

View from the Rivers Edge – May 2023

Congratulations Town of Yarmouth voters! Your nearly 100% vote in support of the wastewater article presented at spring town meeting, was extraordinary!



By endorsing this article, the over \$200m necessary for construction of the wastewater treatment plant and critical phase 1 piping is available now, and construction will begin this Fall! I would argue this is one of the most important municipal projects in my lifetime and is critical to the health of Bass River. Well done! Attending nearly all the Yarmouth wastewater planning meetings over the last two years' It was honor to represent all of our members and supporters. Now we must move on to our river partner, the Town of Dennis, who are in the early planning stages. (Which we are committed to).

I'd like to share more good news. Many of you know of our determined efforts to improve the Upper Bass River Headwaters water quality and storm resiliency capabilities. Now into our 4th year we celebrate a significant milestone. Thanks to Yarmouth CPC, Mass Department of Ecological Restoration, support from State Representative Chris Flanagan, the Pond Foundation, and NRCS we are about to begin the FINAL design phases for the North Dennis Rd. culvert replacement, the 57.2 acre O'Loughlin cranberry bog wetlands restoration, the Weir Road culvert replacement and Hamblins Brook fish habitat restoration. This project will, in a more organic way, improve the water quality of the most "ill" part of our river. It is a fact, wetlands restoration becomes a natural sink for nitrogen and carbon, improving water quality at the source. Opening the undersized culverts increases flow also improving water quality in the headwaters, and this part of the project will begin to solve the ever-increasing storm water challenge associated with sea level rise. Thanks to our partners Tighe & Bond, Interfluve and the Wood Hole Group for their excellent engineering work though out the process.

I am also excited to share with you our partnership with APCC and their Weir Creek improvement project, headed by April Wobst. At the southern end of the river beginning near the Lighthouse Inn, this project has tremendous potential for water quality improvement.

Thank you to our committed volunteer water testing team members. Many of which begin their 4th year of work this spring, as well as D-Y teacher Carl Deputy for assistance.

Finally, I am happy to say thank you so much to everyone that contributes to Friends of Bass River. We can only continue this incredibly important work with your help and support.

A handwritten signature in black ink that reads "Rick Bishop". The signature is written in a cursive, slightly slanted style.

Rick Bishop
Executive Director

Upper Bass River Restoration Project

Friends of Bass River is pleased to announce that we recently received a NOTICE TO PROCEED for design of the replacement Weir Road Bridge. Replacing the failed 200-year old culvert is a key element in our overall wetlands restoration project in the Upper Bass River Headwaters. Issued by The Massachusetts Division of Ecological Restoration, along with Yarmouth CPC, these two funding sources will allow design work to begin immediately. Thanks to our partners, The Town of Yarmouth, Tighe & Bond, Interfluve, and the Woods Hole Group for their hard work in getting the MEPA* application completed and through the various approval processes. Thank you also to our neighbors, abutters and members of the public who attended our public meetings in support of this project.



We hope to get shovels in the ground before the end of 2023!

What is MEPA

“The Massachusetts Environmental Policy Act requires that state agencies study the environmental consequences of their actions including permitting and financial assistance. It also requires them to take all feasible measures to avoid, minimize, and mitigate damage to the environment...MEPA applies to projects...that are proposed by municipal, nonprofit, or private parties and require a permit, financial assistance, or land transfer from state agencies.” www.mass.gov/service-details/purpose-and-intent-of-mepa



Meet the President

Robert Harrison

Bob came to the Cape in 1954 as a summer kid & has never left. Turning his summer college job into a lifetime career he is now a buyer for Puritan of Cape Cod.

Bob & his wife Lu settled into an 1874 Captain’s House in South Dennis Village & raised a family. Both have been very active in the community for over 30 years.

Bob’s non-profit experience ranges from DY Band Boosters to the boards of Sail Cape Cod, Old South Dennis Village Association, and the Bass River Yacht Club where he ran the sailing school & most recently served as commodore. Bob chairs the membership committee of BRYC and remains active on the finance committee.

As an avid boater and resident of Bass River Bob is committed to improving the health of Bass River through active restoration projects, collaboration with State & Local Governments, working with local businesses on best practices and conservation education for all ages.

Learn more about Bob Harrison as we re-commence our summer “Meet the River” segments starting in June!

FOBR Partners with APCC and Town of Dennis to restore wetlands at Weir Creek

The Weir Creek area in West Dennis comprises over 70 acres of wetlands. There are more than 6 culverts along the creek including the critically undersized culvert at School Street/Lower County Road. (See *Town of Dennis* photo at left.) The **Association to Preserve Cape Cod**

recently received a \$138.6k SNEP grant to study the feasibility of restoring these wetlands via culvert replacement. Friends of Bass River is proud to be a partner in this project.

Ironically, Weir Creek’s original owner was Doctor Thomas Starr, who in 1639 resided along Mill Pond in Yarmouth Port. Weir Creek during that time was know as “the Doctor’s Weir River” (Source: *Dennis, Cape Cod From Firstcomers to Newcomers 1639 - 1993*. Nancy Thatcher Reid. Published by Dennis Historical Society, Dennis, 1996)



Dennis-Yarmouth Middle School 7th Grade Estuary Experience

Over 3 gorgeous days in late May approximately 300 7th graders participated in the 1st annual Estuary Experience. Students learned about estuary life, saltmarsh ecology, water testing, shell fishing, and Wampanoag culture at 4 learning stations at West Dennis Beach. Special thanks to Karen Johnson, Jordan Halloran & staff from the Dennis Department of Natural Resources, Carl Depuy & his student volunteers from D-Y Regional High School, Dr. Daniel Rogers & his student volunteers from Stonehill College, Bella Bergonzi from Cape Cod Community College, Jayne diCandio & Joan Muller from Waquoit Bay National Estuarine Research Reserve, and Kitty Hendricks, Indian Education Coordinator for the Mashpee Wampanoag Tribe. This event was organized by our amazing Education Coordinator, Elizabeth Gail Hayden working with Betsy Pontius, Director of STEM Instruction at D-Y Regional School District, and Regina Wood from the D-Y Regional Middle School. Thank you to Gail, all the volunteers, teachers, aides, and guidance counselors for making this a great event!



Our 2024 Volunteer Water Testing Program Kicks-Off



This week we begin our 4th year of water testing at 7 sites along Bass River. Thanks to a generous donor we were able to purchase digital oxygen meters. This will greatly improve and standardize our test results.

Thank you to the many repeat volunteers who stepped up for the 2023 season and the newbies!

Thanks to Jenn Burkhardt from the Center for Coastal Studies for training our volunteers.

DCLT Clears the Way



Thank you to our friends from the Dennis Conservation Land Trust! They sent a group of volunteers to our restoration area in Yarmouth Port to clear the trails for summer tours.

DON'T FORGET TO RENEW YOUR MEMBERSHIP
WWW.FRIENDSOFBASSRIVER.ORG

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Changing Land – Stream Table Lab

A Collaboration between FOBR & Dennis-Yarmouth Intermediate School

Grade 4 Stream Table Lab
Nathanial H. Wixon School: Grade 4
Classroom Teacher: Cathy Demanche
K-5 STEM Coach Brian Spano
Director of STEM Instruction Betsy Pontius



← Changing Land

Grade Fourth Grade - MA.3D

The students in grade 4 have been studying "Changing Land" in their unit titled: Changes Over Time to Earth's Surface and Resources.

K-5 STEM coach, Brian Spano, used (STEMscopes) curriculum resources as an aid in planning and preparing this lab experience. Our community partners 'Friends of Bass River' supplied our students with the stream table. On this day, it was used to practice the skill, Making Observations which reflects Massachusetts standard, 4-ESS2-1 "Make observations and collect data to provide evidence that rocks, soils, and sediments are broken into smaller pieces through mechanical weathering and moved around through erosion."

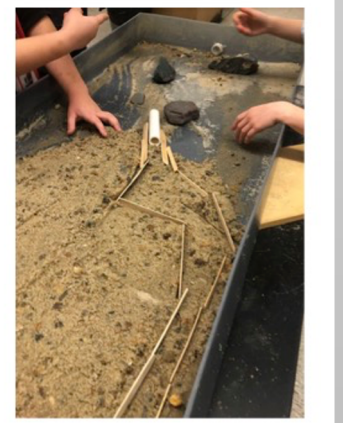
The student centered lab was designed to help students explore the investigative phenomena: How do landforms change over time?

Students entered the lab to find 6 stations to explore. Center 6 targeted the concept of Deposition and the stream table was the perfect tool for exploration. The students were given a protocol for exploration and proceeded to engage as scientists. The following [slides](#) detail the experience.



Smooth out the sand using your hand or a tool

Carve out some rivers with your fingers.
Drop in different sized rocks.
Experiment with blocking the river.



Rocks and sand (are moving)
Sand is rocks
It keeps moving up!
Let's block it and see what happens..

Students create a barrier
The rocks are moving
Its making all the water go over



- I see it's digging a hole.
- Like what it (the poster) said it's going down.
- Rocks are moving the water (the) water is mostly going on this side and creating a river
- Water is stronger than sand
- There is more water when something hard meets it, it gets softer.
- Deposition- it goes up to down.

Special thanks to our volunteer Stream Table Engineers Erik Hunter and Brian Spano.

We would like to provide stream tables for every 4th grade classroom by September.

Your generous donations help make these projects possible.

PLEASE DONATE!

www.friendsofbassriver.org

Friends of Bass River, Inc. is an Independent Non-Profit 501C3 dedicated to the preservation of Bass River.

*Friends of Bass River
P.O. Box 303 West Dennis, MA. 02670*