



SALMON RIVER WATERSHED PARTNERSHIP

ANNUAL NEWSLETTER

SALMON RIVER WATERSHED

2016

The Salmon River Watershed Partnership Hosts FrogWatch USA Training



*Wood Frog in a vernal pool
photo courtesy of Stan Malcolm (www.performance-vision.com)*

Frogs and toads have porous skin that can absorb pollutants from both water and air, which makes them good bio-indicators of impacts to our local ecosystems. Our landscape is dotted with many potential breeding sites for these amphibians, making it impossible for a handful of scientists to track changes across the state. Enter local community citizen scientists!

Partnering with The Nature Conservancy and Eightmile River Watershed, the SRWP hosted a FrogWatch training program with Mystic Aquarium in March 2016 to enhance data collection in our local watersheds. New trainees learned how to identify the calls of 10 frogs and toads native to Connecticut; spring peepers, wood frogs, American toads, green frogs, bullfrogs, grey tree frogs, pickerel frogs, fowler's toads, northern leopard frogs and the very rare spadefoot toad, that lives several feet underground and only comes out once a year for a very brief period to breed when conditions are ideal. And we learned the exciting news of the discovery in New York City of a new species, the Atlantic Coast leopard frog.

SRWP plans on doing a follow-up program with the Aquarium in the future.

For more information on FrogWatch: <https://www.aza.org/frogwatch/>

Remembering the Efforts of the Westchester Ponemah Club to “Save the Salmon River”

The Ponemah Club, also known as the Westchester Women’s Club, was started in the late 1960’s by several members of the Westchester Congregational Church. The group’s purpose was to organize the women of Westchester, a village within Colchester, to promote the welfare of the church and the local community. When the Borough of Colchester submitted plans to build a sewage treatment plant along the Jeremy River in North Westchester, a tributary to the Salmon River, the Ponemah Club quickly went into action. They formed a grass roots organization called the “Committee to Save the Salmon River” to organize community opposition to the proposal.

The committee persuaded Senator Stafley J. Pack from New Britain, to agree to a second hearing on a bill to “preserve the waters of the Salmon River to perpetuity”, that had received little interest a few months earlier. The club then organized public informational meetings held at the church and provided transportation for people interested in attending the hearing in Hartford. There were representatives from the National Wildlife Federation, the Institute of Environmental Sciences, the Appalachian Mount Club, Fish and Game Associations, as well as clergymen, scientists, housewives, and students who testified at the hearing. The turnout was so large that the hearing was moved to the Hall of the House! Not a single person spoke against the bill.

What started out as a bill to preserve the Salmon River as a Class “A” river (Bill 796), gained momentum and turned into a state-wide initiative to prevent the contamination of any stream suitable for drinking. The group rallied and presented to members of the state Senate a petition with 5,000 signatures in support of the bill. After numerous sessions, the resulting legislation, Bill 1754, enacted a state-wide mandate that tertiary treatment plants must be utilized when building these facilities along streams and rivers with a “Class A” designation. Tertiary treatment results in less pollutants in the discharge by breaking down effluents in three separate cleansing processes.

The club was recognized by winning 1st prize in the Second Annual Courant Club of the Year Award (1971) for their efforts and service to the community. Nearly 45 years later, the fruits of their labor are still evident. The Salmon River still retains a “Class A” designation and continues to be enjoyed year-round by thousands of anglers, hikers and swimmers.

L. Hageman

The Tributary Mill Conservancy: *Raising Fry for the Salmon River Watershed*

The Tributary Mill Conservancy, located in Old Lyme Connecticut has been contributing to species preservation since it was formed in 2000. It is located in an old restored mill and the owners, Jim and Sandra Tripp, had developed a most unique water-fed flow-through system that state fisheries biologists thought would be ideal for raising salmon fry. The incubated eggs are delivered to the site and placed in trays that gravity fed filtered stream water flows through. The water temperature is controlled by Mother Nature so fry develop accordingly.



DEEP Fisheries coordinates the program and relies both on the Conservancy and community volunteers that provide the much needed un-paid expertise and manpower. Volunteers that will help release salmon fry are on stand-by in the spring, waiting for the perfect combination of fry development and stream flow conditions. At that point, thousands of fry are released into our local streams. In 2015, a total of 121,706 salmon fry were stocked in the Salmon River Watershed, of which 94,506 were from the Tributary Mill Conservancy.

And you may have heard the good news about the discovery last fall of wild Atlantic salmon spawning in the Farmington River Watershed. Three “redds” or salmon nests were discovered by state fisheries biologists, officially documenting the first confirmed spawning in over 200 years.



To find out more about the Tributary Mill Conservancy, please visit their website at <http://www.tributarymill.org/>

Top: salmon fry being weighed, Bottom Left: A look at the Mill Tributary Conservancy set-up and Bottom Right: incubation trays

Haddam Neck Happenings

The conservation effort in Haddam Neck during the past year has been low key, but moving along. To some extent we have been affected by the retirement of Barry Parish, the excellent manager of the Conte Refuge who has moved back to his native North Dakota. Barry was very responsive and helpful and is proving to be difficult to replace.

We have however seen some interesting progress in land acquisition. A joint effort between The Gateway Commission and the Middlesex Land Trust acquired fifty acres on the slope adjoining the main entrance to the Connecticut Yankee Property on Injun Hollow Road. This property is now known as the Brainerd Quarry Preserve, so named partly to honor Stanford H. Brainerd. The Middlesex Land Trust immediately set about laying out and marking hiking trails winding up through the historic quarries, which overlook the Connecticut River.



Haddam Neck youngsters participate in annual CT River Watershed Council's Source to Sea Clean-up. Photo courtesy of Brooks Nablo

Efforts to encourage the acquisition of the 544 acre Connecticut Yankee property continue. While it's known that there is a good relationship between principals of both Connecticut Yankee and USFWS and that they have been joined by a representative from The Nature Conservancy, we are not in a position to know what progress is being made. We know that stewardship work is being done in the woodlands by an outside

forestry company. Also, the CY site has become one of only a very few nuclear facilities in the country to be declared completely free of the effects of a nuclear operation.

The spent fuel remains stored on site, however, in transportable casks, ready to move at such a time as Yucca Mountain or an alternative storage arrangement is available.

USFWS, in the meantime, continues to purchase property to add to the Salmon River Division of the Conte Refuge. Last summer they acquired an ill conceived eleven lot subdivision off Haddam Neck Road on which houses had not yet been built. Very recently they acquired two small lots fronting on the Salmon River, off lower Salmon River Road. This will allow the closing part of the road to vehicular traffic.

J. McHutchison

Steering Committee

Watershed Towns

Bolton: Rod Parlee (temp)

Colchester: Jay Gigliotti,
Randy Benson (alternate)

Columbia: Bryan Tarbell

East Haddam: Emmett Lyman,
Jim Ventres (alternate)

East Hampton: Jason Josefiak,
Josh Wilson (alternate)

Glastonbury: Tom Mocko,
Dennis Mcinerney (alternate)

Haddam: Gail Reynolds,
Jim McHutchison (alternate)

Hebron: Brian O'Connell,
John Mullaney (alternate)

Marlborough: Peter Hughes

Organizations

The Nature Conservancy:
Shelley Green

Connecticut DEEP: Eric Thomas

Land Trusts

Colchester Land Trust: Lisa Hageman
Cathy Shea (alternate)

Recreational Groups

Trout Unlimited: John Preston

Member at Large

Silvio O. Conte Refuge-Haddam Neck:
Jim McHutchison

Watershed Coordinator: Patricia
Young

Restoring a River: *Update on Norton Mill Dam in Colchester*

The Jeremy River at the Norton Paper Mill site in Colchester (Route 149 and Paper Mill Road) has been an industrial site since the 1720s. This summer The Nature Conservancy, working in partnership with the Town of Colchester, will remove the Norton Paper Mill dam and restore access for migratory fish to 17 miles of high-quality habitat upstream. Removal of the dam will not only allow fish to get upstream, but it will improve overall river health by restoring natural flows, sediment and nutrient transport and allowing other aquatic species to move freely up and downstream. Dams that go unmaintained could fail catastrophically, posing costly risks to downstream properties and infrastructure. Removing the Norton Paper Mill dam eliminates those concerns.

In the coming months, the town of Colchester plans to demolish the mill buildings and prepare construction access for the dam removal team. In the future, this site will be Colchester's newest Town Park. The town and partners will be working to develop a plan for the park that honors its long, rich history.

The Nature Conservancy hopes to work closely with the Town and its partners, including the Wasniewski family, in developing the future park and where possible engaging volunteers and partners in that effort, including providing restoration plantings along the stream banks. Currently, the dam removal project permit applications are under review with federal and state agencies. The Nature Conservancy anticipates beginning the dam removal work July 1.

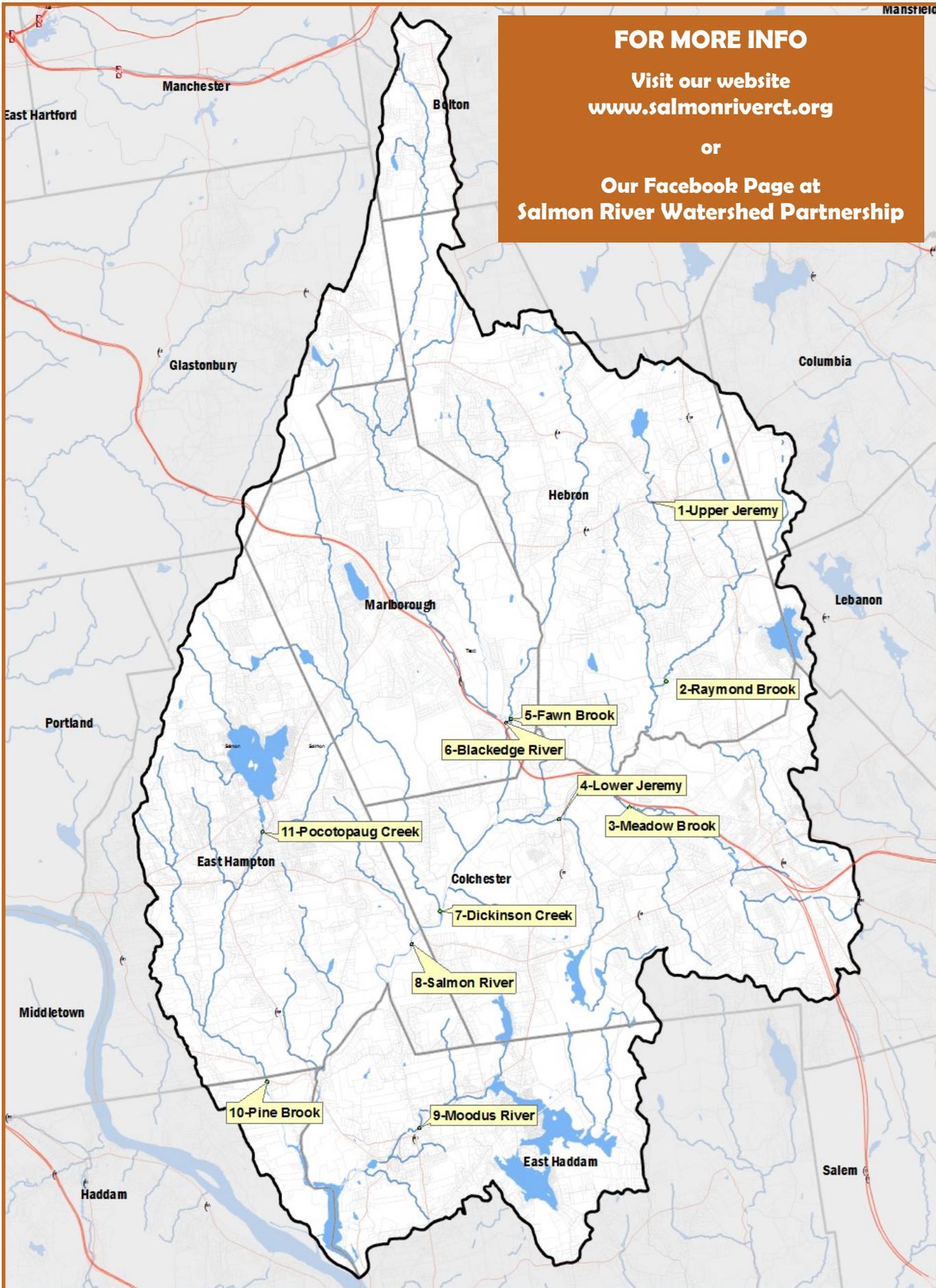
S. Harold (The Nature Conservancy)

Editor's Note: This dam is a significant barrier preventing access to upstream tributaries. Its removal opens up potential passage to many smaller brooks including, Pine Brook (Colchester), Meadow Brook, Judd Brook, Raymond Brook, Hope Valley Brook and Jeremy Brook, plus many other smaller streams.



*Aerial photograph showing top of the old mill. The dam is just south of the building, to the east of RT 149.
Courtesy of J. Gigliotti, Town of Colchester*

FOR MORE INFO
Visit our website
www.salmonriverct.org
or
Our Facebook Page at
Salmon River Watershed Partnership



Have we put our Streams on a High-Salt Diet?

In a recent report by USGS (<https://pubs.er.usgs.gov/publication/sir20155189>), summarizing over 40 years of monitoring data in Connecticut, there was good news and bad news. The good news is that nitrogen and phosphorus concentrations have decreased. The bad news is that chlorides have increased significantly at nearly all the sites noted in the report. Chlorides are part of different types of salt and can be used as an indicator of the presence of salt. They can be found in deicing materials and are also found in discharges from wastewater treatment facilities and septic systems.

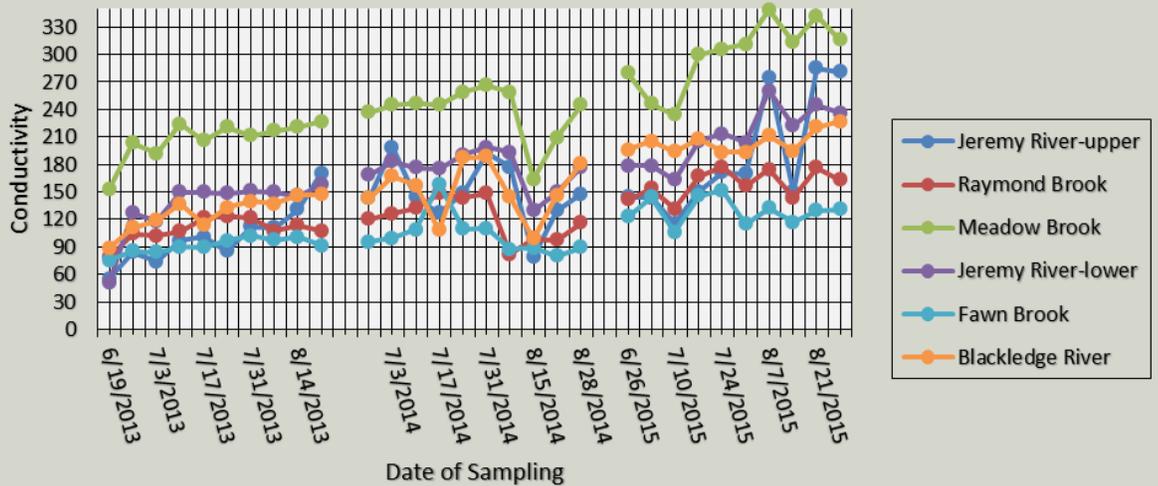


With the help of many dedicated volunteers, SRWP has been monitoring 11 sites (see adjacent map) throughout the watershed for the past three summers. Summer is an especially stressful time for aquatic life as water temperature is higher and dissolved oxygen is lower. In addition, as flows drop in summer months, most of the water in a stream is a result of groundwater seeping into the stream. So we are concerned not just about overland flow from stormwater, but also the quality of our groundwater. Conductivity readings are one of the measurements our volunteers take every week. Conductivity measures the ability of the water to pass an electrical current. Higher levels of dissolved inorganic solids in the water (like salts) result in a higher conductivity readings. The graphs below show the conductivity readings for the summers of 2013, 2014 and 2015.

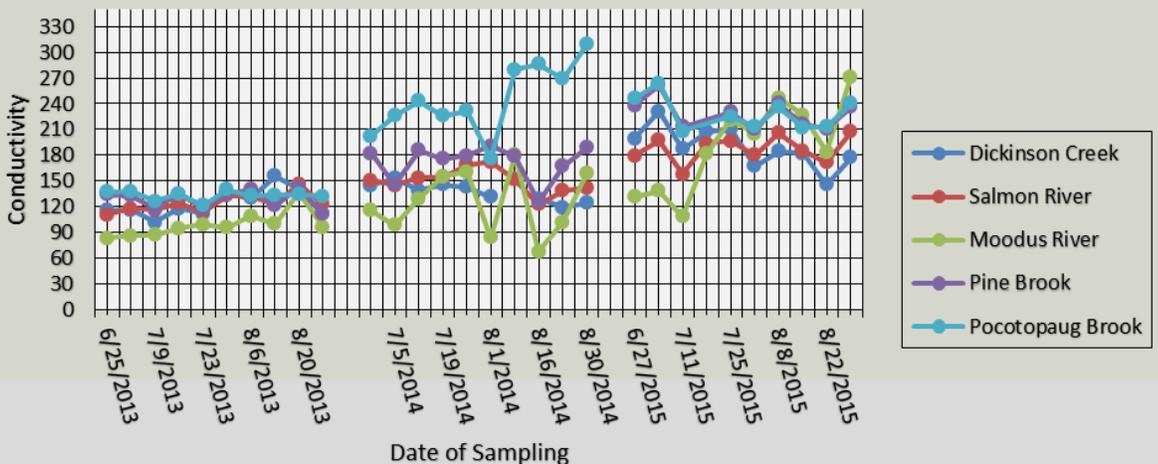
In the summer of 2015, Chris Frey, an Environmental Scientist with GZA out of Glastonbury and a Hebron Conservation Commission member, applied

for and received a small community grant from his company. With those funds, SRWP was able to purchase four HOBO conductivity loggers and associated software. Chris and his fellow "Green Team" members at GZA volunteer their time to launch these loggers at four streams and visit them periodically to download data and perform maintenance. The loggers are set to take readings once an hour and will stay in place for a year collecting data. This will give us a much more accurate picture of seasonal levels of inorganic materials, such as chlorides, in our local waters.

Salmon River Watershed (Upper)-uS/cm



Salmon River Watershed (Lower)-uS/cm



Community Engagement: One of the most important things the SRWP does is community outreach. Whether it is with local schools, organizations, or town officials, it takes many people to ensure that the watershed resources are protected for future generations.

Below are pictures from some of our 2015 events.



Starting at top left, going clockwise: 1. Stream bug assessment with East Hampton HS Environmental Club, 2. Summer Stream Water Quality Monitoring Volunteers, 3. Green Infrastructure Field Workshop at UCONN with Town Public Works, Engineers and Planners, 4. RHAM HS Aquatics and Environmental Science Classes at Fawn Brook for a stream bug assessment, 5. Summer student interns training with DEEP Fisheries on road culvert data collection and 6. Field day with Colchester Girl Scouts at Dickinson Creek

