

#### **Education: The Hallmark of Good Watershed Management**

The long path to Wild and Scenic designation of the Eightmile



River Watershed began more than ten years ago with its first steps of reaching out to potential stakeholders, drawing them into the watershed, and showing them what was special about this remarkable place. Ever since, outreach and education have been just as important as any of the scientific work we do to keep our

watershed healthy. We are guided by the premise that when people know their river, they will love it. And when they love it, they will make good decisions about its management.

The best environmental education begins with a sense of wonder, and children are the best customers for a message of the marvels of our river ecosystem. Our collaborations with educators and our school-based programs have reached hundreds of students, and children are the major focus of summer programs



in the Devils' Hopyard and many aspects of the always-popular RiverFest. Children, and their parents, have gotten up close with bats and caterpillars, counted bugs and fish, tried their hands at water sampling, and waded in a wild and scenic river. Excellent college interns have learned and

grown too while participating in our educational and scientific projects. And we're still innovating, looking for new ways to reach out and spread the word with our interactive website: www.WanderOurWatershed.org



#### **Projects We Love!**

New project ideas come up every few months. However, there are several projects we are especially proud of and offer substantial community value.

- **Protected Lands Mapping:** ERWSCC maintains updated GIS mapping of watershed resources with a focus on preserved lands (see map on reverse). This allows us to support local initiatives for land preservation, develop greenways, support outdoor recreation, and protect water and air quality. Quick Fact: Since 2010 over 1000 acres of land in the watershed have been preserved, bringing the total to 15,400 acres.
- The Goodwin Trail: With the protected land mapping, it became obvious that parcels could be joined via a connecting trail. Working with towns, Land Trusts and CT DEEP, the Richard H. Goodwin Trail was formed connecting eight parcels in four towns. **Quick Fact:** The existing Goodwin Trail is approximately 14 miles long and only crosses 4 roads along its length. (maps for the trail at www.EightmileRiver.org)
- Important Bird Area: In 2016, Audubon CT designated the Lyme Forest Block as the first landscape Important Bird Area in

CT. This is a result of the large areas of protected core forest habitat in the watershed region. Designation brings additional resources such as habitat improvement assistance to land owners. Quick Fact: The Eightmile River Watershed is a significant

our project in its January 2019

Members

Meetings-

2,160 hours

15%

"Partners in Action" post. Find the map



habitat in CT for species such the globally vulnerable Cerulean Warbler. (photo by Laurie Doss)

Wander Our Watershed: The Wander Our Watershed map project is designed to provide an online resource for the greater Eightmile River Wild & Scenic Watershed region. It highlights the variety of outdoor recreation opportunities while supporting local services and businesses. Quick Fact: The National Park Foundation featured



## Ten Years as your Federally Recognized Wild and Scenic River

### The Beginnings

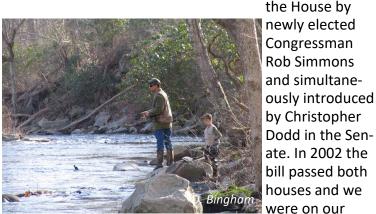
In May of 2008 President George W. Bush signed legislation designating the Eightmile River watershed as one of the nation's great Wild & Scenic river systems. The effort to protect the Eightmile began in the mid 1990's when representatives from the three primary river towns of Lyme, East Haddam and Salem came together with help



proach was needed for its long term survival. But what to do with this amazing resource? Could we come up with strategies and programs to protect the river in its natural state for generations to come for all species living here?

#### The Wild & Scenic Process

At this point we came to learn about the national Wild & Scenic River program. With designation, the Eightmile would receive financial resources and other federal support to further our understanding and for protection of the river system. A bill to determine whether or not the Eightmile was eligible for designation was submitted to



way. From the beginning a watershed-based designation was pursued because of the interconnectedness of all the President Bush in May of 2008. natural resources within the river system.

## Congress gave us three charges.

- 1. Is it Eligible? Guided by the National Park Service the study committee needed to provide scientific evidence of the special and unique qualities or Outstandingly years of study six ORV's were identified:
  - A bedrock geology that incorporates two conti-
  - An unimpaired surface and groundwater system;
  - · Exemplary water quality with few sources of degra-

#### dation;

- · A network of natural communities supporting plentiful plant and animal species;
- An outstanding overall watershed ecosystem;
- A rich cultural history that still reflects the historic patterns and connections to our colonial past.

It is the sum of these parts that truly exemplify the Eightmile.

- 2. Can we safeguard it? The next step was to create a Management Plan directed at protecting the identified ORV's. After consultation and input from local land use commissions and other river stakeholders we knew we needed to:
  - Protect riparian corridors by retaining naturally vegetated setback zones along the river and feeder streams;
  - · Reduce habitat fragmentation by working with willing land owners to reduce haphazard development of important habitat blocks;
  - Minimize and manage impervious surfaces in new construction in order to reduce runoff that can warm waters and introduce pollutants;
  - and stream crossings to minimize runoff to waterways containing road sands, salt and auto pollu-

• Improve stormwater management along our roads

- Promote open space conservation to maintain high water quality and ensure suitable and adequate habitat for wildlife with priority given to saving large habitat blocks and riparian areas.
- 3. **Is it supported?** Congress required the three involved communities, Lyme, Salem and East Haddam, to show their support for designation and the implementation of the Eightmile River Watershed Management Plan. Voter turnout was unprecedented with large numbers of residents participating with nearly unanimous approval. Included were endorsements from all three town's Boards of Selectmen and Land Use Commissions. In addition, Republican Governor Jodi Rell put her support behind it as did the Connecticut General Assembly.

In 2007 with the study complete, and backing from Con-Dodd in the Sen- necticut's five House members and two Senators, our ate. In 2002 the newly elected Representative, Joe Courtney, introduced the bill for designation in the House while Senator Christopher Dodd did likewise in the Senate. Due to political jostling in Washington it took over a year before the bill for designation was finally passed and signed into law by

## **Ten Years of Designation**

The work is not over. As your local oversight group, ERWSCC is entrusted with the responsibility of ensuring that this river system remains one of the nation's finest examples of an intact river watershed. This poster Remarkable Values (ORV's) of the watershed. After two demonstrates what we have accomplished towards this commitment through ongoing study, education, and outreach to our communities. However, it is only with your help and continued support that the Eightmile will live up to its reputation as being one of the nation's premier Wild and Scenic River systems.

## **The Science of Watershed Management**

Watersheds are ever-changing systems. Fluctuation in water chemistry, habitats, animal populations and vegetation are expected. Some of those changes are related to natural phenomena and some are related to man-made influences. ERWSCC is dedicated to tracking baseline conditions and examining results to determine best approaches to watershed management tools. Some of the monitoring projects from the last ten years are highlighted below

Benthic Macroinvertebrate Stream Assessments: Thanks to

Three Rivers Community College, a number of stream segments are monitored annually to determine whether streams are meeting their aquatic habitat support goals. Certain macroinvertebrates (aka stream bugs) are particularly sensitive to pollution. These include species in the mayfly, stonefly and caddisfly families. So when we find them in a stream it is a way of confirming stream health. (free-living caddisflyabove-right)



- Baseline Summer Water Quality Monitoring: Five years ago we started measuring certain parameters at nine locations in the watershed. We measure water temperature, dissolved oxygen, pH, conductivity, total dissolved solids and salinity. Not only does this allow us to track changes over time, but it is also an opportunity for local college students to get involved in field service learning activities.
- Temperature Stream Loggers: In partnership with CT DEEP

and in an effort to learn more about the stream temperature fluctuations, especially during particularly stressful summertime conditions, ERWSCC deploys Onset HOBO® stream loggers annually to collect hourly data on temperature. This in turn gives us a much more ac-



curate "picture" of what is happening in our local streams.

Salt Impacts: A growing concern in Connecticut is the impact of salt in our groundwater and streams. With a grant from the **National Park Foundation** (through the generous support of The Coca-Cola Company and The Coca-Cola Foundation), ERWSCC was able to purchase

eight Onset HOBO® conductivity loggers, which have been launched throughout the water-

shed and will be taking hourly readings all year long. Chloride (salt) level increases along with other constituents result in increased conductivity readings.

## **Our Present is Steeped in Our Past**

The Eightmile River Watershed is remarkable not just for its nat-

ural resources, but also for the place it holds in the culture and history of the people who have made their lives within its boundaries for thousands of years. The story of human interaction with the watershed is written in traces of native American encampments, colonial mills and shipyards, stone walls, cemeteries, and venerable antique houses. The Devil's Hopyard State Park, dating back to 1919, anchors the watershed on the north and invites people to walk the banks of the river in the footsteps of early inhabitants.



The Eightmile watershed boasts seven sites listed on the Nation-

al Register of Historic Places and forty-six others identified by the Connecticut State Office of Archaeology. Visitors to the Eightmile often come for the culture and stay for the natural wonders. Recognizing this, we featured historic and cultural attractions on our interactive map and consider impacts to



resources when conducting federal reviews.

#### Volunteer Hours - Estimated for 2008-2018 Total = 14,305Project Committees & Events-3,045 hours 21% Board

Student Volunteers-.8,600 hours 60% Professional Donated Services -500 hours

"The Wild and Scenic designation is truly a high honor - one that is applied to less than one quarter of one percent of the nation's rivers. We in eastern Connecticut are grateful to have such a small piece of Eden in our backyard and even more grateful to those who have pledged to protect it for the past ten years. I'm confident it will be in good hands for years to come."

**-US Congressman Joe Courtney** 



## Go WILD on the Eightmile!

www.EightmileRiver.org 860.345.8700



Facebook: Eightmile Wild & Scenic Watershed

For ERWSCC's 2017-2018 Financial Report, please refer to our website.

# **EIGHTMILE MILESTONES**

2008 **Congress Designates the Eightmile River Watershed** as the 12th Wild & Scenic **Partnership River** 

2010 Watershed towns have all adopted state guidelines for stormwater, erosion control and fish passage

2013 Lake Hayward Biofilter **Project Completed** 

2014 **School Sponsored Programs Initiated**  **Summer Family Programs** at the Hopyard

2016 The Richard H. Goodwin **Trail Opens** 

2018 **ERWSCC** announces its Small Community **Grant program** 

Wander Our Watershed interactive map launched to highlight outdoor recreation adventures and local businesses

2018







**ERWSCC** receives funding to complete town-wide

2014 **Summer Baseline** Monitoring Initiated in

2015 **Ed Bills Pond Dam** removed in Lyme

( )

2016 Lyme Forest Block **Important Bird Area** Designated by **Audubon Connecticut**  2018



(1)

2011 stormwater mapping

2013 **Moulson Pond Fishway Video System Installed**  the Watershed

**Conductivity Loggers** Deployed in watershed to track possible chloride impacts