedman, Chair, 666-3372

Keel Kemper and Kendal Marden at MDIF&W, Fred Koerber for archaeology kits and site preparation work, and the staff at Wild Oats Bakery for delicious lunch wraps.

Ed Friedman

WE NEED YOU! PLEASE SUPPORT OUR IMPORTANT WORK

Friends of Merrymeeting Bay · PO Box 233 · Richmond, Maine 04357 **FOMB Leadership Membership Levels** □ \$1,000+ Sturgeon □ \$20 Smelt □ \$250 Striped Bass Our accomplishments are due to the hard work of □ \$100 Shad □ \$750 American Eel □ Other dedicated volunteers, especially those who serve □ \$500 Wild Salmon □ \$50 Alewife on our committees. If you want to get involved and serve, please contact the committee chair or □ \$7 Enclosed Ed Friedman. We always welcome member input (optional) and we'd love for you to join us! Name for a copy of Conservation **Steering Committee** Options: A Ed Friedman, Chair (Bowdoinham) Address Guide for Vance Stephenson, Treasurer (Beavercreek, OH) Maine Land Becky Bowes, Secretary (Brunswick) Owners [\$5 Town/State/Zip Phil Brzozowski (Brunswick) for book, \$2 Nate Gray (Vassalboro) for postage]. Email Phone **Education Committee** Betsy Steen, Chair, 666-3468 ☐ Renewal ☐ Send information about volunteer opportunities ☐ New Member ☐ I would like a FOMB duck logo sticker **Conservation and Stewardship Committee** Chair Vacancy Membership and Fundraising Committee Nate Gray, Chair, 446-8870 **Research and Advocacy Committee**



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Merrymeeting Bay Hunting from Bath Times, September 30, 1920

Some of the hunters from blinds on Merrymeeting bay shores have stirred up a hornet's nest in the proposal to obtain a law preventing the hunting of ducks in floats at the new legislature. The float men talk of retaliating by obtaining a law preventing the hunting of ducks with the use of live tollers claiming that these blinds are thus ruining the hunting on bay waters. It seems to many Bath hunters that the float gunning is the more sportsman like of the two methods. The float hunters match their wits more against the craft of the wild birds and the approach of a float to within gunshot of a flock of birds certainly gives more thrills than loafing behind a screen watching tollers and awaiting the ducks to fly their way. The trouble with the gunning on the bay this Fall is the pump gun more than either the blinds or the floats and the fact that so many green hunters have been there frightening away the birds. Barring by law the eight gauge gun from use, duck shooting has lost what good effects it may have had by the counter increase in the use of the automatic pumps that fire five shots in as many seconds, while the 8 gauge fired but one shot or two.



Photo: Andrew Holly