



ANNUAL REVIEW 2020



Musconetcong River at Hughesville dam removal site



Our Board of Directors

Richard Cotton, President
Erik Henriksen, Vice President
Mary Paist-Goldman, Vice President
Christopher Stout, Treasurer
Bill Leavens, Secretary

Michael Fox	Tish Lascelle
Tomas Gonzales	Cinny MacGonagle
Oliver Grimsdall	Ray Merrell
Tim Johnston	Beth Styler Barry
John Kluthe	

LETTER FROM THE PRESIDENT

I write to you from a unique perspective. I am a founding board member, a lifetime and fourth generation resident, and my children are a fifth! My family and I have been on the landscape either in the Musconetcong Watershed or adjoining watersheds continuously for many years. I grew up in the 60's-70's. That was a time when Bob Dylan sang to us "the times, they are a changin'," and boy, how they have! For the past 30 years my family and I have lived on the river and have gotten to enjoy and explore its awe and beauty as well as the incredible resurgence and diversity of wildlife. New Jersey and the Musconetcong Watershed have a unique place in American history, from its indigenous people of 10,000 years ago through European settlement and its role in the industrial revolution.

During the 60's-70's era, you could notice a change in the environment. I spent a lot of time in the watershed hunting and fishing with my grandfather. The diversity and number of animals and birds was on the decline from his perspective from 30-40 years earlier. Agriculture had become more of a monoculture system and much less diversified, family farms were being sold off and longtime families were moving away. As I grew older, I too could see the change.

In the early 80s, New Jersey started a land preservation program called Farmland Preservation along with The Green Acres program run by the NJ Department of Environmental Protection to try to slow the conversion of farmland and open space. The Musconetcong Valley became a target of western sprawl as developers bought up land on their way to Pennsylvania. The programs were successful in preserving a large amount of prime farmland in the watershed. At the same time almost all the counties and municipalities created their own funding for farmland and open space to either support or directly protect land in their communities. It became clear early on that the preservation would be far less challenging than the management of large tracts of land

with diverse interests involved.

In the early 90s, a local group of us were inspired by the South Branch Watershed (founded in 1959) and its founder, Hermia Lechner, to form our own non-profit organization to create awareness in and around the Musconetcong. Like a child, our group struggled in the beginning to find its place and voice. Today, we have grown to have our own headquarters, programs, and staff to deliver a broad offering of programs. We also have many dedicated volunteers that truly make it a local organization doing work that can be adapted everywhere.

Next year will be our 30th year of operation, and the list of accomplishments over that time is truly amazing! There are challenges ahead, and given our resilience over the last 30 years, I'm sure we will rise to these challenges. The balance between economic and environmental sustainability is once again trying our region. The MWA is well-versed in the science of water quality and the regional threats to clean water.

Looking forward to the next 30 years, I believe we will see a tremendous rebound in our natural resources. We need to give ourselves credit for the incredible work that has been done in our watershed to bring back species like bald eagles and the grassland birds that, when I was a child, were only a dream.

To all the volunteers and individual landowners, municipal officials, paddlers, hunters, anglers, hikers, bird watchers, arrowhead hunters, and anyone else who enjoys the Musconetcong, THANK YOU!

Richard C. Cotton
Board President



Our Team

Cindy Joerger, *Executive Director*
 Alan Hunt, *Director, Policy and Grants*
 Karen Doerfer, *Communications Coordinator*
 Christa Reeves, *Water Quality Program Coordinator*
 Ryan Jiorle, *Community Engagement Coordinator*
 Annie Polkowski, *Watershed Programs Coordinator*
 Sam Johnson, *Water Quality Field Specialist*
 Deborah Kane, *Development Associate*
 Jane Heeckt, *Policy Assistant*
 Karen Buchanan, *Bookkeeper (Contractor)*

LETTER FROM THE EXECUTIVE DIRECTOR

2020. My first year as Executive Director at the MWA. Covid-19. Need I say more?

You bet I do. Because it turns out that when the going gets tough, the “Musky-teers” get going. As I look back, I’m surprised at all we’ve accomplished and all I’ve learned about what makes this organization not just survive, but thrive!

Just like in nature, when winter comes and the bulbs, and the seedlings, and bugs and slugs can’t be up and out, MWA’s staff and board were hunkered down for most of the year. Like everyone else. But when you’re protecting water quality and saving or restoring habitat, a year of down time could be dangerous. We knew we couldn’t let our programs, or are fundraising activities, languish for long.

So, a month into the lockdown, we re-imagined our Run for the River. And guess what? *#MovingfortheMusky*, a virtual rendition of this event, was terrifically successful at attracting new participants and getting folks active outdoors during a State-ordered lockdown. Participants could run, walk, jog, paddle, or bike the Musky, on their own or with family, soaking up the benefits of activity in the Great Outdoors and staying safe at the same time. Just what the doctor ordered. Unexpectedly, we learned that we could do something old in a new way, and surpass our goals. The money we raise from special events is critical to our ability to win grant funding, so this early “win” was a good omen.

We also had to cancel our in-school education program and Camp Musky, but could not abandon the goal of inspiring young people to explore nature and understand the ecosystem benefits a healthy watershed provides. Pivoting again, we developed the Virtual Online Classroom for young people, parents and teachers. Full of fun, independent learning activities, the VOC is something else that will outlive Covid at the MWA.

A big concern was how to keep the water quality monitoring work going, especially when our usual lab shut down. We develop and adhere to Quality Assured Project Plans for our sampling work, which insures that our data will be credible to agencies like the NJ Department of Environmental Protection (NJDEP). Gaps in the data record compromise the validity and utility of our findings.

Fortunately, we have trained dozens of River Watcher volunteers over the years, and they answered the call. On key projects like the William Penn Foundation-funded Delaware River Watershed Initiative and the U.S. Fish & Wildlife Service-funded study of the effects on water quality and fish passage of the Hughesville dam removal, we collected ALL our samples AND found a lab to process them. No data gaps, here...

There were, of course, projects we could not advance under Covid restrictions, so we focused instead on raising funds to take our work forward post-Covid, and we were wildly successful there. New funding is in place to update and expand the 2011 NJDEP-approved River Restoration and Protection Plan, which will help us leverage grants for site-specific restoration projects from Bloomsbury to Hackettstown. Our Push Back the Lawn initiative was also funded – we’ll be reaching out to riverfront property owners soon to invite participation in this initiative. Instead of grass right up to the edge of the water, which has to be mown, watered, and fertilized, imagine riparian buffers that attract butterflies and other pollinators, provide cooling shade (fish don’t like it hot!), and filter pollutants out of stormwater runoff before it enters the River. Kind of a win-win-win!

The New Jersey Historic Trust approved a new round of funding to advance our effort to develop an Interpretive Center and community meeting space in our historic Asbury Mill building. And the National Fish and Wildlife Federation approved a grant to help us remove a derelict building that sits in the middle of the River behind our Mill. Imagine, instead, an “Island Park,” accessible from the bridge that is a favorite fishing spot in Asbury, a kayak launch for paddlers portaging around the Asbury dam, native plants, cool shade, and maybe a picnic lunch?

In recognition of our significant experience working with stakeholders to remove unsafe or obsolete dams in the River, we received a grant from USFWS to undertake a feasibility study as groundwork for removal of the Warren Mill dam. Removing that dam would open up another 1.8 miles of free-flowing river and potentially make new River miles eligible for Wild and Scenic status.

(Continued on Page 4)

(Executive Director Letter Continued)

Smaller grants secured in 2020 are supporting efforts to train citizen scientists to monitor for the presence of harmful algal blooms, map water temperature to monitor habitat health for trout and beneficial aquatic species, expand our outreach and build our membership. Talk about replenishing energy stores during the dormant period...

In other good news from last year, NJDEP increased protections for over 600 miles of streams and rivers in the State, including new Category 1 designations – the gold star protection plan – for sections of the Musky and some of its tributaries. And years of effort to have portions of our River recognized as extraordinary recreational waters resulted in a prestigious achievement in 2020 when a newly designated *Musconetcong Watershed National Water*

Trail was added to the National Trails System.

Next year in this space, I'll have accomplishments to report on all of these new fronts; this year, we've got our work cut out for ourselves. We'll need donor support to raise the necessary matching funds for these new grants and volunteer help with plantings, trail-blazing, water quality sampling, stream assessments and other tasks. Thanks to our members and volunteers, staff and Board, we made 2020 work for us. MWA's doors are open again and the future for the Musconetcong River and its communities is ours, and yours, to create. Let's get back to getting together!

Cindy Joerger

Executive Director

PROTECTING THE PLACES WE LOVE TO PLAY

One thing 2020 showed us was the importance of outdoor recreation and our public open spaces. The value of those open spaces and public access to lakes and rivers was much appreciated and in demand. However, we also saw how vulnerable these resources are to loopholes in water quality safeguards and poor planning.

With the Musconetcong's National Wild and Scenic River designation in 2006, there was much hope that the Watershed would be better-protected. There was an implicit assumption, too, that people would know what to see and do in the Watershed. In 2020, these assumptions were tested.

At the start of 2020, about 100 supporters attended a public hearing to voice concerns about a new, proposed sewage discharge to groundwater in Hampton. The project site is underlain with a type of cavernous limestone, which allows water on the surface to enter the ground through sinkholes and later re-emerge from springs or directly into the river. However, groundwater protections are not as stringent as surface waters. This loophole could result in degradation of the River's water quality. Due to the high volume of public comment, the

NJDEP is still investigating how and if it could safely permit such a sewage discharge. Your voice mattered, and still matters, as several other high-intensity developments are proposed throughout the watershed.

What the hearing revealed was how people enjoy the river, whether it be from sticking their feet in the water on hot day, tubing, or fishing. The summer of 2020 showed this, too. Some areas along the river became especially busy on hot weekends when Spruce Run and Round Valley Reservoirs closed. However, less visible locations remained virtually empty with overgrown paths to the River. It became clear that there was not the right information available about where to recreate and the types of recreation allowed along the river.

According to the Outdoor Industry Association



46% of New Jerseyans participate in outdoor recreation



About 15% of NJ's land area has been preserved

MWA already had three recreational projects in the works...

...before the pandemic hit: the development of online recreational maps through the Great Waters project, the production of a partnership brochure with the National Park Service that includes a map and site descriptions, and promotion of the Musconetcong Watershed National Water Trail.

The Great Waters project aims to link together the recreational use of the Musconetcong River and Northwest New Jersey's other rivers and lakes, with a proposal for new, state-wide recreational surface water quality criteria. This criterion would ensure that the water quality continues to support fishing, boating, and tubing while development proceeds. Originally, in-person trips on the rivers and hikes were proposed. When Covid hit, our outreach went online. You can learn more at www.greatwatersnj.org, and access recreational maps for the Musconetcong, Pequest, Flat Brook, Pohatcong, Lopatcong, and Paulin's Kill rivers.

Showing people where to recreate appropriately, educating about the watershed's resources, and appealing to volunteerism and

community engagement is also our approach in developing our first National Park Service brochure for the Musconetcong National Wild and Scenic River. Likewise, a revamped online map for the Musconetcong Watershed National Water Trail is being developed.

People protect what they value. Distributing recreational information helps facilitate a connection to nature and our unique cultural landscape. However, recreation alone does not result in watershed protection. All of these efforts include a call to action to engage – as a volunteer, as a representative to a river management council, and as an advocate – so that future generations can enjoy the landscape that we enjoy. 2020 showed us that we all must be engaged in the critical work of watershed protection by increasing the recognition among our local, county, and state officials of the value of our region's clean water, open spaces, and recreational economy.



Secretary of the Interior
Bernhardt designated
the Musconetcong
Watershed National
Water Trail on October
10, 2020



The Great Waters project
aims to safeguard over
800 miles of rivers and
streams used for
recreation. See the
recreational maps and
learn how you can help at
www.greatwatersnj.org



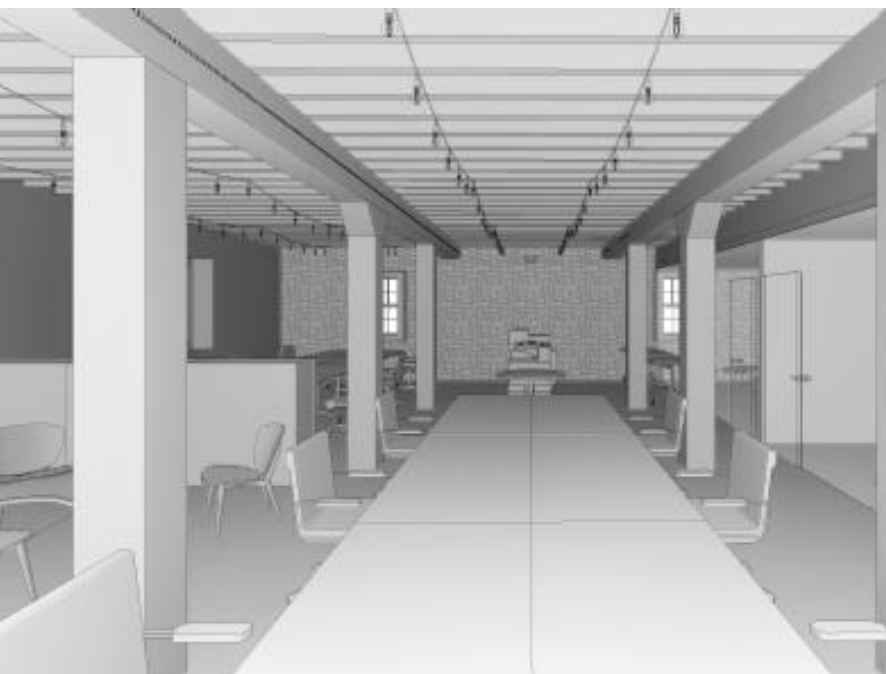
WATER QUALITY MONITORING

The name of the game for water quality monitoring in the last year was adaptation. Like most work during the pandemic, monitoring quickly became complicated. To remain compliant with current restrictions, we could not hire interns, and the labs where we send samples were closed. However, MWA is tenacious and determined. Through funding from the William Penn Foundation's Delaware River Watershed Initiative, we were able to pivot our approach so ongoing projects would not suffer because of uncollected data. Through our relationship with a private lab, funding for monitoring and all-star volunteers, we were able to accomplish our water quality monitoring goals in 2020.

For safety and logistical reasons, we cannot go into the river alone, so we send teams to monitor the Musky. All-star volunteer, Jeremy Travers, worked within the Covid guidelines to help MWA's water quality team collect samples at established sites. The samples collected show trends in sediment transport, water quantity and nutrient levels, like nitrates, from Stanhope all the way down to Holland Township, near the Delaware River.

Another all-star volunteer, River Watcher, and MWA Board member, is Tim Johnston. Tim assisted in collecting macroinvertebrates and performing habitat assessments for ongoing monitoring of the dam removal site in Hughesville for our U.S. Fish & Wildlife Service project. This data is crucial to understanding and documenting the effects of the dam removal and increased aquatic connectivity.

MWA's River Watcher workshops had already trained these citizen scientists to use professional-grade handheld meters, know the procedure for discharge measurements, and use the proper technique for gathering macroinvertebrates. Never has the importance of trained and dedicated para-professional volunteers been so evident. We could not have accomplished our work otherwise. We were able to collect samples and data from over 20 sites in the Musconetcong River and its tributaries, as well as the Lopatcong Creek. We cannot do our work without the support of our dedicated, informed, and engaged members and volunteers. Water quality is most assuredly a team effort.



THE ASBURY MILL

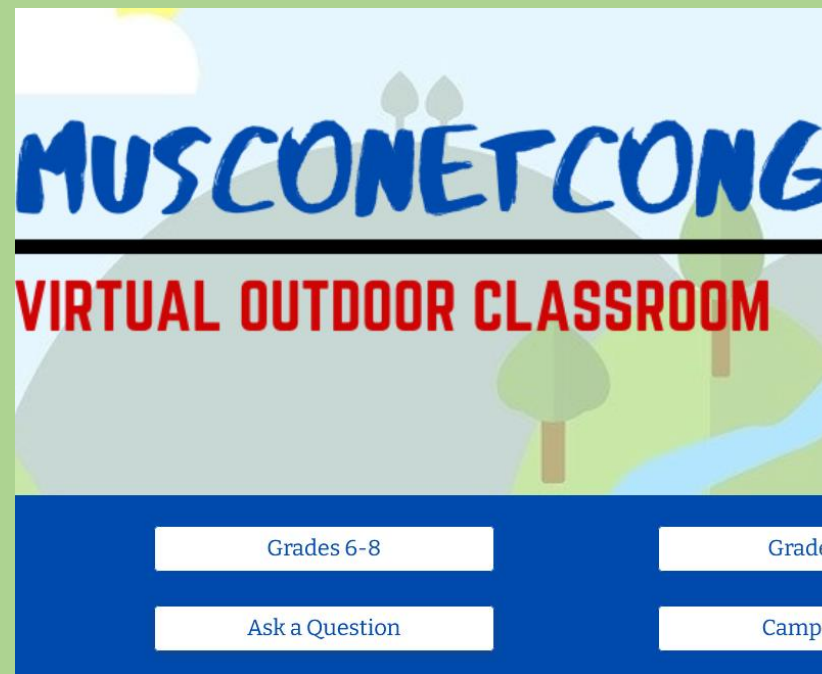
The Asbury Mill is an integral part of MWA's future. It has been since it was gifted to the Association in 1999. An important part of our mission is education about the Musconetcong Watershed and actions needed to protect and sustainably manage its precious natural resources. Two strategies, education and partnership, have been part of our approach since the MWA was formed. Our work to protect and restore the Musconetcong depends on partnerships with a number of allied individuals, governing bodies, and organizations.

For most of 2020, the pandemic was a very real part of MWA life. As with virtually everything in our world, the reality of social distancing touched the Mill. However, we know there will be a recovery that allows people to congregate again. We know that the Mill will provide a beautiful space to educate and tell stories. It has always been imagined as a space to gather our members, students, partners, and visitors to the area.

In December of last year, instead of holding our usual Annual Mill Dinner, we invited community members to see the progress we've made to restore the main floor and basement of the Mill. Once completed, this space will become an Interpretive Center where visitors can learn about local history and environmental stewardship.

During these tours, guests were also invited to take a holiday photo in front or inside of this beautiful, historic building. We plan to incorporate more Mill tours and photo opportunities in our future annual program plan.

In 2020, we were awarded a significant new grant from the New Jersey Historic Trust, which requires a dollar-for-dollar match to begin to spend. MWA will continue to complete the restoration. We plan to achieve our vision of an Interpretive Center that educates visitors, promotes tourism and contributes to our local economy.



VOLUNTEERING

SPREADING OUT OUR EFFORTS

Volunteer events are best when everyone can come together, and MWA and its volunteers carried out meaningful service while following social distancing guidelines during 2020. Instead of the Annual River Clean-up in April, MWA coordinated a “Clean As You Can” initiative, where we provided supplies for volunteers to pick up and use in individual or family clean-up efforts throughout the Watershed. Nearly 100 people participated in this month-long campaign during September last year, which was supported by NJ Clean Communities mini-grants. Other volunteer activities were also conducive to people participating on their own time, such as tending MWA’s native plants garden and maintaining the Educational Trail, both located at the River Resource Center. Instead of single, all-hands-on-deck workdays, volunteers assisted with preparing, planting, and weeding the gardens at staggered times. Work on the Educational Trail was carried out in the same way. Because of this flexibility, volunteers continued to provide important services to the MWA and the larger Watershed community.

EDUCATION

MWA GOES VIRTUAL

Despite the cancellation of Camp Musky and in-school educational programs, MWA continued to provide outdoor and watershed-based education to children through the Virtual Outdoor Classroom (VOC). Activities on the VOC website were listed by grade level, with estimated completion times. For example, a simple game for younger ages was “Nature Bingo,” which included a printable bingo card, where children could attempt to find five outdoor items in a row, such as a rainbow, spider, and pinecone. The VOC provided directions for each activity or video tutorials to guide learners through building- or exploration-based projects. One such example was “River Exploration,” which included a video demonstrating how to collect benthic macroinvertebrates from a stream. In the absence of in-person educational programs, MWA successfully leveraged free online platforms to deliver outdoor, interactive education activities to around 400 members of our watershed community.



RUN FOR THE RIVER

PARTICIPANTS WERE #MOVINGFORTHEMUSKY

MWA's legacy event, the Run for the River, hit its 20th Anniversary last year. We knew that hosting this milestone event in person was not an option due to Covid, so we re-imagined it to inspire participants to get outside and stay active during what was the most strict lockdown time of the pandemic.

#MovingfortheMusky became a virtual, social media-led event that allowed participants to run, walk, hike, bike, paddle, or even fish for the Musky. Participants were encouraged to share how they were getting outside to support the MWA on all of our social media channels. Overall, this event raised more funds than in recent years, thanks to the support of old and new participants, loyal sponsors, and personal fundraising pages.



WILD & SCENIC FILM FESTIVAL

A VIRTUAL FILM FESTIVAL EXPERIENCE

The Wild & Scenic Film Festival On Tour is a curated selection of films aiming to inspire environmental activism and reignite a passion for nature. Since the Musconetcong is a Partnership Wild & Scenic River, it is important to the MWA to be able to host this festival each year. To accommodate social distancing, MWA presented the Wild & Scenic Film Festival virtually in 2020. Working with the On Tour staff, we were able to provide guests with a free viewing experience from the comfort of their own homes, where they could interact with one another and MWA representatives through a live chat feature. Overall, participation in the Virtual Wild & Scenic Film Festival more than doubled the attendance of previous in-person years, and guests were able to view anything they missed or wanted to see again through a Video On Demand feature. While MWA can't wait to reconnect in person, this is one event that may stay virtual for years to come!



WARREN MILL DAM REMOVAL

The Warren Mill Dam is the largest remaining dam on the Musconetcong River. It stands tall at 39' above the riverbed. The dam has no functional purpose, blocks migratory fish passage, is a High Hazard structure, and limits recreational boating in an otherwise scenic gorge.

For more than 10 years, the MWA and restoration partners have sought funding to advance the Warren Mill dam removal. After meeting with New Jersey's only Congressional Appropriator in 2018, Congress included funding for a feasibility study for the dam's removal. The U.S. Fish & Wildlife Service (USFWS) awarded MWA a cooperative agreement in 2020 to work on that study. Congressman Malinowski (pictured above) toured the site in the spring with representatives from the MWA, USFWS, and NJDEP, and International Process Plants – a partial dam owner.

The USFWS Partners for Fish and Wildlife grant will determine next steps to remove this dam, which straddles the River between Holland Township in Hunterdon County and Pohatcong Township in Warren County.

This project will help to restore an additional 2 miles of the Musconetcong River for fish passage from the Delaware River and improve local water quality. It will also remove a significant public safety hazard and improve recreational access. The restored river segment might also qualify for National Wild and Scenic River status.

The feasibility study will build on a pending report from NJDEP that includes an alternatives analysis on how to provide fish passage to the upstream segment of the river. With its removal, about 8 river miles would be open to migratory fish, up to the Bloomsbury dam. With that dam scheduled to be removed in 2022, removal of the Warren Mill dam would allow migratory fish to make their way as far as Asbury, about 13 river miles open to the Delaware River. Imagine American shad and striped bass right outside the Asbury Mill!

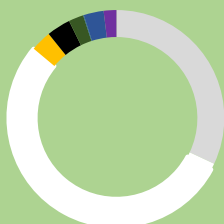
There are many steps in the planning process for a project of this magnitude, but signs are pointing in the right direction that this 330' wide dam is on its way out, and the fish are on their way back in.

FINANCIAL STATEMENT

The Musconetcong Watershed Association is a registered 501(c)(3) non-profit organization.

We rely on grants, fundraisers, memberships, business sponsors, and donations from environmentally conscious individuals who support local water quality... People like you! Below are our financial highlights from 2020. Financial reports are available upon request by contacting the MWA Executive Director.

SOURCES OF FUNDS (%)



- Government Grants
- Foundation Grants
- Individual Support
- Program Service Income
- Investments
- EIDL Advance
- Membership Dues
- Special Events
- Other

HOW FUNDS WERE SPENT (%)



- Programs
- General & Administration
- Fundraising

MWA By the Numbers



420 River Cleanup Volunteers

35 River Watchers Assisting MWA's WQM Team

\$55k+

In-Kind Support Received

400+

Families participated in the Virtual Outdoor Classroom



65 Active Water Quality Monitoring (WQM) Sites in the Musconetcong River



26 New WQM Sites Added

29 Years Operational



42+ Miles added to the Musconetcong National Water Trail System

MISSION:

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.

