

MUSCONETCONG WATERSHED ASSOCIATION

2016
ANNUAL
REVIEW

10 MAPLE AVE.
P.O. BOX 113
ASBURY, NJ 08802
MUSCONETCONG.ORG



BOARD OF TRUSTEES



A NOTE FROM THE BOARD PRESIDENT:

Happy 25th anniversary to the MWA! I am still just a toddler in the organization, but as I was thinking about this unique milestone and how to honor our history, I realized how little I knew about its birth. I imagine that someone, somewhere, was standing on the edge of the Musconetcong River and thinking first, "God, this is so beautiful;" followed by, "we need to take care of this!"; and then made a pivotal decision: "I need to do something." One person had a big idea and enough conviction to mention it to another. Great accomplishments often have humble beginnings, and it humbles me to think about 25 years of MWA accomplishments.

Our founders envisioned an organization of neighbors who would promote a watershed-based approach to land and river resource management. The early days began with volunteer water quality monitoring, educational seminars for property owners, teachers and local officials and annual river cleanups. As we gained steam, we helped make the Musconetcong River and its watershed a high priority for the New Jersey Department of Environment Protection Green Acres land acquisition program. Then we sponsored a study of the river that ultimately qualified it for inclusion in the National Wild and Scenic Rivers System. Last year, we strengthened our outreach through affiliation with North Jersey Resource Conservation and Development Council. We are active with dam removals (5 in 25 years), public education, river cleanups, municipal outreach and ordinance review, water quality monitoring and promotion of appropriate and scientifically sound state environmental legislation.

Today we have an engaged membership of like-minded neighbors who stand on the riverbank and not just think it should be protected, but who proactively give of their time and resources to do so. I am inspired daily by the smallest acts of conservation that collectively continue to create so much benefit in our community and I look forward to the great things we will accomplish in the next 25 years!

-Tish Lascelle



TISH LASCELLE, PRESIDENT

CINNY MACGONAGLE, VICE PRESIDENT

ERIK HENRIKSEN, TREASURER

BILL LEAVENS, SECRETARY

RICHARD COTTON ♡ MARTIN EIDE ♡ MICHAEL FOX

BILL GIERKE ♡ TOMAS GONZALES

OLIVER GRIMSDALL ♡ JIM HEDDEN

TIM JOHNSTON ♡ GARY POHORELY

ERIC SNYDER ♡ KAREN WILLIAMSON

A NOTE FROM THE EXECUTIVE DIRECTOR:

2016 was a big year for MWA! We undertook our largest dam removal to date, resulting in five miles of the Musconetcong River freely flowing to the Delaware River. The Hughesville Dam was our fifth removal, and it drew national attention with visits from the US Secretary of the Interior, US Army Corps regional office, US Fish and Wildlife Service and staff from the White House Office of Management and Budget. We hope the completion of this impressive, nearly \$2 million project, will pave the way for removing the next upstream impoundment – the Warren Glen Dam.

The Asbury Grist Mill restoration saw significant progress on structural repairs, interior cleaning and installation of new flooring. This long running project is nearing the halfway mark. I especially want to thank Trustee Emeritus, Chuck Gullage, and the Mill Committee. The Mill project is a tangible example of how volunteer leadership greatly increases the impact of our association.

Water quality monitoring also went high-tech last year. We began using new techniques to identify the relative impacts of contribution of bacteria from people, wildlife and agriculture. The first round of this data was used by MWA and North Jersey Resource Conservation and Development Council to prioritize funding for agricultural best management practices on two tributaries. The second round of data from 2016 was promising and showed decreased bacteria counts on those two tributaries – likely due to the best practices. We also received a grant to deploy our first remote water quality sensor which we will use to measure water flow in the upper watershed.

We saw the arrival of two new staff in 2016. Karen Doerfer became our Communications and Administrative Coordinator, taking on all things from event coordination and website management to member outreach and fundraising. Also, I took the helm of MWA in November, after Beth Styler Barry moved on to The Nature Conservancy.

2017 promises to have more in store for Camp Musky, which had its highest enrollment last year and added a Science, Technology, Engineering and Mathematics week. We will be making continuing progress on the Mill, and laying the groundwork for future dam removals and river restoration projects.

Here's to a great 2016 and a promising 2017!

Alan Hunt

STAFF

ALAN HUNT, EXECUTIVE DIRECTOR

BRENDA BERARDO, FINANCE MANAGER

KYLE RICHTER, EDUCATION & OUTREACH

NANCY LAWLER, WATER QUALITY

KAREN DOERFER, COMMUNICATIONS



MISSION STATEMENT:
THE MUSCONETCONG WATERSHED ASSOCIATION
(MWA) IS AN INDEPENDENT, NON-PROFIT
ORGANIZATION DEDICATED TO PROTECTING AND
IMPROVING THE QUALITY OF THE MUSCONETCONG
RIVER AND ITS WATERSHED, INCLUDING ITS
NATURAL AND CULTURAL RESOURCES

MWA PROGRAMS

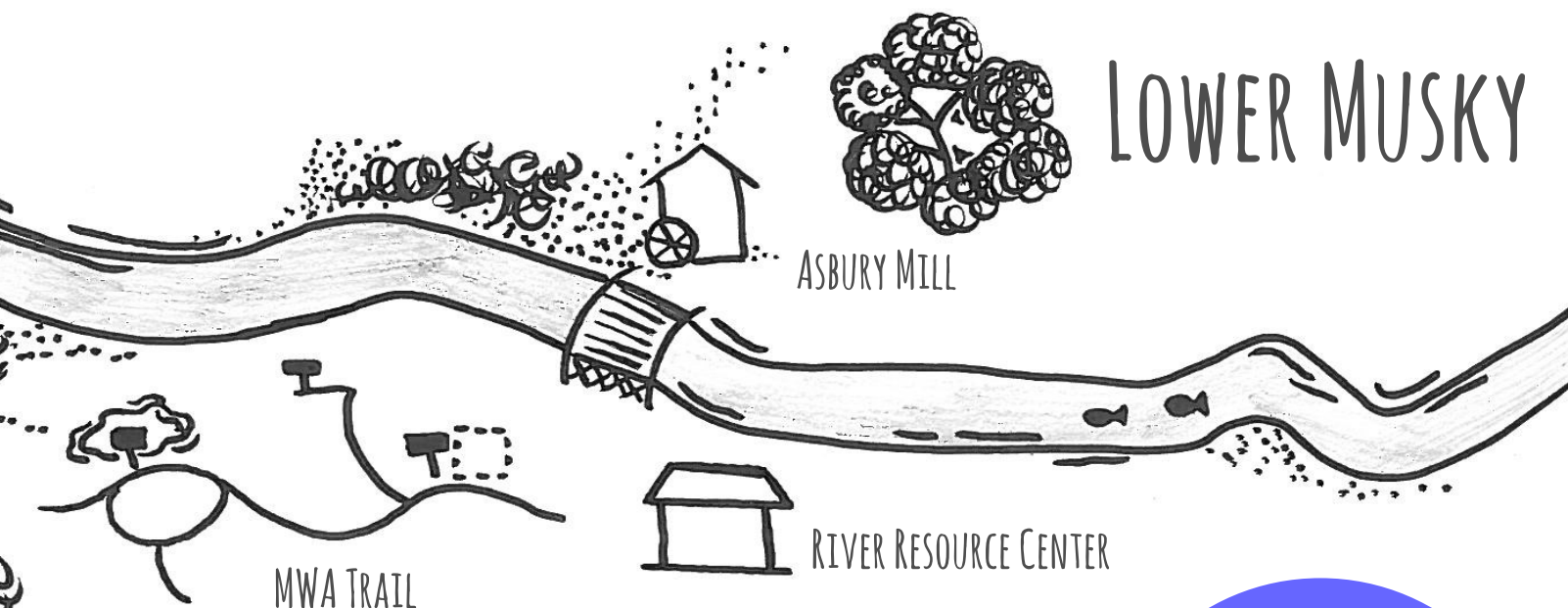
HUGHESVILLE DAM SITE

RIVER CLEAN-UP



MWA's Annual Spring River Clean-up is our largest river clean-up of the year and 2016 was no exception! A record number of over 300 volunteers came out to different locations along the Musconetcong River from Lake Hopatcong down to the Delaware River confluence. Each year MWA seeks out volunteers to clean up trash, recyclable items, tires and anything else that may wash up along the river banks and nearby parks. We provide trash and recycling bags, gloves, water, granola and souvenir t-shirts to each volunteer. We also invite everyone back to our River Resource Center in Asbury, NJ for a celebratory barbecue on the Musky.

In 2016, MWA Board, staff and volunteers picked up approximately 250 bags of trash, 40 bags of recycling and various objects including tires, lawn chairs, scrap metal and office equipment. We would like to thank Hunterdon County Solid Waste, NJ State Park Service, Byram Township DPW for Sussex County, Warren County Road Department, DPW Hackettstown, Republic Services, Premier Sanitation and Warren County Mosquito Commission for their donation of goods and services that help contribute to this event. We would also like to thank all of the volunteers who came out and supported this event!



NATIVE PLANT SALE



IN 2016, WE SOLD OVER 2,000 PLANTS!

The plants sold at the Native Plant Sale help MWA carry out our mission of protecting the Musconetcong River and its tributaries. Using native plants is one of many approaches we take to increase the health of the watershed. Native plants along the river's edge increase shade, which in turn, lowers the temperature of the river. This is good for trout and other species. Native plants are also better at withstanding high water flows and preventing erosion.

MWA promotes the use of native plants because a watershed is much larger than the properties on the river's edge. It is affected by the practices of all homeowners in the community. Native plants can eliminate the need for fertilizers and pesticides and they need less water to survive. They also provide an indispensable food source and habitat for hundreds of species of local insects, birds and other animals.

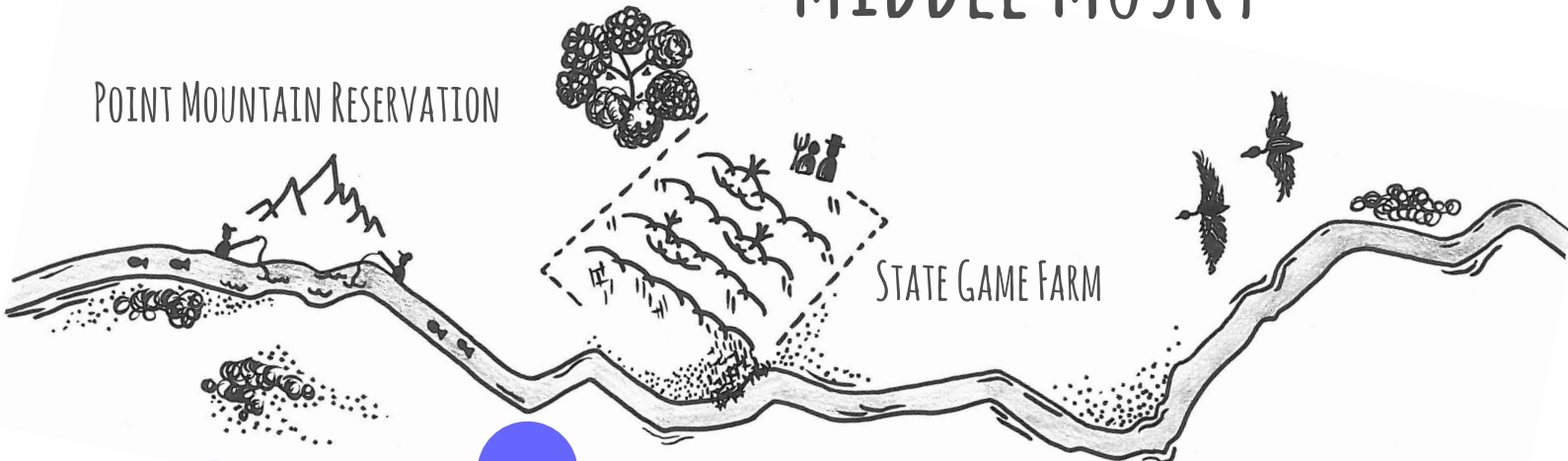


WE SELL OVER 100 SPECIES OF NATIVE PLANTS INCLUDING
PERENNIALS, GRASSES, FERNS, VINES, SHRUBS & TREES



MIDDLE MUSKY

POINT MOUNTAIN RESERVATION



OUTREACH

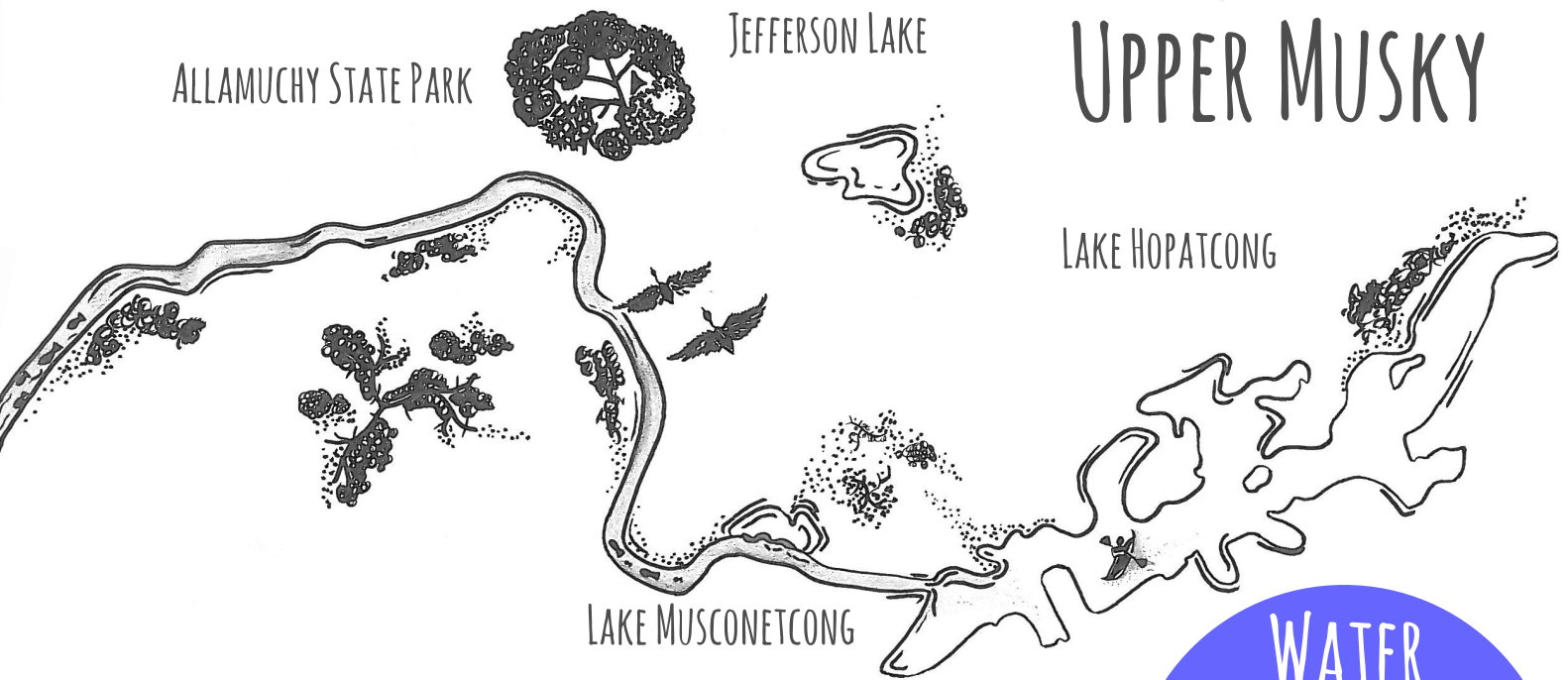
MWA believes that a community that is fully aware of the importance and vulnerability of its natural resources is a community that will actively support efforts to ensure environmental quality. To bring awareness to our community, MWA hosts many different outreach events throughout the watershed including hikes, paddle trips and river talks. This year, our annual post-Thanksgiving hike at Point Mountain Reserve boasted the largest turnout in MWA history with 45 people attending! We also held hikes at Mahlon Dickerson Reservation and at the Musconetcong Gorge to visit the site of the future Warren Glen Dam Removal; and hosted paddle trips on the stretch of river from Hampton to Bloomsbury and at Saxton Lake. We also hosted five River Talks on topics including habitat connectivity, funding opportunities for farmers and a build a rain barrel workshop.

EDUCATION



The MWA Watershed Education Program teaches students about fresh water ecology, ground and surface water characteristics and the historic and geological features unique to the limestone valleys in the Musconetcong and adjacent Delaware River tributary watersheds. Our program promotes a sense of stewardship for the environment that is rooted in knowledge of science, local ecology and history. The MWA Watershed and Education Program is active in several schools. In 2016, we brought our education program to 27 classes where we taught over 485 students in grades 5-12.

Camp Musky is an educational and fun day camp for kids ages 5-12. It offers an outdoor learning experience through hands-on, river-based programs. Campers utilize the beautiful River Resource Center property and adjoining preserved 30 acres of meadows, woods and wetlands. 2016 marked a year of growth for our camp program as we expanded from four to five weeks with the addition of our STEM camp, and attendance set another record with 65 campers. Campers learned about our river, wetland, forest and pond ecology while also getting the opportunity to build underwater robots, solar ovens and forts.



2016 was a busy year for the Water Quality Monitoring program. MWA received a grant from the Watershed Institute to deploy two sensor stations on the river near Stanhope, NJ. When these stations are installed in 2017, with the help of Stroud Water Research Center and local citizen scientists, they will provide us with real time continuous flow, temperature and conductivity data. This data will help us determine what happens to the condition of the river when water flow is reduced from the Lake Hopatcong and Lake Musconetcong dams. We are confident that this project will open up new ways of using technology to monitor our river.

Under a three-year grant from the William Penn Foundation, we continued to collect water samples between New Hampton and the Delaware River confluence to quantify bacterial contamination. Despite existing data which has pin pointed low levels of bacteria in this region, predominantly from Canadian Geese droppings, there are locations where livestock and failing septic systems may be concerns. We continue to work with municipalities and partners such as the North Jersey Resource Conservation and Development Council and others to find ways to reduce bacteria contamination from all sources.

In partnership with Dr. Hongbing Sun of Rider University, and with the help of River Watcher volunteers, MWA continued to collect data on sources of dissolved salts in the River. Higher than expected salt levels have been detected in the upper and middle sections of the River and additional sampling will enable us to determine if road salt or another source is the cause.

Our River Watchers program trained an additional 42 volunteers to identify impacts of the river; to date, we have trained 282 volunteers. In 2017, we will increase the number of monitoring locations to six sites. With additional site locations, we can more accurately monitor the health of the river.



445 TOTAL VOLUNTEER RIVER MONITORING HOURS!

WATER
QUALITY
MONITORING

& WORKING
WITH PARTNERS



THE HUGHESVILLE DAM REMOVAL



2016 was a huge year for the Hughesville Dam removal. This project enabled MWA to open five continuous miles of river from Pohatcong and Holland Townships to Riegelsville, which now serves as a freely flowing migratory passage for American eel, blueback herring, alewife and, potentially, American shad.

The Hughesville project started in 2012 when MWA received a letter from International Process Plants and Equipment Corporation (IPPE) stating that it was interested in removing two obsolete dams on its property and looking to partner with MWA on next steps—we were eager to assist and take the lead. Over the next few years, MWA worked with Princeton Hydro and RiverLogic Solutions to engineer an effective demolition and river restoration plan as well as applying for and securing the necessary permits. IPPE provided the necessary access and staging areas as well as a suitable site to dispose of dredge spoils.

In May 2016, we secured all of the necessary permits which allowed TriState Dredging to begin dredging the Hughesville Impoundment in June. On September 8, 2016, the dam was notched to begin a safe draw down of the water level in the impoundment. On the same day, Sally Jewell, United States Secretary of the Interior, visited MWA's River Resource Center where we hosted a roundtable discussion on the importance of the removal of obsolete dams. Following this roundtable discussion, a press conference was held at the Hughesville Dam site where Secretary Jewell reiterated the importance of dam removals and the role they play in river restoration.

RiverLogic finished critical demolition and stream restoration work in October and we planted trees in the former impoundment in November. Final close out items for the project will take place in 2017.

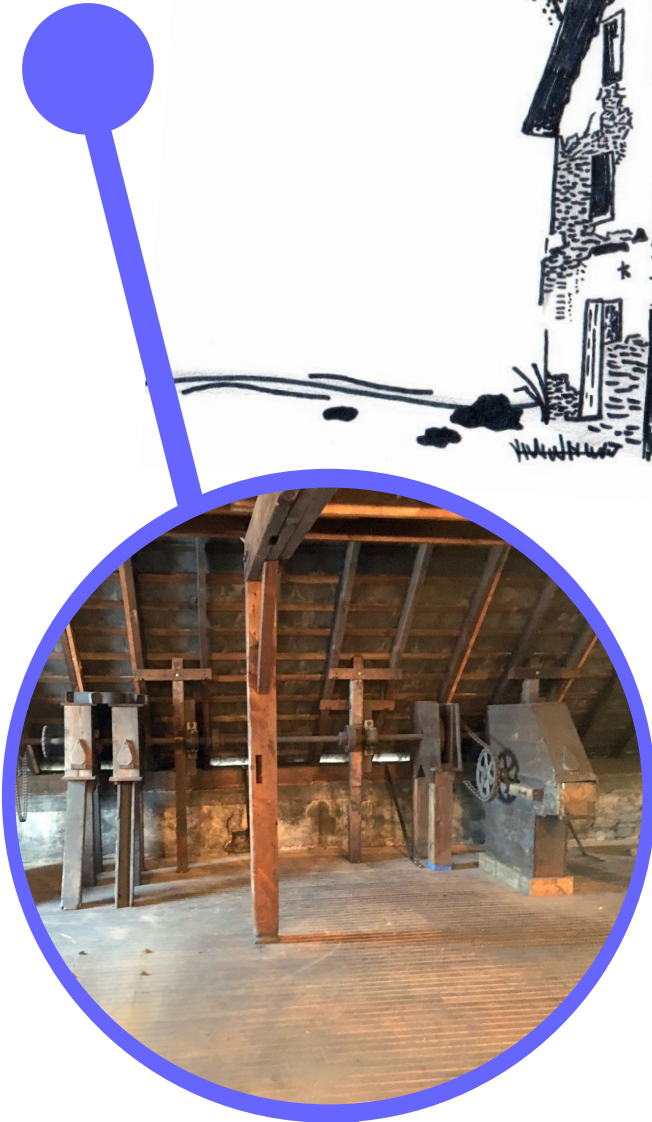
Thank you to all of our volunteers who made this project a reality. We look forward to making our next dam removal project in 2017 and beyond—removing the Warren Glen dam.



MWA THANKS OUR PARTNERS:

U.S. FISH & WILDLIFE SERVICE
NATURAL RESOURCES CONSERVATION SERVICE
NATIONAL OCEANOGRAPHIC & ATMOSPHERIC ADMINISTRATION
AMERICAN RIVERS
NORTH JERSEY RESOURCE CONSERVATION & DEVELOPMENT COUNCIL
NEW JERSEY TROUT UNLIMITED
NJDEP DIVISION OF FISH & WILDLIFE
NATIONAL PARK SERVICE
CORPORATE WETLANDS RESTORATION PARTNERSHIP
PRIVATE LANDOWNERS

THE MILL



We made significant progress on the Asbury Mill in 2016. The main accomplishment was completing all of the structural repairs in the interior of the building. This included replacing: all of the broken or damaged floor joists on the first, second and third floors; support columns where necessary and flooring throughout most of the building—including installing a new basement floor with radiant heat.

In addition to the critical structural repairs, our contractors completed several other important projects. Our carpentry and masonry restoration experts repaired damaged joist pockets, widened the door from the basement out to the tailrace, installed a basement door, constructed a stairway down to the tailrace deck and repaired all of the door and window openings on the east wall of the mill to prepare for the installation on new windows and doors.

Thank you to our friends at Genesis Farms who donated two Clivus Multrum composting toilet tanks that we modified and moved into the basement for later installation. We'd also like to thank our dedicated and hardworking mill volunteers that helped pull up the old flooring, excavate the turbine tub and clean up all of the graphite dust. This was extremely hard work.

We would also like to thank our major donors. Without their financial support, none of this work would be possible:

- ◆ Warren County—Municipal and Charitable Conservancy Trust Fund
- ◆ Franklin Township—Open Space Trust Fund
- ◆ Asbury Carbons and the Riddle Family
- ◆ The New Jersey Historical Trust—1772 Foundation
- ◆ The Gullage Family & The Verizon Foundation
- ◆ The Hyde and Watson Foundation
- ◆ The Society for the Preservation of Old Mills (SPOOM)
- ◆ George's Plumbing
- ◆ Individual Donors and MWA Members

WINE TASTING



Wine Tasting on the Musky is an important fundraiser for the MWA. Guests are able to sample wines from around the world as well as craft beers. This dynamic event includes live music, a silent auction, delicious food including trout caught fresh from the Musconetcong River and one of our favorite activities—our annual rubber duck race on the Musky!

We would like to thank our longtime partners Musky Trout and Fish Hatchery and Perryville Wine and Spirits who help to make this event a success each year. If you would like more information, or to get added to our mailing list, please email karen@musconetcong.org



Our 2016 Run for the River shined despite the rainy weather. As our organization's largest fundraiser to-date, we owe much of this event's success to our loyal participants and sponsors.

We would like to thank all of our sponsors who made this a record breaking year in giving!

Gold: Asbury Farms, Assemblyman Erik Peterson, Borealis Compounds, Hawk Pointe Golf Club, International Process Plants, The Law Offices of Erik C. Peterson, Ondra-Huyett Associates, Princeton Hydro, Tilcon, Unity Bank, Visions Federal Credit Union

Silver: Amy S. Greene Environmental Consultants, Asbury Coffee Mill, Asbury Village Farms, Brewster & Judith Perkins, Brown & Brown, Covanta, Davey & the Wave Runners, Engineering & Land Planning, Four Paws Playground, Fox Lumber, George's Plumbing, Gladstone Design, Hackettstown MUA, Holland Liquors, Mid Jersey Orthopedics, Dr. Sally Jorgensen, M&E Engineers, Mountain Valley Fine Wines & Liquors, Musconetcong Sewerage Authority, Paddler's Cove, Perryville Wine & Spirits, Rick Allen's Auto Repair, RiverLogic Solutions, Rockefeller Group, Rossi Chevrolet Buick GMC, Sanico, Smith Motor Co., Warren Animal Hospital, Washington Animal Hospital



16TH ANNUAL

RUN FOR THE RIVER

2016 FINANCIALS



MWA THANKS ALL
OF OUR IN-KIND
SUPPORT!

💧 4,754 VOLUNTEER HOURS

💧 71 ACTIVE VOLUNTEERS

💧 A SPECIAL THANKS TO KELSEY SACCENTE FOR ALL OF THE REPORT ARTWORK!

MWA is a registered 501(c)(3) nonprofit organization. We rely on grants, fundraisers, memberships and donations from environmentally conscious individuals who care about our local water quality... people like you! Below are our financial highlights from 2016. Financial Reports are available upon request from our Finance Manager, Brenda Berardo.

SOURCES OF FUNDS

Government Grants	\$1,499,063
Non Government Grants	\$233,588
Programs & Events	\$51,726
NJ RC&D	\$19,090
Individual Donations	\$18,673
Memberships	\$11,695
Interest	\$755

HOW FUNDS WERE SPENT

Dam Removals	\$1,128,354
Program Management	\$136,578
Water Quality Monitoring	\$86,031
Management & General	\$84,042
Education & Outreach	\$30,611
Watershed Management	\$27,331
Fundraising	\$24,205



SPRING, '92
MWA WAS
FOUNDED

SPRING, '92
ISSUED 1ST
NEWSLETTER

SPRING '92
1ST RIVER
CLEAN-UP

1998
ACQUIRED
RRC & MILL



WINTER '16
MWA—NJRC&D
AFFILIATED

SPRING '00
1ST RUN FOR
THE RIVER



LOOKING FORWARD:
2017 IS 25 YEARS!



WINTER '06
OBTAINED FEDERAL
"WILD & SCENIC"
STATUS



2008
GRUENDYKE -1ST
DAM REMOVAL



FALL '07
ESTABLISHED
RIVER WATCHERS



SUMMER '09
1ST CAMP MUSKY

