The River Connects Us.

Connecticut River Watershed Council

The Power of Water / The Power of Words

1,000 Stories to Make the Connecticut River Cleaner & Hydropower Greener







Share your river story to help protect your rivers.

What do our rivers mean to you? The Federal Energy Regulatory Commission is relicensing five hydroelectric facilities on the Connecticut River. This is your chance to have a say in how these facilities operate and improve conditions for our rivers. CRWC has been gathering your river stories and your hopes and dreams for the future of our rivers. Now your comments have been transformed into a massive and inspiring community art installation. You can see this 'river of words' displayed for the first time at the River Garden in Brattleboro, VT during September, 2016.

Opening Reception: Friday, September 2, 5:30-8:30pm **Closing Reception:** Thursday, September 29, 5:30-7pm

It's not too late to have a say! Invite us to bring this FREE presentation to your group. You'll learn all about the relicensing and have a chance to submit your piece of art and official public comment on what you want for your rivers. For more information, contact Colleen Bent, at cbent@ctriver.org or 413-772-2020 ext.206.

The Power of Water / The Power of Words is supported by a generous grant from the Putnam Foundation. CRWC is proud to partner with Christine Destrempes and Art for Water on this project.

Installation on display through September 30. River Garden, 157 Main St., Brattleboro, VT, FREE Admission

River Science + You = Citizen Science

id you know CRWC volunteers help collect scientific data that helps us protect your rivers? Here's what they've been up to:

Water Quality Monitoring – CRWC volunteers & 16 partner organizations collect water samples tested for bacteria at 147 popular river recreation spots in all four river states. See results, posted weekly June to October, at www.ConnecticutRiver.us, click 'Is It Clean?'

River Herring – CRWC volunteers, partnering with CT DEEP, monitor streams for river herring during the spring. This helps identify areas to focus restoration projects for these fish.

Invasive Water Chestnut Pulls – CRWC volunteers join partners in all river states to remove this invasive plant each summer. More infestations are being reported and plants being pulled to keep waters clear for recreation and make way for native plants to return.



Invasive Water Chestnut

Mussel Restoration – Our newest program. CRWC volunteers will work with state and federal scientists to measure water quality, evaluate habitat, and next year help reintroduce hatchery-raised mussels to the wild.

WWW.CTRIVER.ORG



Mission

CRWC works to protect the Connecticut River basin's diversity of habitats, communities and resources. We celebrate our four-state treasure and collaborate, educate, organize, restore, and intervene to preserve the health of the whole for generations to come.

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WATERSHED-WIDE

River Celebration 2016 - You packed the house!



Thanks to the more than 150 of you who joined us for the 2016 River Celebration at Brunelle's Marina in South Hadley, MA in June. It was a sold out event! You enjoyed Lady Bea cruises and various river activities, sunshine and ice cream. Many thanks to our 2016 Bud Foster awardee and featured speaker Laurie Sanders, local naturalist and former 'Field Notes' radio host, who gave a captivating presentation on how the Connecticut River has shaped our region. See you next year!

ERMONT AND NEW HAMPSHIRE

NH Projects Improve River Health

This summer, CRWC and partners are working to improve fish passage, flood resiliency and water quality in northern New Hampshire. CRWC River Steward, Ron Rhodes, is overseeing the replacement of two perched culverts in Haverhill, NH. CRWC received several grants to help buy a new bridge that will be installed once the culverts are removed.



The new bridge will allow native Brook trout and other fish access to the cold headwaters of Oliverian Brook, a direct tributary to the Connecticut River.

Ron is also working with the Natural Resource Conservation Service on two agriculture projects in Haverhill and Piermont, NH. One project will prevent water runoff from the farm getting into the river. The other will keep cows out of the brook by installing fencing and a stream crossing. Both projects will keep our rivers cleaner. CRWC received grant funding to assist the farmers with the permitting process and to help fund both projects.

This work is made possible by funding support from many sources including the New Hampshire Charitable Foundation, USDA, US Fish & Wildlife Service, National Fish & Wildlife Foundation, and the Dextra Baldwin McGonagle Foundation.

MASSACHUSETTS

Challenging Expired Permits in Springfield

Old, outdated permits are not good for our rivers. In the case of Springfield, MA, 10 years is way too long to wait to bring a permit up to current standards and requirements. In May, CRWC signed on in support of the Connecticut Fund for the Environment's (CFE) request to EPA to modify, revoke and reissue, or terminate the Springfield (MA) Water and Sewer Commission's pollution discharge permits. The Springfield Water and Sewer Commission (SWSC) has one permit for the wastewater treatment facility, which expired in 2006, and another permit for their combined sewer overflows (CSOs), which expired in 2014. Each permit has been 'administratively continued' by EPA since expiration which means EPA has just

FALL 2016 3

changed the date on the old permit, sent it back to Springfield, and the public is shut out of the process. That's bad government in our mind.

In the last decade, new information has come out on the harm of nutrients in Long Island Sound. Meanwhile, EPA has set annual nitrogen limits for other permits in MA and has increased required nutrient monitoring. Yet, none of this has happened with Springfield even though the facility is a significant contributor of nutrients into Long Island Sound.

CFE's legal director, Roger Reynolds, was quoted in the *Hartford Courant* saying, "EPA must hold Massachusetts plants to the same legal requirements they've held Connecticut and New York to." CRWC agrees and will continue to work with CFE on reducing nutrients flowing into Long Island Sound.

CONNECTICUT

What Difference Does a Dock Make?

Our rivers have been used as a shipping lane, a commercial fishery, and a trash disposal for centuries. What does the future hold for our treasured river? Now that our rivers are



cleaner, many believe the future is recreation. But not all recreation belongs in all locations.

Lyme, CT has been struggling with this balance between recreation and ecological health. Whalebone Cove is one of the most intact freshwater tidal marshes in the lower Connecticut River. It is prized for its beauty by residents and for its outstanding fish and wildlife habitat by birders, hunters and anglers. But it also gets visited by jet skis and power boats which sometimes operate too fast and too much in this fragile wetland cove. Currently, there are no docks in Whalebone Cove. However, a newly proposed dock that would support motorboats has been permitted by the Department of Energy and Environmental Protection (DEEP). Fortunately for Friends of Whalebone Cove (FOWC), whose mission is to preserve and protect the ecological integrity of Whalebone Cove, the Lyme Planning and Zoning ordinances include guidelines for docks. So there is still an opportunity at the local level to weigh in on the proposal.

Most towns do not have such guidelines so it is entirely up to DEEP's Office of Long Island Sound Programs (OLISP) to determine if a dock or other structure in tidal wetlands should be permitted. There is concern across the state about OLISP's increasing willingness to allow docks over sensitive wetlands. CRWC will remain engaged with FOWC and other organizations on the situation in Whalebone Cove until there is resolution. CRWC works hard to increase access to our river, including opening over a mile of the river to all types of boaters that was blocked by Connecticut Yankee in 2015. But we also know that special areas like Whalebone Cove should be treated differently and with care.

Nature Notes: Dragonflies



Dragonflies belong to the scientific order *Odonate*, Greek meaning tooth, and suborder *Anisoptera*, meaning unequal wings. In fact, their two wings of different lengths on each side of its body are one of their more distinguishing features.

They are an ancient insect whose shape has changed little, but there has been a great reduction in their size over the eons. Today, the largest dragonfly measures almost 7" wingtip to wingtip. But fossil remains show the wingspan of their ancestors was over 2½ feet!

Water is home to the dragonfly. The female lays her eggs in the water, hatching into aquatic crawling nymphs. Dragonfly nymphs breathe through gills and shed their outer skin as they grow. Nymphs usually eat other insects but may also eat tadpoles and small fish. Depending on the species, they spend two months to two years growing underwater. Dragonflies achieve their winged adult form with one last molt, this one above water. The nymph climbs a stick or rock, splits its outer skin a final time, and flies off.

Dragonflies are insect eaters. Adults are so partial to mosquitoes one of their nicknames is mosquito hawk. Adult dragonflies are superbly designed to capture food. Their complex eyes allow them to spot prey up to 60' away. Their legs are fringed with spines and form a bristly basket to snare prey from the air. Once captured, they eat small prey in flight. Larger captures are eaten on a branch or other resting place.

Though we typically only see the flying adults, these insects experience quite an amazing transformation. Next time you pause to admire their vibrant colors, remember the journey they've had, then send them on their way to snack on more mosquitoes.

Originally published & adapted from Upper Valley River Steward David Deen's "River Currents" column. Is there a topic you want to know more about? Let us know and we may cover it here. editor@ctriver.org

2016 Fish Migration—How many came back?

There are many different stories on migration this year. Fewer American shad returned this year but more of them made it farther up the Connecticut River – good news! The shad count at Vernon Dam hit its third all-time high this year. River herring are still having a bad go of things, with it again being a dismal year for alewives. Then again, over 35,000 sea lamprey passed Holyoke Dam in MA. That might be a record number! And thanks to new modifications at Holyoke Dam in MA, 82 shortnose sturgeon were able to navigate around the dam for the first time. This is a big success!

4 www.ctriver.org

Upcoming Events

We've packed 2016 with fun & educational events about our rivers. Here are some coming soon. **Visit our online calendar for more information, www.ctriver.org/news-events, or call 413-772-2020.**

THE POWER OF WATER / THE POWER OF WORDS

Opening Reception: Friday, September 2, 2016; 5:30-8:30pm



Closing Reception: Thursday, September 29, 5:30-7pm River Garden, Brattleboro, VT

As owners of our rivers, citizens have a say in how hydroelectric facilities will be operated, how negative impacts on the river can be improved, and how renewable energy be made more sustainable. This 'river of words' art display provides input to the State and Federal government as they make decisions about new hydroelectric dam licenses.

On display through September 30. FREE

SWALLOW PADDLE

Thursday, September 15, 2016; 5-7:30pm Old Lyme, CT

Join CRWC & the CT River Museum for a sunset paddle on the CT River to see the swirling flocks of Tree Swallows, numbering in the hundreds of thousands, performing their nightly aerial ballet. Contact the Museum to register at 860-767-8269 XIIO or crm@ctrivermuseum.org.

IT'S YOUR RIVER, SO WHAT ARE YOU GOING TO DO ABOUT IT?

Saturday, September 17, 2016; 1pm Great Falls Discovery Center, Turners Falls, MA

Join Andrew Fisk, Ph.D. CRWC's Executive Director to learn about the past, present, and future of the Connecticut River, New England's longest and most iconic river. This general interest presentation about biology, law, engineering, and hydrology will cover successes and failures in the decades long work to improve your River and its 11,000 square mile watershed.

BOB GUNDERSEN

Where in the Watershed?

We stumped you! No one guessed that this is an abandoned rail bridge across the CT River near the Canadian border in Canaan, VT. Thanks to Bob Gundersen for his image. Look for another round of photos in our Spring newsletter next year.

Your newsletters are now more eco-friendly!

This new design uses water-based inks and FSC certified, recycled paper.
Tell us what you think: editor@ctriver.org

20TH ANNUAL SOURCE TO SEA CLEANUP

Friday & Saturday, September 23 & 24, 2016 VT, NH, MA & CT

REGISTRATION IS NOW OPEN for the 2016 Source to Sea Cleanup. You can register your group of any size to clean an area near you. Register by September 7 if you'd like us to send you gloves and trash bags.

Not interested in organizing a group? You can find and join a group near you. Know of a trashy site that could use some cleaning? Report it to us. All this and more at www.ctriver.org/cleanup

Thanks to the many sponsors that help make the Source to Sea Cleanup possible, including our lead sponsors NRG Energy Inc., Pratt & Whitney, TransCanada, and Whistler.









Here's to a Job Well Done

2015 STORMY Award – Each year, the New England Stormwater Collaborative recognizes New England communities and utilities for simple, imaginative and inventive ways that increase efficiency, funding or political support for stormwater management programs. CRWC and partners were named one of three winners of the 2015 STORMY award.

CRWC and partners Enchanted Circle Theater, United Water, and Hitchcock Center for the Environment worked with 5th grade students in Holyoke, MA on a program called "Where Does Your Water Go?" This fun program integrated art and science for stormwater education. We are pleased that creative efforts and effective partnerships continue to be recognized as solutions to stormwater issues.

EPA Lifetime Achievement Award – EPA New England annually recognizes individuals and groups in the six New England states who have worked to protect or improve the region's environment in distinct ways. This year, CRWC Trustee Robert (Bob) Moore received this distinguished honor.

Moore dedicated his entire working life, including 25 years with the CT Department of Environmental Protection and more than 10 years with the Metropolitan District Commission, to environmental protection. Many of the state's environmental programs were developed under his leadership and many of these programs have been models for other state programs.

Join us in congratulating Bob on this wonderful achievement! We are so thrilled for him and thankful for his service and expertise on CRWC's board of trustees.