

NETU Newsletter January 2024



Meeting Notes

Our Next Meeting will take place on Monday, 8 Jan 2024, at 6:00PM at the <u>IRWA Headquarters</u>, 143 County Road, Ipswich, MA 01938

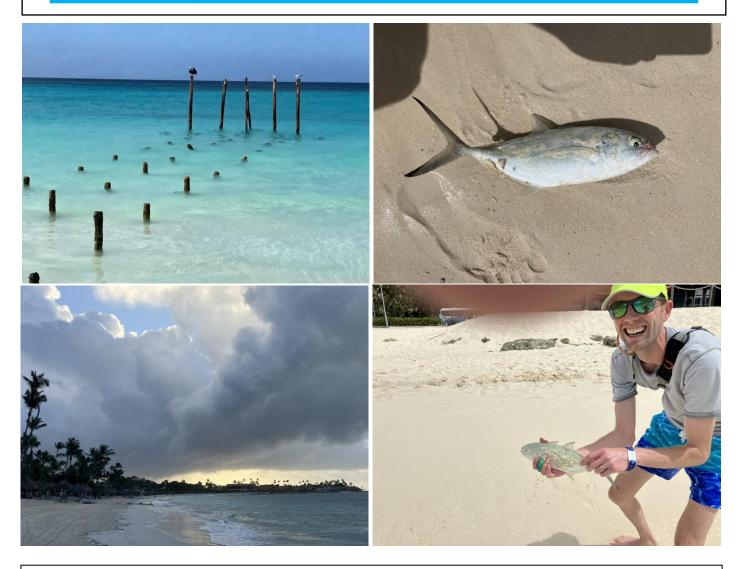
OUR SPEAKER WILL BE

ROSS KESSLER

FISHING ACCESS COORDINATOR FOR THE
MASSACHUSETTS DIVISION OF MARINE FISHERIES

PLEASE JOIN US FOR A FUN EVENING!!!

Greetings from NETU President Ben Meade!



Dear fellow Nor'East Chapter Trout Unlimited Members,

Happy Holidays to all! A season for getting together with friends and family and a season for being thankful and reflective. Probably like for a lot of you, this year has passed in a flash. Overall, there was precious little time in the Meade household to sit back and smell the roses. With the idea of R&R in mind, however, Mary Beth and I were fortunate to be able to escape the real world in early December for a few days in Aruba. We had an incredible time. With the prospect of Caribbean beach time, I, of course, packed fly fishing gear. I am sure many of you reading this can relate. If you travel somewhere where there will be fishable water, a fly rod comes along!

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Greetings from NETU President Ben Meade! (continued)

Memories that I will treasure forever – and a scene which repeated itself many times - involved sitting and reading on a lounge chair, on a picture perfect beach, and seeing a surface blitz of feeding bar jacks. They traveled up and down this beach in schools, trapping and engorging themselves on baitfish trapped in the waves. At the sight of feeding fish, I would sprint up from my chair, grab my rigged up 8 weight, carefully watch my backcast, and drop a streamer on the edge of the school. I caught a few of these bar jacks this way. It was great fun! As I found throughout our stay, too, fly fishing on the beach of a Caribbean all-inclusive resort is a great conversation starter and a quick way to make friends. Fellow beachgoers soon began to call out to me at the sign of feeding fish and cheered whenever a fish was landed. It was great fun, and I have never had such a cooperative fly fishing experience!

Have a great holiday season, all, and looking forward to seeing you at one of our NETU meetings in 2024. We are actively recruiting new members and new energy. We welcome your attendance and involvement!

Ben Meade, NETU Chapter President

Note from your friendly Newsletter Editor, Fred Jennings

Whenever our esteemed NETU President posts a "Greeting" for this Newsletter, there seems always to be a photo that shows his infectious smile at his utter delight with living life. When my kids were little, we had a house rule against any of them ever "having too much fun"! (Kids should always have a rule that they are expected to break with unrestrained glee...) So when they visited friends' houses, I would always say to them when picking them up at the close of these visits: "I hope you didn't have too much fun..." They would brighten up with a big laugh and respond: "We sure did, Dad! WAY too much fun!" I think that Ben is a wanton rule-breaker in this regard... Bravo!!! –FBJ

Here's another wonderful blog from Spencer Belson... ENJOY!!!



Something in the Orange By Spencer Belson

Orange is the color of autumn. Orange pumpkins adorn front steps; fire-orange oak leaves set the fall landscape ablaze; brook trouts' bellies darken to a deep orange in preparation for spawning. But despite how seasonally-appropriate and functional my orange Black Diamond rain jacket is, perhaps it wasn't the right choice for stalking ultra-spooky brown trout.

The weather on this late October day could be summed up by one word: miserable. The polar opposite of the previous day's 80 degrees and bright sun, a bone-chilling drizzle soaked the central Massachusetts mountains, making 45 degrees feel more like 35. If there was one benefit to the wretched conditions, it was that I'd have virtually no competition. Having already unsuccessfully fished a nearby stream for 45 minutes (a popular one, at that), my only company had been a massive whitetail buck who immediately spooked at the sight of me. Must have been the jacket.

Now I found myself on a new stream, with the rain lightening slightly into a cold mist. My first time at this stream had been a brief trip a month prior. That said, in a half-hour of fishing, I caught one fat wild brown trout and spooked another. With more time this trip, I hoped to explore more water and find more fish.

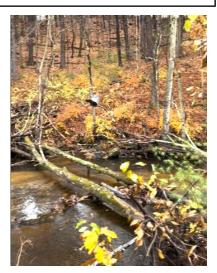
Right off the bat, I fooled a 12-inch brown in a small pool between two short sets of riffles. The fish took a Higa's SOS, a new addition to my ever-expanding list of confidence patterns. With the weather cooling, I expected the browns to be dressed in their vibrant spawning attire; however, this one was as pale as a Halloween ghost.

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Something in the Orange – By Spencer Belson (continued)







Though I planned to work upstream, as one typically would when dead-drifting a nymph, it was hard to pass up a long pool downstream of me. Drifting the nymph under an overhanging log, I was quickly hooked up to another brown, a cookie-cutter of the first. So far, the fish seemed to be everywhere they were supposed to be.

Seeing as I was having success moving downstream, I figured I'd work down the next pool and then start heading back upstream. Well, one pool turned into two, then three, and soon I'd completely lost count. I was seeing fish – only trouble was, now they were everywhere I didn't expect them. I'd stealthily wade towards a promising spot, expecting the trout to be holding in the seams or deep water. As soon as I'd get within casting range, a shadow would emerge from the six-inch-deep shallows where I was standing, thoroughly spooked. Must've been the orange jacket. Occasionally I'd walk back to the spot and see the same fish, but they'd never eat.

Eventually I did fool one more fish, quite possibly my smallest brookie of the year (also known as a brown trout snack). With that, I turned around to head back. Along the way, at a spot I'd been saving all day to fish, I encountered a surprise. This particular pool was lined with plenty of fallen timber, creating complex seams and shaded holes where the biggest trout in the stream undoubtedly lived. However, because of this surprise, it was unlikely that I'd catch them. (concluded on next page \rightarrow)

Something in the Orange – By Spencer Belson (concluded)

Perched atop the logs was an elegant Great Blue Heron. Its head was cocked in concentration, searching hard for its next meal. At first the bird angered me — why did it have to ruin what could have been a game-saving finale to an otherwise slow day? But the more I considered it, the more I realized I had no right to be angry. This heron, more so than the brown trout I pursued or the anglers that had placed them there decades ago, deserved to be there. Unlike the browns, it was a native, natural part of the ecosystem. Frankly, by stalking and eating those fish, it was doing its part to increase the stream's biodiversity and give a fighting chance for other indigenous species, such as brook trout.

Regardless, I really wanted to catch those big browns. As I stood silently observing the heron, it eventually caught sight of me and took off. Must've been the orange jacket. I continued wading through the shallows, eyes fixed on the timber. However, I must have taken one step too many; out of a run that couldn't have been more than eight inches deep, a massive, dark shape skirted upstream. Unbothered by the heron, this fish had been sitting right out in the open, only to be spooked by my stealthy steps. Whatever, I'll just blame it on the jacket. (*Thanks for this story, Spencer!!! – FBJ*)







We're Thankful • November 21, 2023

During this time when we collectively reflect on what we're grateful for, we wanted to extend a heartfelt thank you to you - our supporters, volunteers, and donors. You not only collect water data, pull weeds, and write letters to the editor, you also help us restore fish passage, rescue animals, protect streamflow, and so much more.

In this season of thankfulness, at our staff meeting this week we posed the question, "What about this work are you grateful for?" One theme is clear — we feel fortunate to be able to do this work — and are grateful for your commitment, dedication, and generosity that allows us to do it. (As are we for your work – FBJ)

Sincerely, Wayne Castonguay IRWA, Executive Director

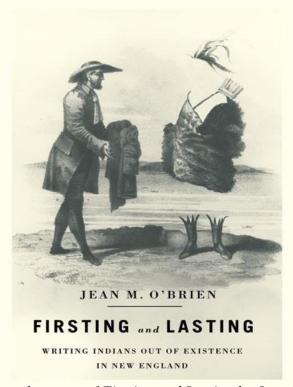
More Nice Tidbits from IRWA!!!



Honoring Native American Heritage

November 29, 2023

Did you know that before colonial settlers named this river the Ipswich, it was called Agawam by the Pawtucket people? The Pawtucket were an Algonquian-speaking, thriving agricultural tribe of indigenous Native Americans. As we work to restore the river to its pre-industrial function, we recognize the important work of Native American leaders in ecological restoration across Massachusetts and encourage you to learn more about it too!



<u>Pictured above: Image from the cover of Firsting and Lasting by Jean M O'Brien</u>

At IRWA's headquarters, a new stream has appeared — or, really, reappeared. The stream was restored by a process called "daylighting," which is exactly what it sounds like: the stream, once buried, is back out in the daylight, as it once was hundreds of years ago.

Plenty of organisms alter their environment to suit their needs, and humans have always taken part in this. In the colonial and industrial ages, settlers in New England engineered the land to power mills, create reservoirs, and farm. But the history of the Ipswich River extends farther back than the last 300 years. Before colonial settlers named this river the Ipswich, it was called Agawam by the Pawtucket people, an Algonquian-speaking, thriving agricultural tribe of indigenous Native Americans. The Pawtucket related to the Agawam through travel, agriculture, and fishing — and they did this while maintaining the river's ecological balance.

History is always in a process of daylighting. This month at IRWA, we are reflecting on the history of people who relied on a river by a different name, that had a slightly different shape — but that river, Agawam and Ipswich, is still here. One thing we're learning at IRWA is that to speak about the history of the Pawtucket people is **not** to speak about people who completely disappeared as a result of disease; rather, their ongoing story has been omitted and elided by the dominant narrative. We've been learning from Rooted in Nature: Indigenous Knowledge and Climate Resiliency web series, Firsting and Lasting by Jean M O'Brien, and History & Cultures of the Great Marsh Conference. As we work to restore the river to its pre-industrial function, we recognize the important work of Native American leaders in ecological restoration across Massachusetts.

How Many Fish Are Too Many? by Carl Soderland

I was a general internist for 43 years, with scheduled appointments months in advance. It was impossible to be spontaneous, missing many opportunities to go fishing "tomorrow". I retired a few years ago at 73 and a new word entered my vocabulary, "sure". So when an old friend called and said: "Before we get too old, let's go to Alaska fishing", I was quick to use my new found word, "sure". Steve and I have been friends since our days together in the new born nursery at Toby Hospital in Wareham, Massachusetts. I am a day older by 4 hours and introduced Steve to fly fishing about 30 years ago. Since that time we have caught lots of trout, bone fish and stripers together. We have had fishless days and some very good days on the flats, but they were all great days. A cast to a rising fish, a long cast to a distant bonefish or a striper in Buzzards Bay often made any day fishing, the best.

Steve had fished Alaska a couple of times before, but it was my first time to a remote camp in Alaska. I had fished several times for steelhead with Paul Jacobs of Reel Action Fly Fishing in western New York, knew several sports who had been to Reel Action Alaska on the Kanektok River and said the fishing and the camp were terrific. So, on August 16, 2023, Steve and I boarded Alaska Air in Boston for a two-step flight to Anchorage followed by two more flights 2 days later to Quinhagak. As we sat on the flight in Boston, an older gentleman than us, with a huge smile and a rod case in his arms said: "Where ya headed?" We told him we were headed to Alaska, to the Kanektok River. He quickly gave even a bigger smile and said: "Me too." This was Bill's eighth trip to Reel Action Alaska, he was 85 years old and he was travelling alone. His friends had all gotten too old to go and would much rather go to a warmer climate. Bill's excitement and enthusiasm added credibility to our decision to go to Reel Action Alaska. We better go when we can, before we want warmer weather. This was Bill's eighth trip!

We had planned an extra day in Anchorage, having listened to all the horror stories of late about flying, lost luggage, cancellations and delays. On time and with fishing gear in hand, we stayed at the Lake Front Anchorage, located a short distance from the airport and across the parking lot from Lake Hood Seaplane Base. Lake Hood is the world's busiest seaplane base, handling an average of 190 flights per day. A canal was dug many years ago connecting Lakes Hood and Spenard and creating three separate landing areas. Sea planes were landing and taking off all day long.

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During our day in Anchorage we went to The Anchorage Museum which sits on the traditional homeland of the Eklutna Dena'ina. The museum is committed to recognizing and honoring the land, culture and language of the Dena'ina people. There were several exhibits: Art of the North, Salmon Culture, Mana: The History We Inherit and Lines of Site, and Comic Art and Storytelling in Alaska. The visit was well worth the time.

The following day we had an Alaska Air flight to Bethel, a city of 6,000 in southwestern Alaska. Bethel is located on the Kuskokwim River and is homeland of the Yup'ik peoples and their ancestors for thousands of years. Bethel had been called Mamterillermiut meaning Smokehouse People. The airport was a small cinderblock building and most of the passengers were Yup'ik. Baggage pickup had our few duffle bags but was mostly large plastic tubs full of needed supplies of the locals. There were no roads to Bethel and there was no Walmart. From Bethel, we left on a gravel runway on a chartered Grant Aviation GippsAero GA8 Airvan. I learned that the GA8 had been designed for use in remote areas and could land on "austere" air strips. Its design emphasized ruggedness and ease of use. With 6 sports and a pilot, we headed southwest flying over tundra, low enough to see moose and bear. I was struck by the appearance of tundra. I had only seen it in photographs before. It was a beautiful mass of short shrubs, sedges, grasses, mosses and lichen. I learned that tundra soil is rich in nitrogen and phosphorous and contains large amounts of biomass and decomposed biomass. The biomass contains methane and carbon dioxide in the permafrost, making tundra soil a carbon sink. As global warming heats the ecosystem and causes soil thawing, the permafrost carbon cycle accelerates and releases much of the soilcontained greenhouse gases into the atmosphere, adding to climate change.

The flight to Quinhagak was short and as we flew over the Kanektok River a long gravel runway appeared alone on the horizon. Quinhagak is on the Kanektok River and on the east shore of Kuskokwim Bay, less than a mile from the Bering Sea. The Yup'ik name is Kuinerraq, meaning "new river channel". The village dates back to 1,000 AD and now has a population of 776, 94.2% Native Americans. Most of the people are subsistence hunter-gatherers. There are lots of salmon, trout, birds, caribou, moose, bear and berries. There had been a large introduced reindeer herd but was longer present. There are very few paying jobs except government employment and there is some commercial salmon fishing in the summer. Interestingly, there is a very productive archaeological site, Nunalleq, in Quinhagak. This site has become much

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more productive as the permafrost has melted due to global warming. This has exposed many more artefacts that previously had been frozen in the permafrost. The town is proud of its museum which is home to many of these discovered artefacts. I would have had to give up an afternoon of fishing to visit the museum and I heard from sports who visited it that the visit was a worthwhile trip. However, I chose to fish but I am sorry I didn't visit the museum.

We were met at the runway by Paul Jacobs and the staff of Reel Action Alaska. We were driven in a pickup to the boat landing which was about 10 minutes away. All eleven sports were loaded into the back of the truck for the ride over the tundra and probably the only road in Quinhagak. Reel Action Alaska is located about 1½ miles upriver from the village, within the Togiak National Wildlife Refuge. The Togiak is home to some of the most prolific salmon runs in the world and hosts a wide variety of fish, birds and mammal species. "From rolling tundra to the highest mountain peaks, and from the rugged coastlines to crystal clear rivers, the Togiak National Wildlife Refuge is a haven for all things wild". As advertised, "in the clear waters of the Kanektok, anglers will find king, coho, sockeye, chum and pink salmon, as well as trophy-sized rainbow trout, arctic char, grayling and dolly varden".

Reel Action Alaska is a full service tent lodge, each sport having their own large 10 X 12ft heated wall tent on a wooden platform. There is a large dining room tent, 2 hot shower heated tents, composting latrines, warming tent for wet waders and wet clothes and a tying tent better stocked than many fly shops. Reel Action has thought of everything. They have a wide array of rods and reels to use, all flies are provided and there are 2 sports per guide/jet boat. Guides are rotated so that you fished with all 6 guides the 6 days that you are on the water. The meals were terrific and the hors d'oeuvres were a welcome addition after a full day of fishing. There were salmon cakes, shrimp, smoked salmon, an assortment of cheeses among many other tasty morsels. Of note, the Yup'ik region is alcohol-free. Out of respect for the Yup'ik people, Reel Action requests that sports refrain from drinking alcohol during their stay at camp.

About fishing, of the days you fish, one day you leave camp at 6:30 AM for a 1½ hour jet boat ride up the Kanektok into the Togiak Wildlife Refuge, fishing for large rainbow trout and dolly varden. Our first morning fishing, fresh with anticipation and excitement, we headed up the Kanektok. I was struck by the absence of wildlife. We saw one beaver and an eagle, but otherwise the shoreline was empty. We landed on a

gravel bar at the mouth of a tributary of the Kanektok and I was struck by the amount of large bear, moose and wolf tracks that were all over the gravel bar. They were everywhere in the soft gravel and they were large. These tracks were everywhere we stopped on the river. I might not have seen bear, but they saw and heard me. I could only imagine what a game camera would have shown!

Armed with my 5wt Orvis Helios 2 rod with floating line and a small egg pattern, I stepped onto the gravel bar still agog with the amount of bear tracks all around. These tracks were larger than my size 12 wading boot. While the guide was setting up Steve's rod, I took my first cast into the Kanektok. Within seconds, I had a 14 inch dolly varden. Thinking, "boy, was I lucky", I cast again. Within seconds, another larger dolly varden was on, this before Steve had wet a line. We then waded up a tributary in search of large rainbow trout. There were dead pink salmon in various grotesque stages of decay all over the shoreline and in the shallows. There were numerous partially eaten salmon with bear and wolf tracks all around. All day long we cast to large rainbow trout, 16-22 inches, in pools eating eggs. The challenge was to get a drift over the rainbow before the aggressive dollies hit. There were dollies that looked like arctic char, 20-24 inches among the many 12-16 inch dollies we caught. The hiking and wading were easy and flat, the shoreline surrounded by scrub bushes separating the Kanektok from the tundra. I could only imagine what was sitting in the scrub staring at me. The guides do not carry guns, only bear spray. At the end of a long day of fishing, we both had caught well over 100 fish each, a greater than 100 fish day! I would have enjoyed a cold Bahamian Kalik on the ride back, my custom when bonefishing, but settled for a lime selzer instead.

Day 2 was our first day fishing for salmon. As was the day before, I wasn't sure what to expect. After a very short jet boat ride upriver, we landed on a gravel bar. The water was up to my calves and we were about 60 feet from shore with a nice pool and good flow between us and shore. I had my trusty Sage XI2 8wt, 20 years old but still a gem, a Bauer SST8 reel (a retirement present to myself) and an Outbound Short Rio WF8F line. The guide tied on a Wapsi super jig headsize 1/16 ounce size #4 fly. The fly was tied with UV Polar Chenille Fl. Fuchsia and Ice Dub Shimmer Fringe shell pink and looked "hot". I was ready, but I wasn't sure for what. My first cast was a nice easy 40 footer, I was trying to get a feel for the weighted jig head. I let the fly swing and, just as the day before, wham, fish on. The salmon took several nice runs down stream, but there were no obstructions to snag. I landed a beautiful 12 lb female silver salmon.

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The fish was netted by the guide, barbless fly came out easily, took a quick picture of my first salmon and release the silver back into the water. The second cast was a repeat of the first. Good easy cast, swing and bam. This time it was about a 14 lb rugged male silver with a large kype and predominate hump. Except for an occasional large pink salmon, the day was spent with fish after fish to the net. Steve estimated that we had caught more than eighty silver salmon each, all between 10-15 pounds.

We were fortunate, the weather was in the high forties, the wind was minimal, water height perfect, water clarity ideal, no wind until the last night and rain only once in the middle of the night. There was occasional sun at the end of the day, but a good cloud cover most of the time. (The temperature two weeks after we left was in the twenties).

Day 3-6 were spent leaving camp at 8 AM after a good breakfast, fishing until 6 PM with a very short break for lunch, and arriving back to camp about 6 PM, leaving wet waders and wet clothes in the drying tent, taking a nice hot shower, and then hors' d'oeuvres, an excellent dinner and lots of enthusiastic chatter. We did have fresh salmon once but Reel Action Alaska feels very strongly about catch and release. Per the Reel Action website: "No matter how great the fishing is and no matter how many fish it appears are in the river, these resources are precious and every fish released will live to fight and spawn another day." The fish are mostly handled by the guide and I would say, I have never seen fish handled more carefully and released more quickly. They were kept in the water except for a quick picture. Two fish were kept to eat out of the hundreds caught and they were delicious.

Over 5 days of salmon fishing, several things stand out. One was how many big fish we caught and how beautiful the salmon were. Many had sea lice, having just entered the Kanektok from the Bering Sea. Another was when we would first get to a pool, we would cast flourescent pink Gurglers, quickly skitter them across the surface and watch big salmon explode after them. We took many fish this way initially and when they stopped hitting the Gurgler, they were right back on the jig head. This went on all day, every day! The last thing that stands out, one day we went to the mouth of the Kanektok, to the tidal area. The tide was going out and we could see large wakes of fish entering the river and heading upstream. We were strategically placed so that the salmon passed within casting range. It was like fishing for bonefish, casting at the head of the wake in foot deep water.

And so it went for six days, fished for 8-9 hours each day, had fish on all day long and landed between 75-100 fish daily. Needless to say, I went to bed early and slept well. Even in late August, it was still daylight until after 10 PM and dark until near 8 AM. This brings me to the title of this writing, "How Many Fish Are Too Many?" I caught more than 450 fish in 6 days. It never got tiring, I never got bored, my 8 wt Sage became punky from all the weight of the fish, I slept well, ate well, and was enthused every day. So what do I mean by "how many fish are too many"? This thought came into my mind when someone asked me if I would go back to Alaska to fish again. My immediate thought was: "Of course"! But then I started thinking. This Alaska trip was all about catching fish, being in remote Alaska with friends and anticipating a bear around every bend of the river. It didn't require matching the hatch, selecting a wet, dry or streamer. It wasn't about difficult wading, getting the float right or delicate casts to rising fish. The tackle was heavy, the fly weighted, many fish went into my backing several times.

I often fish for solitude. I love to wade a remote Bahamian flat, fish for small brook trout with a 3wt in Maine or catch a striper from my rowing shell in Plum Island Sound. Why do I like to fish? I never think "why do I like to catch fish"? I have had many days where there are very few strikes and even fewer fish to the net. I have taken hundreds of casts on the Miramachi and never felt a tug. I was fishing, not catching.

So, how many fish are too many? My closest friends are all fly fishers. I love to gather with friends, tie flies and tell tales about fish lost. I love the entomology of trout fishing and the marine biology of striper and bone fish habitat. I love to read the works of Dana Lamb, John Gierach, Russell Chatham, Nick Lyons. I love to read descriptions of where people fish and who they fish with. Bill Tapply wrote in his last book, Sportsman's Legacy, about his relationship with his legendary dad, Tap Tapply. Bill wrote: "I became Dad's hunting and fishing partner, as soon as I proved I could keep up with him in the woods, take my fair turn at the oars, and keep my mouth shut from the back seat."

I have fly tying books by A.K.Best, Charlie Craven, John Barr, Dave Klausmeyer, Dave Hughes and many others. I have enough fly hooks and fly tying material that I could stock a fly shop.

So how many fish are too many? I am not too bad a caster, but I can't cast the entire 90 feet of fly line either with a rod or, as Lefty Kreh did, by hand. I have read Simon Gawesworth's books on Spey Casting and stood in Walden Pond thinking of Henry David Thoreau while Simon explained spey casting to many members of the Boston Flycasters. I haven't kept a fish that I have caught in years, but I do love to eat fresh fish, caught by someone else!

So how many fish are too many or how many fish are too few? There is no right answer to this question. We all fish for different reasons. But, as I ponder this question, "why I fish", I realize that catching a fish is a very small part of why I fish. I didn't ask how many caught fish are too many, but how many fish are too many. I think of the sound of flowing water in a stream or the quietness of still water. I smell the ocean and watch a crazed striper blitz. I admire fishing artwork and those who are able to capture all of this on paper. I love the anticipation of a fishing trip. This anticipation goes on for months. I love to tie the "right" fly for the trip, pack, unpack and repack waders, boots, rods, reels and flies.

I love the people that I fish with. I think of those who have taken their last cast, Hugh Johnson and the smell of his pipe, Nick Rench and his enthusiasm and detail, Jonathan Peabody and his niceness, Bob Ford and his ability to bring many sports together and many others I have shared my passion for fishing with. I think of those who have moved away, others who are not able to fish any longer. I still get excited for my annual trip to Tim Pond in Maine where I first cast a line 40 years ago and now spend a week with good friends, fishing and catching up. I am thrilled to watch my grandchildren with waders on, cast a Parachute Adams to small rising brook trout in The Little Kennebago. When I retired, my wife and I floated the Smith River in Montana. We caught fish but what I remember most was my time with her, on the water, in the middle of God's country. I do remember the large brown trout I caught in the foam on a purple chubby chernobyl under an overhang with a "perfect" cast. But I mostly remember the stars at night, the campfire, the cliffs, eagles, the sound of cicadas and the solitude.

So how many fish are too many or too few? It all depends. But it is much more than catching fish and that is why I love it. So there aren't too many and there aren't too few and has often been said, fishing is only part of it. I would rephrase to say, catching is only a very small part of it.

(<u>Editor's Note</u>: Thank you so very much, Carl Soderland, for contributing this lovely and thoughtful essay, written for and presented at <u>The Boston Flycasters</u>. – FBJ)

PERIOR BECEMBER 7TH PARKER RIVER NATIONAL WILDLIFE REFUGE 8:30AM-NOON



Editor's Note

Carl Soderland and I (Fred Jennings) attended this annual meeting, to be presented with very informative talks on a wide diversity of relevant topics. Here are our notes...

PIE-Rivers Annual Meeting 2023

On Thursday, December 7th, 2023, the PIE-Rivers Partners, collaborators and stakeholders met at the Parker River National Wildlife Refuge for a morning of peer-to-peer learning, resource sharing and productive discussion and networking. For those not familiar with the PIE-Rivers Partnership, it is a cross-watershed collaborative effort to protect, restore and increase the resiliency of the valuable aquatic resources of the Parker, Ipswich and Essex River Watersheds. The PIE-Rivers region refers to the combined watersheds and estuaries of the Parker, Ipswich and Essex (PIE) Rivers in northeastern Massachusetts. This area encompasses all or parts of 28 towns. (continued →)

Session 1: Getting Things Done: PIE Partners' Case Study

Moderated by Erin Bonney Casey, PIE-Rivers Administrator:

Erin mentioned a 3 year NOAA Regional Resiliency Grant that has allowed for increased staff time. PIE has added a Restoration Project Manager, Sarah Dawson. Action Plans have included:

River and Stream Continuity-

Prioritize Aquatic Barriers Remove Migration and Flow Barriers

Water Conservation-

Incentivize Water Conservation Water Conservation Outreach Provide Stewardship Tools

Water Quality Management-

Identify Water Quality Problems Address Estuarine Pollution Sources Upgrade Storm Water Systems

Land Use:

Promote Low Impact Development Improve Land Use Bylaws Provide Stewardship Tools Address Flooding Risks using BMP's

Featured Speakers: For Getting Things Done

Neil Shea, IRWA Restoration Program Director:

Neil talked about river and stream continuity. There are 84 dams in the PIE watershed. They have varying ownership and mainstream dams have been prioritized. The South Middleton Dam, the highest mainstream dam on the Ipswich River, is scheduled to be removed in 2024. It has taken years to get to the point of dam removal. Dam removal is a partnership among NOAA, DCR, DEM, NMF and other state and federal agencies, communities, and organizations. The Ipswich Mills Dam received its MEPA certificate. MEPA has requested further sediment sampling. There will be a vote of the town of Ipswich, owners of the dam, whether to proceed with dam removal. This will guide the Ipswich Selectmen in making their final decision whether to remove the Ipswich Mills Dam.

86 tidal crossings were surveyed. Correcting these tidal crossings poses difficult design and implementation challenges. The tidal crossings are being prioritized based on concurrent marsh restoration work and locations that will maximize benefit to the marsh. Neil mentioned the tidal crossing at Cart Creek near Orchard Street in Newbury. Cart Creek flows into the Parker River.

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Session 1: Getting Things Done: PIE Partners' Case Study (continued)

Featured Speakers: For Getting Things Done (continued)

Neil Shea, IRWA Restoration Program Director (concluded)

There are over 1,000 non-tidal stream crossings. Over 700 have been officially inventoried and redesign and replacement will be prioritized based upon maximal benefit to the stream. He did show pictures of before and after culvert replacement at Pond Street in Topsfield.

Robi Tobin, President, Friends of Hood Pond

Friends of Hood Pond's mission is to promote and support efforts to restore, protect and enhance Hood Pond's ecological health. Hood Pond, which is in Topsfield and Ipswich, had been a major spawning grounds for anadromous fish, including alewife. Improving access to Hood Pond for anadromous fish migrating up the Ipswich River has been a major restoration priority. In addition, due to a proliferation of invasive species such as water chestnuts in Hood Pond, swimming had become nightmarish, fishing areas were becoming choked, boating was restricted and native plants were being displaced. Hood Pond was becoming filled with thick plant growth while spiky surface plants multiplied and aggressive grasses infiltrated the shore. Variable Milfoil, Water Chestnut, Fanwort and Phragmites were identified. This citizen's group, Friends of Hood Pond, has used varying techniques, including manual pulling of invasive plants and an ecologically safe and targeted herbicide to attack these invasive species. They have created a website: www.friendsofhoodpond.org and have educated interested citizens. Hood Pond is now part of the Alewife Restocking Program, which has included improved migratory access at the outlet of Hood Pond and Howlett Brook. This improved fish passageway has resulted from the efforts of IRWA, NETU, MA DMF, MA DER, and SRBTC and others.

Marissa Gast, ACE Biotech, Parker River National Wildlife Refuge

Unprecedented acceleration of marsh conversion and marsh loss is occurring in the Great Marsh, including on Parker River National Wildlife Reservation. There is a greater risk of catastrophic failure of the dikes during storm surges. Maintaining biological diversity, integrity and environmental health on the refuges requires an increased focus on restoring ecological function and managing invasive plants to ensure successful regeneration of native plant communities that support present and future wildlife.

The marsh is filled with legacy infrastructure, colonial-era irrigation canals and 20th century mosquito control ditches. These drainage canals were good for 18th century hay farmers and 21st century residents concerned about mosquitoes, but they were not good for many animals and the marsh's overall health. Scientists tried to fix the problem by blocking some ditches with small ditch plugs. This got water back on to the marsh, but sea level rise has caused too much flooding of the marsh. It is important for the marsh to get flooded, but also for the water to come back off. Healthy saltwater marshes are natural buffers against sea level rise. Grasses trap sediment, allowing the peat underneath the grass to grow in elevation. But, important marsh grasses have been disappearing. After installing the ditch plugs, significant areas of marsh were inundated with water and salt marsh hay drowned and the marsh turned to mud flats. Also, pink, green and yellow algae started spreading over pools of standing water. It was a signal that something was wrong.

Session 1: Getting Things Done: PIE Partners' Case Study (continued)

Featured Speakers: For Getting Things Done (continued)

Marissa Gast, ACE Biotech, Parker River National Wildlife Refuge (concluded)

A recent pilot project, removing some ditch plugs in about 100 acres of marsh, showed less soggy and more densely vegetated marsh. With this success, following the permitting process, using a small excavator, they scooped out chunks of grass-covered dirt creating meandering channels, reconnecting two parts of a previously blocked ditch. The water started draining immediately and a thin trickle of water headed toward a small river that lead to the ocean. With the success of the first 100 acres, the hope is to restore more than 1000 acres in the future. This project involved a coalition of organizations, including Ducks Unlimited and Mass Audubon.

Sara Cohen, resource Specialist, MA Department of Conservation and recreation: Facilitator of the North Shore Water Resilience Task Force

Sara described the process for collaborative potential for stakeholders in the North Shore Water Resilience Task Force. With energy from state legislators, including Senator Bruce Tarr and former State Representative Brad Hill, the Task Force was re-invigorated after the Covid Pandemic emergency subsided in 2022. At least 18 communities are stakeholders and are all dealing with chronic water shortages. The mission is to identify and advance long-term solutions to improve water supply resilience and ecosystem health in the Ipswich River Watershed. The Task Force will seek full consensus on actions to support solutions and will work to reach a common understanding of the best potential solutions to achieve water supply resilience and ecosystem health.

After many years of regulatory and judicial disputes, the Task Force is working to develop trust and looking at water in and water out, drinking water and waste water. They have earmarked several subcommittees: the Earmark Subcommittee is focused on funding issues, the Joint Narrative Subcommittee is focused on telling and promulgating their story and the Conservation and Demand Management Subcommittee is addressing a diversity of developmental issues. The North Shore Water Resiliency Task Force has a \$400,000 budget.

Session 2: Finding resources to Meet Future Challenges

Kathryn Glen, North Shore Regional Coordinator, MA Office of Coastal Zone Management

CZM's mission is to balance the impacts of human activity with the protection of coastal and marine resources. The CZM Program helps coordinate with regional initiatives, provides direct technical assistance to coastal communities and performs Federal Consistency Review and review of coastal projects through MEPA. CZM also serves as a liaison between federal and state programs and municipal authorities on key initiatives within the coastal zone. Also, CZM provides guidance and support from development of grant proposals to final implementation of grant projects.

Session 2: Finding resources to Meet Future Challenges (continued)

Kathryn Glen, North Shore Regional Coordinator, MA Office of CZM (concluded)

CZM administers the Coastal Resilience Grant Program and a Coastal Habitat and Water Quality Grant Program. The Coastal Resiliency Grant Program provides financial and technical support for local and regional efforts at increasing community understanding of coastal storm and climate impact, evaluate vulnerabilities, conduct adaptation planning, redesign and retrofit for a range of coastal resilience approaches. The Coastal Habitat and Water Quality Grant provides financial resources for projects that assess and treat storm water impact and supports comprehensive habitat restoration activities. Eligible grants include nonpoint source pollution impacts, design and construct storm water structural Best Management Practices, development of habitat restoration plans and public outreach.

Kathryn's email is: Kathryn.glenn@mass,gov

Hanna Mogensen, Coastal Resource Planner & MassBays Regional Coordinator, Merrimack Valley Planning Commission (MVPC)

Hanna described areas of support and assistance MVPC provides. She stressed Municipal Vulnerability Planning, Eight Towns and the Great Marsh, Water Resource Management and Greenscapes (storm water initiatives). Other areas of support include Hazard Mitigation Planning, Coastal Resiliency Planning, Storm water and MS4, Open Space Planning, Brownfields Program and Green Communities.

Leah Robbins, Director of Government Affairs, Metropolitan Planning Council (MAPC)

MAPC covers 101 cities and towns. MAPC deals with environmental issues. Transportation, resiliency and equity are at the heart of what they work on. They have policy resources and can help with federal funding, finding the appropriate funding and assisting with completing applications for such funds. They have assisted obtaining over \$800,000,000 over 3 years. They have a climate resiliency tool kit on their website and note that 96% of flooding is outside the FEMA Flood Zone. She mentioned that the housing crisis and the environmental crisis will be combined together in a 1 billion dollar bill. They issued a report on stormwater flooding called "Water, Water, Everywhere", describing the increasing threat of stormwater flooding in the Greater Boston area.

Alicia Geilen, Wetlands Circuit Rider, MassDEP Northeast Regional Office

The Wetlands Circuit Rider can provide tools and resources for projects in and near wetlands. Alicia said that the Massachusetts Wetlands Protection Act presumes wetlands protect a range of eight public interests, calling for the approval of local Conservation Commissions for:

Protection of:

- 1. Public and Private Water Supply
- 2. Groundwater Supply
- 3. Public and Private Water Supply
- 4. Groundwater Supply
- 5. Fisheries
- 6. Wildlife Habitat
- 7. Land Containing Shellfish

Session 2: Finding resources to Meet Future Challenges (continued)

Alicia Geilen, Wetlands Circuit Rider, MassDEP Northeast Regional Office (concluded)

Prevention of:

- 1. Pollution
- 2. Storm Damage

Control of:

1. Floods

Each MassDEP region has a Circuit Rider who:

- Serves as a liaison between municipalities and MassDEP
- Provides technical outreach and training programs for Commissioners and staff
- Can answer WPA regulatory questions from applicants, abutters, concerned residents
- Can't say if project is approvable by ConCom or offer legal advice, but can point to applicable parts of the regulations.
- Work in/near wetlands requires approval of local Conservation Commission even if
 work is intended to restore wetlands. Alicia described some on-line tools and
 regulatory contacts to help plan projects in/near wetlands. One such tool is
 MassMapper, a MassGIS Online Data Viewer. There is also a US Geological Survey
 National Map which helps look at the slope of land and how water moves across the
 land. FEMA also has Flood Map Service Center and MassDOT has Pictometry
 Viewer.

For links and descriptions of these tools go to the PIE-Rivers Partnership Blog and click on Presentation Slides HERE. There are other links to a list of resources including:

Applying the Massachusetts Coastal Wetlands Regulations

Guidance for Aquatic Plant Management in Lakes and Ponds

MA Wildlife Habitat Protection Guidance for Inland Wetlands

Massachusetts Buffer MANUAL

There are also links to Other Environmental Regulations that could apply. She also described the Pre-Application Process including requesting a consultation with MassDEP regional office before starting the process. Often, more than 1 wetland permit is required. These meetings can include other state and federal agencies such as: MassDEP, Natural Heritage, MEPA, Army Corp of Engineers and others. She stressed that the municipal Conservation Office is the most important contact.

Contact: Wetland Circuit Rider Alicia.Geilen@mass.gov (phone: 617-519-7389)

Question Period:

It was mentioned that the Wetlands Restoration Act is old. Initially, the WRA made it illegal to fill in wetlands but now the WRA can be an impediment to wetlands conservation work, restricting any touching/restoring of wetlands.

Also, there was a brief discussion about blue algae (cyanobacteria) in the ponds in Boxford. Styles Pond was mentioned as one such pond and a Styles Pond Advisory Committee has formed. It was stressed that storm water runoff is very import in controlling blue algae. Two references were mentioned: Practical Guide to Lake Management in MA and Pond Management in Nantucket.

In closing: PIE-Rivers Networking Happy Hour Event
Thursday, March 14, 2024

Details to follow. There will be pie.

Notes taken by:

Carl Soderland, MD, MPH, NETU Board Member

Frederic B. Jennings Jr., PhD, MA TU Council Secretary and NETU Board Member (past NETU President) and acting NETU Newsletter editor



Photo (perhaps) by Erin Bonney Casey. Fred and Carl are (uncharacteristically) on the Far Right!

<u>Editor's Note</u>: Perhaps I should apologize for the lengthy inclusion of these "Notes" on the 2023 PIE Rivers Annual Meeting. Carl and I decided this great information was well worth sharing!

-- Fred Jennings, NETU Newsletter Editor

CORRESPONDENCE

Editor's Note: We welcome correspondence about these NETU Newsletter issues in regard to either its content or on anything else of concern or interest to you. Also, please contribute material for us!!!

re TU Newsletter

Asimba0712 <asimba0712@aol.com> To:peakdawn@yahoo.com Tue, Nov 28 at 10:46 AM

Hi Fred - Just a short note to thank you for your contribution regarding the striped bass. I certainly agree that passing legislation to make striped bass a game fish in our state is the best course of action. This was done in some southern states, I believe, for redfish with excellent results.

ASFMC by its very structure will not likely ever consider game fish status for striped bass......too many commercial stake holders. Similarly, Massachusetts is not likely to ever pass any game fish status legislation if we (MA) continue to license the annual harvest and destruction of breeding size bass......around 2000/year just here in MA.

So that's why, in my opinion, we need to find a way to bring all of the groups like Stripers Forever and American Salt Water Guides Association and others TOGETHER and put the pressure on our lawmakers to make Striped Bass a Game Fish in MA. This would set an example for the other states in ASFMC....... and prompt their respective recreational communities to consider saving their fish.

I fear that we are headed for yet another collapse and moratorium within a few years unless our laws are changed.

My thanks again for your time and effort to bring this to TU members' attention. I would suggest only that you put your commentary and items 1-11 on top of the rest of the Striped Bass info......because...... that's the pointand readers may lose interest getting thru all of the ASFMC history.

Dick Sargeant

Fred Jennings <peakdawn@yahoo.com> To:Asimba0712

Tue. Nov 28 at 10:56 AM

Thanks for this input, Dick. I share your frustration with this whole process. SF and ASGA ought to work together, but ASGA includes a lot of "for hire" fishing boat captains and they tend to oppose gamefish status because they also hold commercial licenses for WSB.

There are also a lot of foolish egos tangling up this game, along with too many myopic concerns that befoul our conservation efforts...

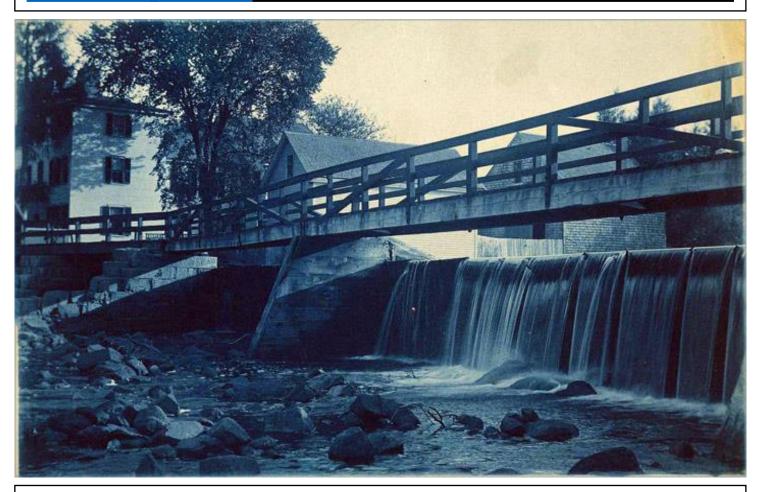
As for the striped bass fishery, my own view is that it has already collapsed. All we're seeing are very big fish, which is exactly what happened in the 1970s and 1980s. With no small fish in the mix, the future looks very bleak. The ASMFC will not solve the problem...

Yes, as an afterthought, I probably should have put my own opinions first. I didn't think of writing that page until I'd already posted the ASMFC Report, and I was a bit reluctant to put so much stuff about stripers in a TU Newsletter. I hope the last piece was of interest too.

Both the ASMFC and MA DMF are adamantly opposed to any moratorium or gamefish status. It really has to happen in the legislature, if it's going to happen at all...

Fred

Historic Ipswich On the Massachusetts North Shore



The History of the Ipswich Mill Dam, and a Natural History of the Ipswich River

Posted on November 27, 2023 by Gordon Harris (Thank you, Gordon, for this great piece!!!)

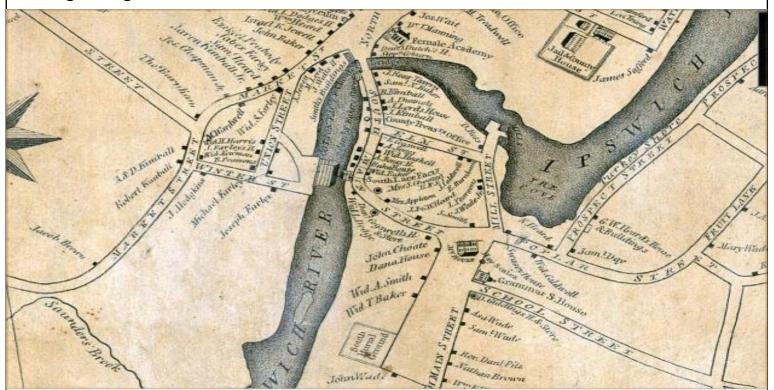
Featured image: Cyanotype of the Ipswich Mills dam and footbridge, circa 1910 by Arthur Wesley Dow.

 $\frac{https://historicipswich.net/2023/11/27/the-history-of-the-ipswich-mill-dam-and-a-natural-history-of-the-ipswich-mill-dam-a-natural-history-of-the-ipswich-mi$

Before the first dam was built on the Ipswich River, there were two sets of natural waterfalls that are referred to as the Upper and Lower Falls. The first of several small crib dams was built in 1637 on top of the upper falls, approximately 30 feet above today's Ipswich Mills Dam. The remains of an early dam were visible during the draw-down of water behind the dam in August 2016. The current dam was built in the late 19th century and was modified in 1908, increasing its height and structural design to supply the mill with a more reliable source of power.

The swampy lot on which the Ipswich mill and dam are situated was granted to Richard Saltonstall in 1635 for the site of a grist mill. The area around the dam came to be known as the "Mill Garden," with a ford-way about 30' below the dam. The grist mill was operated for many years by Michael and Mesheck Farley, after which the Farley family purchased the mill, with descendants of Richard Saltonstall continuing to hold a financial interest. In 1657 a hemp mill was established, followed by fulling mills, dye houses, sawmills, bark mills, tanneries, a scythe mill, and a sawmill on the south side of the Dam in 1729, which was still in operation in 1792 under the management of Asa Andrews. (continued on next page \rightarrow)

In 1674 Nathaniel Rust and Samuel Hunt were permitted to construct a weir at the mill dam, "provided it does not hinder the mill or the passage thereto." The two stone walls of the weir were constructed downstream at 45 degrees to each other, coming close together and driving the fish into cages "in great numbers."



The 1832 Ipswich map shows the stone cotton mill on the left and the Lace Factory on the right. The present stone dam had not yet been constructed, and the size of the river above the mills in the drawing is close to its natural size without a dam.

In the early 19th century, George Heard purchased the <u>Dr. Philemon Dean House</u> on South Main Street and constructed an addition in which lace machinery was installed. The operation was transferred to the Boston and Ipswich Lace Co., consisting of Joseph Farley, William H. Sumner, Augustine Heard, and George W. Heard on Feb. 4, 1824, but the company became insolvent, and the factory was sold at auction in 1827 to Theodore Andrews.

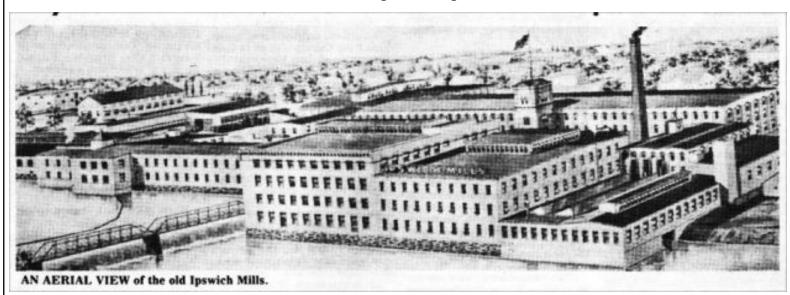
The Ipswich Manufacturing Company was incorporated on June 11, 1828, by Joseph Farley, Augustine Heard, and George W. Heard; the first substantial stone dam was built over the ancient ford with the Town's permission, and a large stone mill was erected at great expense for the manufacture of cotton cloth. The height of the "mill pond" behind the dam was raised and lowered by wooden flashboards. By 1832, the stone mill had 3000 spindles and 260 looms.

The middle of the 19th century saw continued growth in the town's textile industries, and in 1863, a <u>large mill</u> was constructed on County Street adjacent to the lower falls. In 1843, Benjamin Hoyt constructed a new sawmill at the upper dam location, which continued in operation for fifteen years, when the building was moved to <u>17 County Street</u>, where it was used for a shoe factory, but is now a private residence.



The Ipswich Mill, with the Old Stone Mill still standing behind it.

In 1846 the Dane Manufacturing Company purchased the stone mill for \$24,000 to manufacture a coarse cotton cloth called drilling. Amos Lawrence purchased the mill and dam in January 1868 and began the production of hosiery as the Ipswich Mills Company, which became the largest stocking mill in the country. When the flashboards were raised to a height of 18" in 1858, properties upstream of the dam were flooded, and the mill had to compensate upstream owners for the loss of their land.



For many years, the Ipswich Mills Corporation was the chief industrial enterprise of the Town, bringing with it an era of prosperity. At the Ipswich mill, there were 1500 employees, of whom 75 percent were female. Each week, 55,000 dozen pairs of hosiery were produced, with an annual output of nearly four million dozen pairs. During this period, the population of Ipswich doubled with the influx of foreign workers in the mills. A prolonged strike in 1913 by foreign-born workers resulted in the shooting death of a young Greek woman, Nicoletta Paudelopoulou by the police. (continued \Rightarrow)

The use of water power to power machinery in New England textile mills was replaced by electricity early in the 20th Century, and for the past 100 years the dam has no longer served its intended purpose. The Ipswich Mills continued in operation until 1928 when it failed to keep up with the latest hosiery fashions. In 1941 Sylvania purchased the dam and the mill buildings for the production of transformers, tungsten coils, and the secret production of proximity fuzes during World War II.

In 1982 the Town of Ipswich purchased the dam from GTE Sylvania, and the Ipswich Utilities Department is responsible for its maintenance. EBSCO Publishing bought the mill in 1995 from Osram Sylvania and succeeded in placing the buildings and the neighboring worker housing known as "Pole Alley" on the National Register of Historic Places. The dam has never been nominated for the National Register. EBSCO continues to base its operations out of the old mill facility, although the introduction of remote working during the COVID epidemic has greatly reduced the number of personnel working on-site.



The Natural History of the Ipswich River

The Ipswich Historical Commission was established in 1964 under the aegis of Massachusetts General Law (M.G.L.) Chapter 40, Section 8D "for the preservation, protection, and development of the historical or archeological assets of such city or town." When considering the proposed removal of the Ipswich Mills dam, it is necessary to think about the Ipswich River's history holistically.

The present Ipswich Mills dam has existed for only a fraction of the history of the Ipswich River, although geologically, the river is quite young. The <u>Laurentide ice sheet</u> from the most recent ice age receded to the northern border of Massachusetts around 14,000 years ago. As the ice melted, the sea level rose about 100 ft. higher than current levels, putting much of the North Shore area temporarily under water until the land, which had been lowered by the weight of the glaciers, began to rebound about 12,000 years ago. The drumlins, moraines, and eskers the glaciers left behind dictate much of the course of the river as it winds its way from Wilmington until it encounters the foot of Town Hill in Ipswich. From there, the river follows a minor geological fault past the Town Landing and enters the ocean between two glacial drumlins, Little Neck, and Steep Hill. (continued on next page \rightarrow)

Until 350 years ago, the Ipswich River ran unencumbered by man-made dams from its origin 35 miles upstream, carving its way through a 148-square-mile watershed. In the spring, herring, shad, salmon, and alewife swam upstream to spawn at Hood Pond via Pye Brook and Howlett Brook in Topsfield, and at Wenham Lake via the Miles River, which is a tributary of the Ipswich River,

Over a million alewives swam upstream to Wenham Lake as late as the 1890s. The freshwater lakes, ponds, streams, and the river were a cornucopia of large and smallmouth bass, red perch, yellow perch, white perch, pickerel, catfish, and black bass, foraging on what once seemed like an unlimited supply of herring. The dramatic lowering of the water level on the Miles River in the 20th Century ended spawning at Wenham Lake and other ponds along its course. What is left of the lake's outlet, Alewife Brook trickles through a culvert underneath Main Street. During the 2006 Mother's Day storm, over ten inches of rain fell, and Wenham Lake overflowed its banks because the culvert to Alewife Brook quickly filled with debris.

Young alewives imprint during their freshwater residency, and upon reaching an approximate size of 4", return from the breeding grounds via the Ipswich River to the ocean, where their arrival is anticipated as food by numerous salt-water species, including Atlantic cod, halibut, and striped bass. Alewives that survive return as adult fish to the same rivers for spawning, Indigenous Peoples depended on these fish as a supply of animal protein and caught alewives by building weirs constructed of sticks and brush to force the fish into narrow channels, where they could be easily netted. At the Plymouth colony, only half of the 102 Pilgrims survived the first winter, but river herring making their annual return in the spring provided the survivors a rich bounty of food.

CHAPTER 6.

AN ACT TO PREVENT THE DESTRUCTION OF ALEWIVES AND OTHER FISH IN IPSWICH RIVER, AND TO ENCOURAGE THE ENCREASE OF THE SAME.

Whereas, heretofore, great variety of fish, particularly salmon, bass, shad and alewives, used to pass up Ipswich River, so called, to cast their spawn in the natural ponds emptying into the same, but, for a long time past, the passage of the said fish up the said river, by mill-dams across the said river and its branches, has been almost totally obstructed, to the great damage and distress of the inhabitants, especially the poor, of divers towns in the count[ies][y] of Essex and Middlesex thro' which the said river and its branches run, as well as to the prejudice of the cod-fishery on the coasts of the province; and whereas the laws now in force relating to opening and keeping open passages for fish in rivers and streams within this province are by experience found to be ineffectual for opening a sufficient passage for the said fish up the river aforesaid,—

Be it therefore enacted by the Governor, Council and House of Representatives, in General Court assembled,

1769-70 Massachusetts Chap. 6: An Act To Prevent The Destruction of Alewives in the Ipswich River

In 1709, a Massachusetts act was passed for the prevention of all obstructions to the passage of fish in rivers, except mill dams. An act in 1735 required dam owners to provide a "convenient sluice or passage" for alewives from the first day of April to the last day of May annually, and that the owners of the dams be required to allow a sufficient water flow for the young to pass back down. Historian Joseph Felt wrote that in 1747, a passage was made in two Ipswich mill dams for the alewives. Catching alewives in any other manner than prescribed by the town brought a penalty of ten shillings for each offense.

Yet in 1745, Massachusetts mill owners exerted political pressure to pass a provision abolishing fishways where the fish did not pass upstream in sufficient numbers to be of greater benefit than the damage from loss of water power due to the opening of the dam. But in 1770, Chapter 6 of the Province Laws was passed by the State to prevent the destruction of Alewives and fish in the Ipswich River, requiring dams on the Ipswich to maintain a passage for fish during the migratory period from late April to mid-June.

As the various species of herring passed in shoals over the fishways of the 18th and 19th centuries, they were seined at night by the light of torches under the arches of the Choate Bridge, and great quantities were taken with dip nets by fishermen lined up in dories at the dam. In the early 19th Century, the annual catch averaged 350 barrels, much of which went to the West Indies market.

In late summer and fall as the young herring would begin their migration out to sea, men would be in boats all along the river for "herringing" by torchlight. At the Summer Street landing, the herring were delivered from the hatch by buckets, with fishermen receiving \$1 per bucket. In later years, the fish were sucked into trucks by long hoses directly from the boats. Another way to catch herring was circling and rounding up the fish with seine nets. William J. Barton wrote that "One year there were so many herring caught, that they were sold to people with large farms, such as Castle Hill, and 1000 barrels were put on the land for fertilizer. This same year far too many herring were caught that could not be sold, and were dumped in the Parker River. Herring did not return for many years."



Neither the older abandoned fish ladder or the 1995 replacement at the Ipswich Mills dam has been effective.

The present Ipswich Mills Dam is believed to have been constructed and reconstructed by Amos Lawrence during a period from 1880 to 1908. Each stone measures approximately 6 feet wide x 20 inches tall x four feet deep, weighing approximately 5,000 lbs. At six feet tall, the present dam exceeds the maximum height that spawning fish can jump. The construction of two fish ladders has had minimal effect, and the migration of fish along the river has all but ended. The mill dam alters the river in both directions by impeding the movement of fish and animals. It also reduces the amount of dissolved oxygen upstream in the mill pond, making it inhospitable to aquatic species and spawning fish. In addition to the obstruction created by the dam, biologists at the Massachusetts Division of Marine Fisheries point to low flow as an impediment in restoring a successful river herring population in the Ipswich River. Despite Alewives having been stocked in the Ipswich River since 2003, annual fish counts during the spring herring run have remained low, ranging from an estimated 98-420 adults per year.

Historically the Ipswich River supported an annual run of both species of river herring, Alewife and Blueback Herring, with a commercial fishery exporting thousands of barrels of fish annually. One of the largest alewife spawning habitats in the Ipswich River watershed is the <u>Great Wenham Swamp</u>, an extensive wetland covering 2.5 square miles. Between it and the River is the <u>Grand Wenham Canal</u>, which was completed in 1917 under a Massachusetts <u>"Act to Provide an Additional Water Supply for the Cities of Salem and Beverly"</u> and diverts millions of gallons of water from the Ipswich River to Wenham Lake to supply water to Beverly and Salem.



The remains of a 17th-century crib dam were visible during the August 2016 draw-down of the EBSCO dam.

(continued on next page \rightarrow)

In thinking about the future of the Ipswich Mills Dam, not only are there thousands of years of history but there is also the future history we create. Removal of the dam will provide the opportunity to restore the historic Upper Falls, which was altered in the 19th century to establish a level footing for the dam. Thirty feet behind the mill dam, a 17th or 18th-century crib dam will reappear. Water levels immediately upstream from the dam will be an estimated three feet lower, restoring the natural floodplain that can mitigate floods such as the Mother's Day Flood we experienced in 2006. The homing migrations of the alewife will be an annual attraction for residents and tourists, congregating on the Choate Bridge and the Riverwalk pedestrian bridge for the annual display of herring swimming upriver.



The annual spawning migration of herring in Whitman's Pond in Weymouth. Photo courtesy WickedLocal.com

It is possible that we will see an increase in beaver activity in the river above the mill. It is estimated that there were as many as 400,000 beavers in the continental United States before Europeans and their Native American partners hunted them almost to extinction. Unlike man-made dams, beaver dams are not a serious impediment to the annual run of anadromous fish. The vast network of dams and wetlands created by beavers greatly reduces the impact of floods and provides habitat for great blue herons, wood ducks, tree swallows, fish, amphibians, turtles, otters, muskrats, and other animals. When beavers exhaust their food supply and move to a new location, the pond drains, creating rich "beaver meadows" and habitat for a new cycle of trees and other vegetation. Pre-colonial beaver meadows were utilized as planting grounds by settlers because of their rich soil. Studies have shown that river sediment loads decrease by as much as 90% in areas with well-developed riparian habitats and beaver dams. Without beavers, there would be fewer wetlands, less successional forests in our open spaces, worse water quality, and less water in our aquifers. In a time when we are concerned about over-development, beavers are our natural allies.



A partial map of ponds and streams in the Ipswich River Watershed that historically supported herring runs.

The loss of forest land and riverine habitat in our more urban neighboring towns and cities prevents restocking of the herring in those locations. But the Town of Ipswich is fortunate that much of the forested area upstream from the Ipswich River is protected from development by Bradley Palmer State Park, Willowdale State Forest, Mass Audubon's Ipswich River Sanctuary, and Harold Parker State Forest. Without forests, rainfall is not absorbed by the ground and passes quickly into the streams causing erosion and and heavy freshets. Correspondingly, the Ipswich River and its 150 square mile watershed, with its network of contributing streams, lakes, ponds, and wetlands is the reason these protected areas survive.

It may come as a surprise to learn that below the dam are additional tributaries to the Ipswich River. Underneath High Street and Central Street are pipes carrying water that drains from Town Hill. With the <u>development of the railroad</u> and steam machinery in the 19th Century, the large expanse of wetland around <u>Farley's Brook</u> in the center of Ipswich was trenched, drained, and filled. Streams were forced underground in culverts, and new buildings, houses, and roads were constructed to create today's downtown.

Dams on the Ipswich River at the lower falls and at the <u>Warner stone arch bridge</u> on Mill Road were removed by the late 19th Century, and the dam at Foote Brothers on Topsfield Road is scheduled to receive a new nature-like fishway. An absence of fishways, even on small dams, decimates anadromous fish migrations. The Division of Ecological Restoration ranks the Ipswich Mills head-of-tide dam in the top 5% of all dams in Massachusetts for removal, as it would open 49.19 miles of riverine fresh water habitat for restoration.



The dam across the Ipswich River at the former <u>Isinglass factory</u> on Mill Road. The dam no longer exists.

On the north side of Ipswich, the <u>Bull Brook</u>/ Egypt River system was a historically active migratory and spawning pathway for rainbow smelt, alewife, blueback herring, and white perch. The two dams that create the Bull Brook and Dow Brook Reservoirs were constructed with no fish ladders, and prohibit fish passage from the Egypt River. In 1965, the town of Ipswich constructed a half-acre pond with a fishway at the site of the old municipal electrical generating plant, which has had some success as a small spawning area for alewives.



Seining for Alewives in 1910 on Alewife Brook at the Apple Street Bridge in Essex

(continued on next page \rightarrow)

In the towns of Essex and Hamilton, which were both part of Ipswich until the 19th Century, Chebacco Lake drains into Alewife Brook, which becomes the Essex River. It is one of the few Massachusetts herring runs without a man-made dam, although silting, plant growth, and beaver dams have impacted spawning.

To summarize, the Ipswich River is far more than a ribbon of water dumping its contents into the sea. For 14,000 years, it has shaped the land, nourished flora and fauna, and helped give birth to our town. For the past 150 years, the natural flow of the River has been obstructed by the present mill dam, which for over 100 years has no longer served its original purpose. We measure history by time, but for the Ipswich River and its alewives, time could be running out. We can help preserve the human and natural history of the Ipswich River by freeing it from its man-made encumbrances and advocating for the herring, the wildlife, as well as the human population that the river serves.

Sources and further reading:

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- 4. "History of the Ipswich Mills Dam," by John Stump for the Ipswich Museum
- 5. "Public Archeology Laboratory (PAL) Report" for the Ipswich Mills Dam Removal Feasibility Study, June 2016
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- 20. "A River Interrupted: Why Removing Defunct Dams is Critical for Restoring the Charles River." Charles River Watershed Association, January 20, 2022
- 21. Massachusetts Division of Marine Fisheries 2022 Annual Report
- 22. Ipswich annual herring count organized by IRWA
- 23. <u>A Survey of Anadromous Fish Passage in Coastal Massachusetts Boston Harbor, North Shore and Merrimack River</u>," Massachusetts Division of Marine Fisheries , January 2005

(Editor's Note: The original article (see link above) ends with a whole lot "More About the Ipswich River" – FBJ)

Conservation Committee News Items



VTDigger News in pursuit of truth

Worlds meshing: VT Fly Gals help bring women into the fly fishing fold

The group's numbers have expanded to 150 women. "I was all by myself for 30 years, fly fishing," one co-founder said. No longer.

November 27, 2023, 6:48 pm by Alissa Frame

https://vtdigger.org/2023/11/27/worlds-meshing-vt-fly-gals-help-bring-women-into-the-fly-fishing-fold/



Fishers on the Browns River in Jericho for a Champlain Valley Trout Unlimited meetup in October. Photo by Alissa Frame/Community News Service

Alissa Frame is a reporter with Community News Service, part of the University of Vermont's Reporting & Documentary Storytelling program.

JERICHO — It could have been just another get-together full of "old men in plaid" when Jamie Eisenberg showed up at a local Trout Unlimited meeting one night in 2017. For decades, the Underhill fly fisher had not felt particularly welcomed by the male-dominated chapter of the fishfocused nonprofit. But she was lonely, looking for community around fishing.

Something was different this time. In the parking lot, the license plate of a Prius proudly proclaimed its owner was a "FLYGAL." Eisenberg needed to meet her. She walked inside and approached the only other woman she saw.

Sure enough she found her fly gal: Nicky Paquette, former Environmental Protection Agency pharmacologist who lives in St. Albans. The plate matched the name of a Nashville group Paquette knew, the Music City Fly Gals, and within months, the two women trekked to Tennessee to fish with them. Experiencing their energy and connection, Eisenberg thought, "I want to do that. I want that."

VT Fly Gals help bring women into the fly fishing fold (continued)

So began VT Fly Gals. It started in 2020 as a Facebook page that announced events like potlucks and fly-tying sessions, or acted as a portal for people in search of a fishing buddy.

For Eisenberg, it was a monumental step. "I was all by myself for 30 years, fly fishing," she said. No longer would the sport have to be a solo endeavor.

In the years since, the group's numbers have expanded to 150 women, with around 50 regularly active members who are all engaged in a much-needed conversation in fly fishing.

According to a 2020 report compiled by the Recreational Boating and Fishing Foundation and the Outdoor Foundation, males represented 70% of the sport's participants.

Eisenberg said this is no secret in the Champlain Valley Trout Unlimited chapter, one of five across the state and the one through which she met Paquette. "They admit it. We talk about the 'old white men' thing, and they agree that it needs to change," she said.

But bridging the gap across demographics has not always been simple.

"It's not easy to break into the boys club ... it took me years to break in," Eisenberg recalled. Her own journey through the fly fishing ranks started with "The Orvis Guide to Fly Fishing" book, which became her Bible, she said.

Eisenberg was completely self taught before the convenience of internet searches and YouTube videos. "The first couple of years it was an absolute mess. I would get completely wrapped up in my line and lose five flies and have a blast — and catch a fish, once in a while," she said.

Eisenberg kept at it until she honed her skill and made more connections in the angler community. Eventually she hired a local guide to help her uncover fishing spot gems in the area.

"He and I hit it off," she said, and before long he was asking Eisenberg if she would join his team of guides. She agreed, and that's when she really shook up the status quo of the boy's club, she said. The other male guides "started to recognize that I wasn't an idiot, and I could hold my own, and I actually could tie a pretty good fly," Eisenberg said.

She had to prove herself to get there. But now, she feels quite welcomed by men in the fly fishing community, and this past spring she joined the board of directors at Champlain Valley Trout Unlimited.

Paquette's first exposure to fly fishing was in Maryland when she decided to join the Potomac Valley Fly Fishers. She lucked out with a club that was "open arms," she said, its members freely sharing advice and inviting her on trips. The positive culture immediately drew her in.

VT Fly Gals help bring women into the fly fishing fold (continued)

She proceeded to volunteer with Casting for Recovery, a nationwide organization offering fly fishing retreats for women with breast cancer. It was another rewarding experience where she felt valued and a strong sense of camaraderie. When she retired from the EPA in 2016, Paquette set down roots in Vermont, where she sought a new community for fly fishing.

A Trout Unlimited chapter seemed like the appropriate venue to check out, being a well-known fishery and conservation organization. But she found a strikingly different atmosphere from her previous fly fishing groups, she said.

"I found them not to be so friendly," seeing as the demographic was mostly older men who seemed unfamiliar with women's involvement in the sport, Paquette said. Still, she stuck with the chapter and was nominated to become secretary by the one other woman in the group at the time, who happened to be stepping down from the role.

To Eisenberg and Paquette, the universe seemed to align the night Eisenberg showed up at that Trout Unlimited meeting in 2017. It was the moment both women were waiting for: an opportunity to create community where it was lacking. The women hoped to welcome others like them into the world of fly fishing, without the intimidation or alienation that can come with being female in a male-dominated group.

VT Fly Gals, its founders thought, could be the antidote. Eisenberg made business cards that read, "VT Fly Gals," with the Facebook page and contact information below. "I kept the business cards with me when I would go fishing, and if I found a woman on the river, I gave her a card," Eisenberg said. This is how she attracted a majority of those involved in the group.

The promise of community is crucial because, for many women, adventuring solo outdoors comes with risks. Safety is a looming concern. As Eisenberg views it, women tend to "fish hesitantly — like, they don't fish, because they're scared to fish alone, and they don't know enough."

Being with a group of like-minded women, "people have more confidence and feel more relaxed," Eisenberg said.

The tide is changing at Champlain Valley Trout Unlimited these days. The chapter is trying to expand its reach across wider demographics, especially after it almost collapsed during the height of the Covid-19 pandemic.

"There has definitely been a change in the idea of having a more open attitude towards getting ladies involved in Trout Unlimited," said Ed Collins, the president of the chapter.

"Could we do better? Absolutely. We can always do better," he added.

VT Fly Gals help bring women into the fly fishing fold (concluded)

A potluck at Mills Riverside Park in Jericho on one crisp, overcast afternoon this fall was one of these efforts to do better. The event brought together members of both the local Trout Unlimited chapter and the VT Fly Gals. A handful of anglers gathered under a pavilion to chat amid cups of hot cocoa, while others made their way down to the river, rods in tow.

Now there is quite a bit of overlap between Trout Unlimited and the VT Fly Gals — "groups meshing and colliding, which is really, really cool," Eisenberg said. "Talk about dreams (coming) true ... over the last four or five years, my world has expanded, and all kinds of people are meshing and going fishing and learning and fly tying."

Catherine Todd, who is on the board of directors for Champlain Valley Trout Unlimited and serves as the fundraising committee chair, attended the Jericho potluck event with her husband and two young daughters. She explained how there is a growing number of strong women in the Trout Unlimited chapter.

"It's a really good opportunity, I think, for women to find something that they love and care about and to be a part of it," Todd said. "And we do a lot more than just fishing ... we do a lot of conservation work, and there's all these other pieces to it that really speak to different parts of what you care about."

As the relatively new secretary of Champlain Valley Trout Unlimited, Eileen Worcester explained how she hasn't been around long enough to notice a notable shift in demographics at the chapter. However, sitting alongside Todd at the potluck, she was enthusiastic about the outlook: "We're part of that change ... I hope that (the) younger generation sees this because it's so beautiful, and it is a lot of fun, and there is a lot of camaraderie."

Paquette, who is now the treasurer of Champlain Valley Trout Unlimited in addition to her continued involvement with VT Fly Gals, summed up her own relationship to the sport these days, saying, "I just love being out there in the river and connecting."

"It's really the outdoors that I'm after," she added. "The peacefulness, the nature, the beauty — and the challenge."

<u>Editor's Note</u>: Wouldn't it be nice to start something like this for our NETU Chapter? We have failed thus far to recruit women, people of color, or much of any diversity of a cultural or ethnic character into our chapter, although we have a wonderful and interesting group of members that would be greatly enhanced by bringing in more of those people with more diverse backgrounds. Perhaps we should discuss this prospect during our upcoming online NETU Board meeting on Thursday, 4 January 2024?!?

Meeting ID: 874 4189 3298 Passcode: 951887







Coordinating Resilience

Early this week we were invited to attend a press conference where Governor Healy announced a new statewide coastal initiative called Resilient Coasts. The initiative's goal is to bring coastal environmental resources together under one umbrella to create a coordinated approach to the impacts of climate change. A \$75 million dollar statewide grant initiative was also announced which if funded will support some of Ipswich River's resiliency work.

Says Executive Director Wayne Castonguay, "This exciting initiative will help advance our resiliency efforts as our entire watershed is considered a coastal river. This effort could dramatically increase the pace of our work and help us achieve our number one strategic priority to make our river more resilient in the face of climate change."

Read the press release or more coverage on NBC.

NBC Coverage: https://www.nbcboston.com/news/local/healey-unveils-new-coastal-resiliency-plan-for-mass/3203251/

Press Release Healey-Driscoll Administration Launches Statewide Coastal Resiliency Strategy

A new Chief Coastal Resilience Officer will lead the ResilientCoasts initiative, which will establish new Coastal Resilience Districts based on climate change impacts; For immediate release: 11/28/2023

- Governor Maura Healey and Lt. Governor Kim Driscoll
- Executive Office of Energy and Environmental Affairs

Beverly — The Healey-Driscoll Administration today announced the launch of the ResilientCoasts initiative, a holistic strategy for addressing the impacts of climate change along the coastline of Massachusetts. In collaboration with the state's 78 coastal communities, ResilientCoasts will pursue a multipronged approach to identify regulatory, policy, and funding mechanisms to develop focused long-term solutions. Notably, the initiative will be led by a new Chief Coastal Resilience Officer within the Office of Coastal Zone Management. Working with communities, this team will establish Coastal Resilience Districts based on their unique climate impacts. The development of a coastal resilience strategy is a priority action within the state's ResilientMass Plan. The announcement took place at the Carriage House in Beverly. (continued on next page \rightarrow)

Press Release Healey-Driscoll Administration Launches Statewide Coastal Resiliency Strategy (continued)

"Climate change poses a very real threat to our coastal way of life, but it also presents a unique opportunity for us to build communities that are safer and more equitable for years to come," said **Governor Maura Healey**. "This is a matter of fiscal responsibility. Our coastal cities and towns have been weathering erosion, sea level rise, and extreme storms without a holistic state strategy. Homeowners, small businesses, and municipal governments deserve a regional approach to this problem. Our ResilientCoasts initiative will allow us to bring the full powers of the state to deliver real solutions to our coastlines."

"Governor Healey and I both hail from coastal communities and we feel strongly about the need for both strong statewide support and local collaboration," said Lieutenant Governor Kim Driscoll. "As Mayor of Salem, our city saw a need for state, regional, and local collaboration on tough coastal issues. ResilientCoasts will provide this framework to harness the expertise of our communities to implement a long-term vision for our coasts." "We're not going to stand by while a major storm wrecks people's homes, or coastal erosion pulls down seawalls out from under our small businesses," said Energy and Environmental Affairs Secretary Rebecca Tepper. "We have some tough questions ahead – where will it be safe to build? How can we preserve our historical landmarks? What infrastructure will withstand ever worsening weather? We're taking on some of the difficult aspects of coastal resiliency, and we're doing it in partnership with municipalities, lawmakers, academics, and advocates to build consensus along the way." "Now is the time for action," said Climate Chief Melissa Hoffer. "This initiative will allow us to make prudent cost-saving investments that protect our communities and coastal ecosystems. The state's 2022 Climate Assessment identifies reduction in state and municipal revenues as an "urgent impact" of climate change with a "major level of consequence." As we pull out all the stops to reduce emissions, these investments will help municipalities and the state save on climate response costs in the long term." Massachusetts is planning for sea level rise by up to 2.5 feet by 2050 compared to 2008 if global emissions are not significantly reduced. Both tidal and storm-related flooding are projected to increase. By 2070, statewide annual average damages to coastal structures could be more than \$1 billion per year. The total value of structures within the floodplain for the current 100-year return period coastal storm is about \$55 billion, of which about \$40 billion is residential, \$12 billion is industrial, and \$2.5 billion is commercial. The number of vulnerable infrastructure assets and anticipated loss will grow over time as rising seas expand the coastal floodplain. Of the nearly 2.5 million people that live within the 78 coastal communities in Massachusetts, approximately 55 percent of the population lives within Massachusetts-designated Environmental Justice Block Groups, representing communities of color, low-income populations, and/or communities facing language barriers. (continued on next page \rightarrow)

Press Release Healey-Driscoll Administration Launches Statewide Coastal Resiliency Strategy (continued)

Governance Structure

The Office of Coastal Zone Management (CZM) will lead the ResilientCoasts initiative. A newly created Chief Coastal Resilience Officer position will oversee this effort and provide cross-agency coordination. CZM's unique experience and expertise with technical assistance, funding, partnerships, and regulatory review to address coastal threats will allow the administration to act swiftly in mitigating the impacts of climate change.

Coastal Resilience Districts

Massachusetts has more than 1,500 miles of coastline, spanning salt marshes, beaches, rocky shores, dunes, ports and harbors, and residential and commercial areas along the shores of 78 cities and towns. These geographic differences, along with variations in development, habitats, and other factors, underly the need for a regional approach to coastal resilience. A key component of ResilientCoasts will be the delineation of Coastal Resilience Districts, geographic regions that share similar landscape characteristics and face similar climate hazards. This initiative will delineate these districts in 2024 and then collaborate with communities to implement tailored resilience policy and regulatory strategies and leverage multiple state and federal funding opportunities.

Resilience Strategies

The ResilientCoasts initiative is a priority within the state's 2023 ResilientMass Plan. It will identify resilience strategies for both statewide implementation and strategies tailored to each region's unique vulnerabilities. Statewide, CZM will work with relevant state agencies to evaluate building standards, financing strategies, and scientific best practices, among other pursuits. The Massachusetts Emergency Management Agency will lead an evaluation of a statewide buyout program. In addressing the concerns of each Coastal Resilience District, CZM will work with communities to assess strategies such as nature-based solutions, dredging, coastal nourishment, roadway elevation, and managed retreat.

Financing & Federal Funding

A key aspect of ResilientCoasts will be identifying innovative new financing mechanisms for climate resilience projects. New infrastructure and changing approaches to development will require reliable funding streams that are structured to incentivize coastal resilience. Already, CZM has led the effort to pursue federal funds through the National Oceanic and Atmospheric Administration's Climate Resilience Regional Challenge. The application requests \$73 million and was developed in partnership with 55 community partners. The administration will work with the Legislature on any recommended approaches.

Press Release Healey-Driscoll Administration Launches Statewide Coastal Resiliency Strategy (concluded)

Modern Regulatory Framework

Massachusetts has the nation's oldest coastal and waterways protection program. In order to support potential resilience strategies, CZM will work in parallel with relevant agencies to identify updates to state wetlands, waterways, the building code, and Massachusetts Environmental Protection Act regulations to better address the climate challenges of today. The agencies within the EEA will evaluate changes that will:

- Support nature-based solutions for coastal erosion and flood protection and resilience;
- Streamline the permitting process for coastal restoration and resilience projects;
- Ensure that permitting and regulatory processes consider projected future sea level rise and precipitation levels that are based on the latest science and accurately reflect the changing climate.

Cross-Government and Stakeholder Engagement

Community engagement will be critical to the development of ResilientCoasts. A Coastal Resilience Task Force with representation from communities, businesses, scientists, community-based organizations, and environmental advocates will be created as part of the team to support the development of a strategy that effectively and equitably meets the needs of coastal communities. State agencies will engage in the effort through the state's inter-agency ResilientMass Action Team.

Statements of Support

Adam Chapdelaine, Executive Director, Massachusetts Municipal Association:

The MMA applauds the Healey-Driscoll Administration for launching this bold and timely effort and looks forward to representing the needs and interests of local government as this critical initiative gets underway."

Bud Ris, Senior Advisor, Boston Green Ribbon Commission:

"The Commonwealth's Resilient Coast strategy comes as a welcome initiative at a critical time – just as we need to move more briskly from planning to implementation. It can build off of the good work done already through the Climate Ready Boston program and the Municipal Vulnerability Plans (MVPs) developed by other coastal communities up and down the coast. Hopefully, we'll get a clear set of priorities for the decades ahead, along with various strategies to implement them."

(<u>Editor's Note</u>: What followed in this Press Release was a lengthy list of "Statements of Support" that I didn't feel was in need of inclusion in this already lengthy Newsletter...)

Editor's Note: Here are some relevant items from recent press reports.

Nature, Undammed

The largest-ever dam removal is underway, a milestone in the nation's reckoning over its past attempts to bend nature to human will

https://www.washingtonpost.com/climate-solutions/interactive/2023/klamath-river-dam-removal/?utm_campaign=wp_post_most&utm_medium=email&utm_source=newsletter &wpisrc=nl_most&itid=hp-top-table-main_p001_f003

White House Announces Historic Agreement to Study Dam Removal and Fund Fish Restoration

The settlement temporarily ends a protracted fight over 14 dams on the Columbia River basin. Tribes argued in a 2021 lawsuit that the dams caused the sharp decline in native fish.

Inside Climate News By Kristoffer Tigue, Wyatt Myskow December 15, 2023

https://insideclimatenews.org/news/15122023/todays-climate-white-house-tribes-settlement-study-dam-removal-fish-restoration/?utm_source=InsideClimate+News&utm_campaign=0c19f601b7-EMAIL_CAMPAIGN_2023_12_16_02_00&utm_medium=email&utm_term=0_29c928ffb5-0c19f601b7-329081741

'Take It Down and They'll Return': The Stunning Revival of the Penobscot River

A historic project in Maine shows that when dams are removed, a river and its fish can recover with surprising speed.

By: Kea Krause

December 11, 2023

https://reasonstobecheerful.world/dam-removal-project-maine-penobscot-river-success/
