

The latest updates from the Eightmile River Wild & Scenic Watershed



East Branch of the Eightmile
All photos taken by staff unless otherwise noted.

Chairman's Column

by Anthony Irving

Science drove the process establishing the Eightmile River watershed as one of our nation's federally recognized Wild & Scenic rivers. To qualify for designation Congress required us to identify and document the unique qualities or Outstandingly Remarkable Values (ORVs) of this river system. The 'Wild' in Wild and Scenic refers to the untarnished natural resources that constitute the watershed environment.

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KEEPING A PROMISE

by Patricia Young

When the Eightmile River Coordinating Committee sought Congressional Designation as a Wild and Scenic River it promised that any funds would benefit the local communities. The Eightmile River Wild and Scenic Coordinating Committee (ERWSCC) met that commitment. These funds support a variety of projects, including education, land-use protection, resource monitoring, and outdoor recreation. ERWSCC has also sought grants for community projects that resulted in mapping of municipal stormwater infrastructure, trail improvements and a recent innovative project linking local businesses with outdoor recreation. (See page 4 for our Wander Our Watershed project.) With increased federal funding, the Committee earmarked funds for new local projects. See below for some of our most recent ventures.

School Programs:

- *Dennison Pequotsepos Nature Center* proposed an after-school nature program based on the resources of the Eightmile at the **Salem Elementary School**. The committee readily approved the proposal. This grant supports 42 after-school and in-classroom programs.
- *River Dwellers*, a program offered by the *Connecticut River Museum*, involves role-playing, research and hands-on activities to help students understand how the greater Connecticut River Valley developed. From indigenous tribes to today's conservationists, students have the opportunity to explore the human impact on local

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The Eightmile Wild & Scenic Coordinating Committee Members

Anthony Irving, Chair

Town of Lyme

Bernie Gillis

Town of East Haddam

David B. Bingham

Salem Land Trust

Anthony Griggs

Town of Salem

Ed Natoli

Town of Salem

Richard Chyinski

Salem Land Trust

Parker Lord

Town of Lyme

Melvin Woody

Lyme Land Conservation Trust

Paul Armond

Town of Lyme

Rob Smith

East Haddam Land Trust

Mary Augustiny

Town of East Haddam

Marilyn Gleeson

East Haddam Land Trust

Susan Merrow

Town of East Haddam

Kim Barber-Bradley

Town of Salem

Jamie Fosburgh

National Park Service

Eric Thomas

CT DEEP

Dave Gumbart

The Nature Conservancy

Staff:

Patricia Young

Riley Doherty

New Staff Spotlight



Hello! My name is Riley Doherty. I joined the Eightmile River Wild & Scenic Watershed as the Environmental Program Coordinator in April 2019. Originally from Haddam, I call this area home. I graduated from the University of Connecticut in 2017 with a Bachelor of Science in Natural Resources and a concentration in water resources and climate. Among the many different things I do as the environmental program coordinator, I collect data on the Eightmile River and its tributaries

during the field season. I also help conduct children's programs with the local schools, girl scouts, and community. In my free time I enjoy hiking and rock climbing with my boyfriend, working in my vegetable garden, reading, and traveling to new places.

Watershed Director Receives Distinguished Service Award

The Rockfall Foundation, presented their 2019 Environmental Champion Awards on October 3rd. Pat Young, Watershed Director, received the Tom O'Dell Distinguished Service Award honoring her long-term accomplishments in environmental conservation and preservation. For thirty years she has worked tirelessly protecting Connecticut's natural resources. Pat currently serves on the CT Sea Grant Extension Advisory Board, and the CT River Coastal Conservation District Board. In addition, each year she works to educate the next generation



of environmental stewards, overseeing summer interns and mentoring high school students through the UCONN NRCA program.

2018-2019 Financial Report

Income

| | |
|---------------------------|---------------------|
| NPS Federal Funds | |
| Annual Funds | \$120,000.00 |
| Carry Over/Reserved Funds | \$96,333.00 |
| Total | \$216,333.00 |

Expenditures

| | |
|-------------------------------------|---------------------|
| Operating Costs | \$62,311.00 |
| Education and Outreach Committee | \$2,553.00 |
| Monitoring and Science Committee | \$5,787.00 |
| Protection and Management Committee | \$420.00 |
| Executive Committee | \$7,264.00 |
| Community Project Grants | \$91,398.00 |
| Contracted Field Research & Mapping | \$46,600.00 |
| Total | \$216,333.00 |

KEEPING A PROMISE *continued...*

watersheds, including the Eightmile River. With an ERWSCC grant, the museum has offered the program to more than 400 third-grade students in the towns of **Salem, East Haddam, Lyme, Colchester, and East Lyme.**

Outdoor Recreation: We love to say “yes” when asked to help with projects that connect our community members with the outdoors.

- Yes to helping the **Salem Land Trust** install benches and kiosks to their newest Riverside Preserve on Darling Road.
- Yes to helping the **Town of Lyme** with invasive species removal at a historic foundation at Hartman Park and 15 educational signs.
- Yes to assisting with the ADA Trail and pollinator garden at the Patrell Preserve in the **Town of East Haddam.**

Lakes, Ponds and a Cove; Aquatic Invasive Species Mapping: ERWSCC conducts several long-term monitoring projects on tributaries in the watershed. However other waterbodies such as Hamburg Cove, Mitchell Pond, Lake Hayward, Norwich Pond, and Uncas Pond are also vulnerable to impacts such as the introduction and colonization by invasive aquatic plants. In the fall of 2019, ERWSCC contracted with the Connecticut Agricultural Experiment Station to survey these five waterbodies. Preliminary reports indicate the presence of Hydrilla in Hamburg Cove. The final report is due in spring 2020.

Improving Bird Habitat: In 2016, Audubon Connecticut designated most of the Eightmile River Watershed an “Important Bird Area.” Home to some rare species, including the Cerulean Warbler and Brown Thrasher, the area continues to draw birders. Size doesn’t matter, however. Even the smallest backyard can help protect birds. ERWSCC enthusiastically supports Audubon Connecticut’s efforts to work with local landowners.

Preserving Watershed Land: Land preservation promotes clean water, protected habitat, flood control, outdoor activities and property values. ERWSCC has recently supported several land preservation efforts in the watershed, protecting important streams, such as Muddy Brook in **East Haddam**, and the headwaters of the East Branch of the Eightmile River in **Salem.**

Science in the Watershed: In addition to our stream monitoring programs, ERWSCC contracts with scientists to evaluate and map resources in the Eightmile. Two studies are currently underway.

- A reassessment of 125 significant natural communities and critical habitats that include 40 state-listed rare plant populations. These surveys will document trends and identify management issues and needs.
- The second will establish a long-term monitoring site for the spotted turtle, a species of special concern, evaluate potential habitat of the endangered timber rattlesnake in the watershed and conduct three herpetology surveys at a local preserve in Salem, East Haddam and Lyme.



Portion of the pollinator garden at Patrell Preserve

"Thank you very much again for your wonderfully engaging and perfectly relevant activity! The kiddos were talking about it the rest of the day! Your support of science education in our community is greatly appreciated and as you know, very much needed."

-Mike Kane, Salem Grade 5/6 Science Teacher (reference to Dennison Pequotsepos Program)



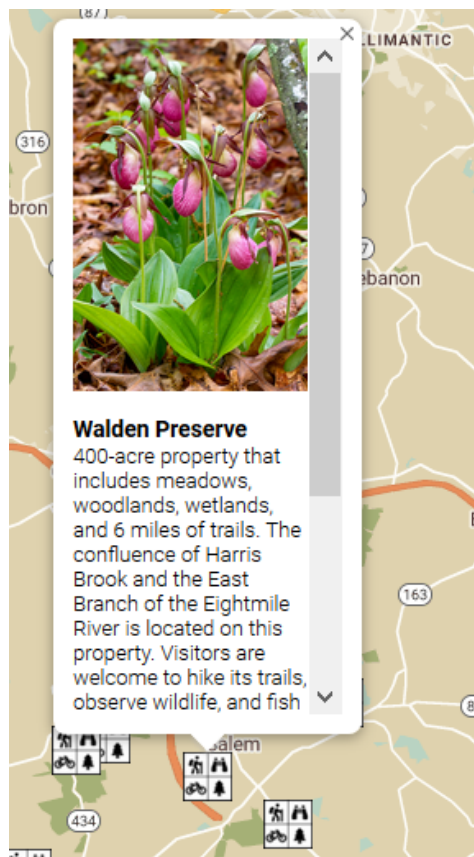
CAES Invasive Aquatic Plant Program boat



Spotted Turtle, Source: CT DEEP



Placard that can be found at trail heads, preserves, parks, and local businesses.



When clicking an icon on the map, a description of the place appears with the address, website, & hours.

EXPLORE OUR TOWNS

by Riley Doherty

In 2019, the Eightmile River Committee opened a new website: www.WanderOurWatershed.org, designed to promote the many outdoor recreation activities in our area. The website houses an interactive map, which allows you to explore all the watershed has to offer.

After a week stuck in the office, we often end the work week stressed, depleted, and in need of restoration. With so many distractions in today's world we are frequently overwhelmed and forget that the outdoors offers an energizing and free form of therapy. So, if outdoor opportunities are never publicized, how will anyone know about them?

People who have heard of Devil's Hopyard State Park, may not have heard of the many preserves that our towns also have to offer. Do they know that over 50% of Lyme has been designated open space? Do they know about our lakes and camping opportunities? The Wander Our Watershed map offers visitors all they need to know to enjoy a weekend outdoors in the Eightmile River Watershed and its surrounds. Publicizing these opportunities invites more visitors to the area, which boosts the local economy. In 2017, the Outdoor Industry Association estimated that outdoor recreation accounts for nearly \$900 billion in consumer spending. The Wander Our Watershed interactive map not only includes outdoor activities, but also allows visitors to search for local restaurants and cafes, the perfect brewery, lodging, and even farmers markets.

How does the map work?

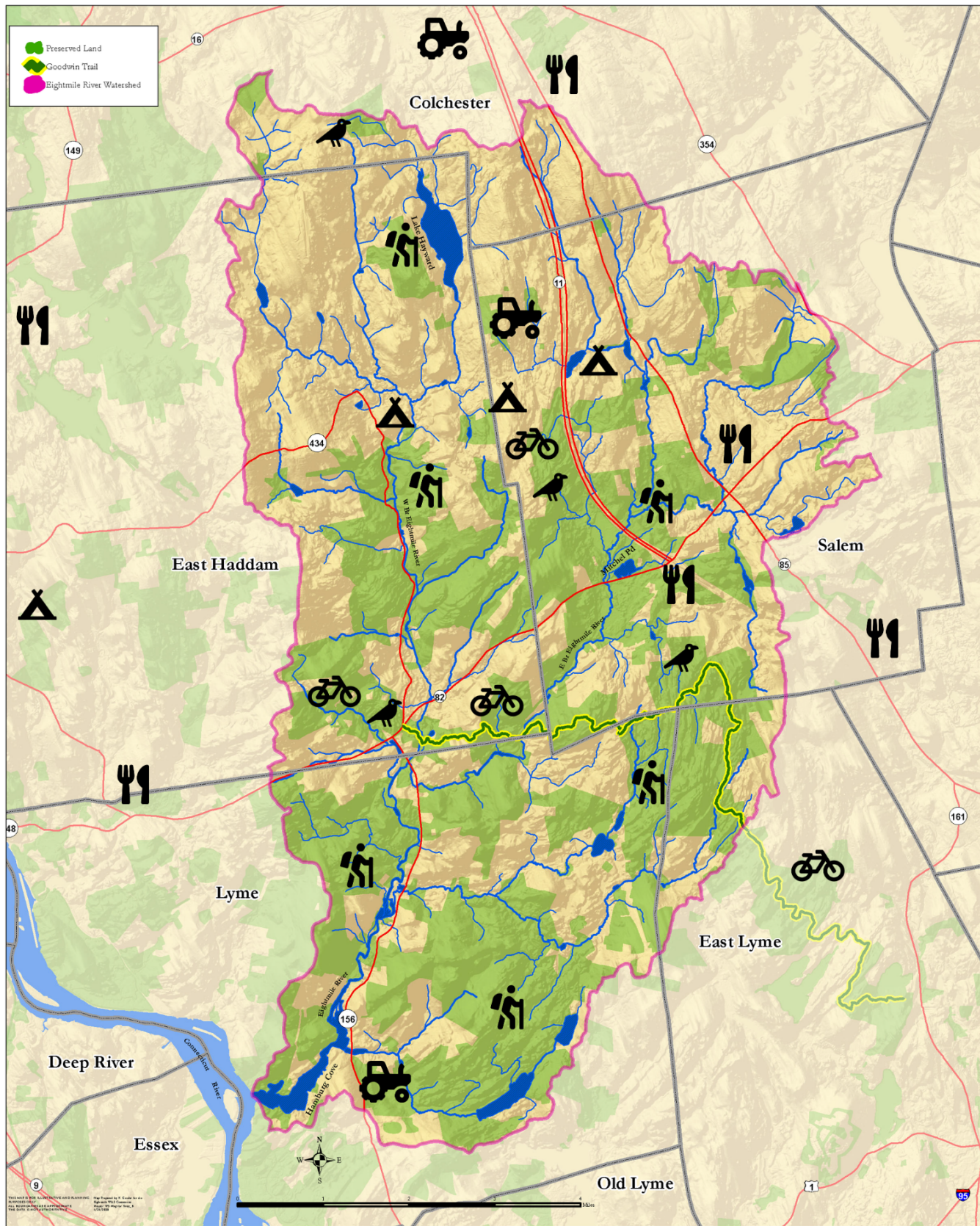
The map offers a choice of seven headings: Art, Culture, & History; Farm Stands & Farmers' Markets; Food & Drink; Outfitters, Gear, & Services; Rentals & Expeditions; Lodging; and finally, Outdoor Recreation. The filters for Lodging and Outdoor Recreation expand to allow you to choose the type of lodging or outdoor recreation you'd like to search for. Within the outdoor recreation filter, you can choose an activity such as birding, hiking, cycling, and mountain biking. Icons will then appear on the map based on what you chose with a description and location of the activity. You can further filter these results with the family friendly, pet friendly, and ADA accessible options.

How local attractions can get on the map

Local businesses and other attractions can open www.WanderOurWatershed.org and click the 'Get on the map' tab at the top of the screen, scroll down, fill out an online form, and click 'Send'. We will publish your information on the map and contact you to make sure you like the display. Placards with QR codes are available for businesses to post so that visitors can explore further options.



WANDER OUR WATERSHED INTERACTIVE MAP



Map created for demonstration purposes only. | Icons from fontawesome.com

Chairman's Column *continued...*

The status of these in relation to their ecosystem functions and values determine the health and viability of the watershed as a natural and self-sustaining river system. When taken together - clean water, abundant and varied wildlife resources, diverse and healthy plant communities, large blocks of unfragmented forested lands in various development stages - they showcase this vibrant and healthy ecosystem. If it wasn't for science, we would have been unable to document and demonstrate these special attributes. In fact, it took several years of fieldwork before we could go to Congress to lay out our arguments describing the special qualities of this river system and why it deserved Wild and Scenic status.

I'll use water quality, one of our ORV's, as an example. Clean-water watersheds provide habitat for the greatest number of plants and animals. Because of a mostly forested, rural, unfragmented landscape we presumed from the start that water quality was high. But verifying this for a 62 square mile watershed with its 150 miles of streams and rivers feeding into it was a complex task. To begin our inquiries, we mapped the Eightmile River's physical characteristics and undertook a population study of fish species within the different river habitat zones. We undertook bioassessments on many of the feeder streams where we documented the variety of insect larvae because the presence or absence of different species indicates degrees of water quality. We undertook a multi-year study to document changes in water flow and temperature gradients at multiple sites - cool waters are important for many species such as brook trout. We identified the species mix and variety of riverine plant communities that speak to the health of the system. Moreover, vegetated buffers along river and streams shade waters during summer heat and filter pollutants draining from uplands. The evidence was convincing. Science proved and Congress agreed that the high-water quality of the Eightmile River system was a major factor in favor of designation.

But scientific study did not end with designation. The Eightmile is in essence a laboratory, an example of a mostly unimpaired river system with a diverse array of plant and animal species. We need to know if the watershed is changing over time. Whether local or global, natural or man-made changes provide clues as to the future health and potential management strategies. If we are gaining or losing species or discover that inputs to the waters are altering the river chemistry, we can compare these changes with the initial baseline information.

What was unexpected about our scientific inquiries was how they opened our eyes to the intimate wonders of this world. When you look closely at things and begin to understand how they function, interact and are dependent on one another you begin to see the intricate beauty behind these connections. Science shows us how to better understand this complexity of interactions and opens us up to the world around us.



Using conductivity loggers to measure dissolved inorganic solids, such as chloride, in local streams



Exploring in the river during one of our summer family programs at Devil's Hopyard State Park.



After dam removal at the former Ed Bills Pond, the water temperature at this location has dropped, improving habitat for species such as the native brook trout.

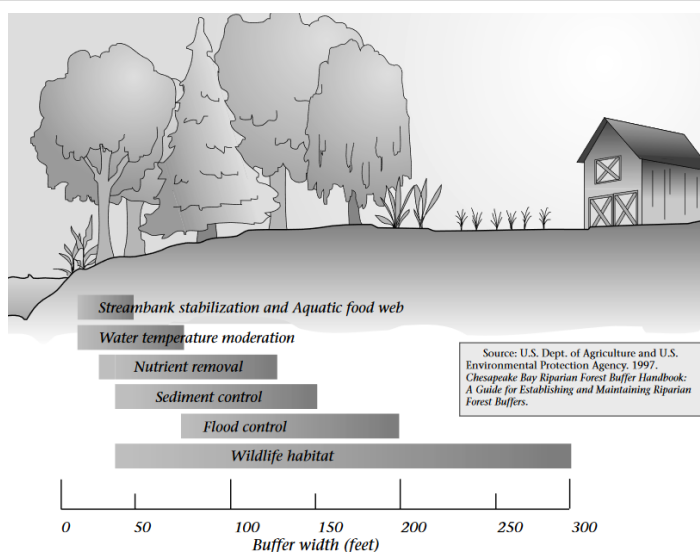
Vital River Buffers

by Sue Merrow

The Eightmile River is an environmental treasure in our backyard. It's a proven example of what a healthy river in the heart of a thriving ecosystem should be. Those of us who love the Eightmile should not forget, however, that any river is only as healthy as its watershed. If we want our grandchildren to enjoy the recreation, beauty and habitat for native wild creatures, we have to think about how we manage the land area that constitutes the watershed. Smaller tributaries, such as Witch Meadow Brook in Salem or Early Brook in East Haddam, can either support a healthy river system or tax it, depending on management of the surrounding landscape.

During the decade-long process it took to win federal designation, we spent a lot of time and energy learning about streamside buffers and their critical role in long-term river management. Left in their natural vegetated state, the land on the edges of streams and rivers filter pollution, protect against bank erosion, increase resiliency to flooding and support a healthy habitat. Obviously, water polluted with toxins pose dangers to riverine life. Less obvious are the benefits of arresting soil erosion. Left unchecked, erosion destroys fish and animal habitat and eventually clogs shellfish beds in estuaries downstream. Trees and shrubs adjacent to streams offer the added benefit of providing nesting and feeding areas and form corridors for wildlife travel. Trees fallen in the river provide breeding and hiding places for fish, while decaying vegetation feeds insects, such as dragonfly nymphs and mayfly larvae. Vegetated buffers also create a canopy to shield and cool river waters for cold-water fish like brook trout.

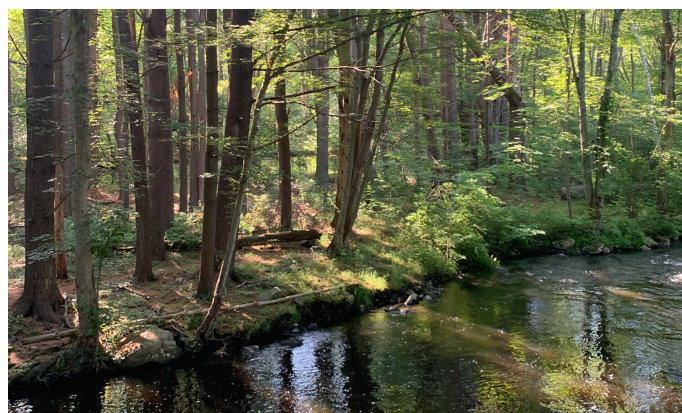
I'm especially proud that the Eightmile is more than just a Wild and Scenic River. It's a Wild and Scenic watershed. When we sought federal designation a decade ago, it was for designation of the whole watershed, in recognition of the inextricable link between the river and the land it runs through. To win this designation, Town Meetings in East Haddam, Salem, and Lyme endorsed the Eightmile River Watershed Management Plan. This Plan laid



Preferred buffer widths for different wildlife and environmental benefits

out frameworks for protecting those critical stream edges. An important feature of watershed land use management is something called a “river overlay district,” an upland zone of land either 50 or 100 feet from a stream bank, depending on whether it's along a small tributary stream or larger brook or the river itself. In these zones, land disturbance activities not already in existence call for a closer look by the Planning and Zoning Commissions, which sets the standards for these protection zones in each town. The Inland Wetlands Commission also plays a role by reviewing permits for activities that affect wetland or watercourses.

I hope you are proud of how the three Eightmile Watershed towns have collaborated to protect our backyard treasure. Establishing streamside buffers has been a crucial tool in preserving an unspoiled landscape for us all to enjoy.



East Branch of the Eightmile in Salem, example of a healthy stream side buffer



EIGHTMILE RIVER
WILD & SCENIC WATERSHED

1066 Saybrook Road
PO Box 70
Haddam, CT 06438

Postal Patron



2020 Upcoming Events

Programs in the Park

Devil's Hopyard State Park
July 11, 18, & 25, 10-11am

RiverFest

Devil's Hopyard State Park
October 17, 1-4pm

Check our facebook page for updates



eightmileriver.org |
WanderOurWatershed.org



860-345-8700



Eightmile Wild & Scenic River
Watershed



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West Branch of the Eightmile, Devil's Hopyard State Park