NOVEMBER MEETING OF THE NORTHEAST MID-ATLANTIC FORESTS & WATER FORUM

The November 2024 meeting took place at the South-Central Connecticut Regional Water Authority in Hamden Connecticut. Participants from Maine all the way down to West Virginia and out to Ohio were in attendance this year with 80 participants by the second day of the event. Professionals from all walks of life and backgrounds came together to network and to learn better ways that we can all come together to protect our local water supplies and their most important allies, our forestlands! Partners included the following:

- Environmental Protection Agency (EPA) staff from multiple regions
- State primacy agencies like Department of Energy and Environmental Protection (DEEP)
- US Forest Service (USFS) and other foresters
- Natural Resource Conservation Service (NRCS) staff from multiple states
- Soil Conservation District (SCD) staff from multiple states
- Water and sewer utility representatives
- National Rural Water Association (NRWA) affiliates from NJ and MD
- Non-governmental agencies like watershed groups, councils, university representatives and others

For about 175 years, the South-Central Connecticut Regional Water Authority has been providing water to their community. Currently they have several wells and a surface water intake on Lake Whitney. Beyond their state-of-the-art facility, the Claire C. Bennitt Watershed Fund Inc. has been

used extensively to work with stakeholders on sensitive lands within their watershed. Listed on their website for fiscal year 2021, grants were awarded to projects like marking 500 storm drains with educational signage about improper usage of drains, analysis and planning for the Farm River: a sub-watershed within their larger planning area, free tree giveaways, and many other grants for educational opportunities with children among other things to protect water quality.

As part of the two-day event with utility tour and lectures, attendees were able to see a naturalized stormwater detention basin with



Tour group at the mentioned naturalized stormwater detention basin with pretreatment settlement basins.

pretreatment settling basins. Suspended solids can settle out of the water flow here before entering the water supply. Vegetation will also filter out nutrients and some contaminants from roadways in addition to suspended solids. Treatment for suspended solids is expensive, and this method helps

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to proactively save money while simultaneously creating natural habitat! Green spaces also help to mitigate the urban heat island effect as well which increases evaporation and energy usage.

Additionally, attendees hiked a forestry restoration site that was protected from herbivores by a 10ft high and 15-20-ft wide "slash wall". A slash wall is a barrier created by undesirable sawlogs, pulp wood, canopy branches, and brush scraps collected from management or logging operations. Rather than hauling all the less desirable material offsite to make mulch for example, this is a great



Saplings within the slash wall's protected interior within a few shorts years are already too tall for herbivores.

beneficial reuse that will prevent deer and moose temporarily from eating all the excessive regrowth within the slash wall's protected interior. Within just a few short years after clearing out many of the older and larger trees, sunlight that could not previously penetrate the tree canopy is now able to illuminate the ground and to wake up the soil seed bank. Thousands of previously dormant or stunted plants can spring forth in the newly abundant sunlight allowing biodiversity to skyrocket. Doing this occasionally allows greater diversity of beneficial and native species to benefit dozens of bird and insect species among other organisms. The

argument can also be made that carbon sequestration will also increase in the preceding years as fresh new growth is more explosive than older growth.

According to Ward, Ward and Barsky, this method was utilized across 101 acres at four additional sites in addition to the Seymour site highlighted in this article. Across all sites, for all tree species, dominant sprout heights were taller by the end of the first year inside the slash wall vs outside the wall's protection. Sprout height and frequency at the end of the second year was also higher for red oak, sugar maple, and pignut hickory. Eventually as the slash wall begins to decompose, nutrients from the previously undesirable cuts once again fertilizer the successional forest and contribute carbon biomass back to the soil food web. Overabundant white-tailed deer especially can decimate the forest understory and new vegetative growth.

As wood product consumption continues to rise with population, hopefully innovative methods like this will continue to develop and be implemented to increase our sustainability and overall watershed protection. Our forests and water quality are intimately related more than the average person may know. It is the responsibility of everyone to ensure that our common resources are shared and protected fairly.

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Reference

Jeffrey S. Ward (Chief Scientist Emeritus)1, Elisabeth B. Ward (Assistant Scientist)2, and Joseph P. Barsky (Lead Technician) 2020-2023. *Browse Exposure Reduces Observed Sprouting Success and Sprout Height Growth.* Department of Environmental Science and Forestry, The Connecticut Agricultural Experiment Station *123* Huntington Street, New Haven, CT.

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Collaborators provided study sites, conducted harvests, supervised construction of slash walls,

and assisted with data collection.

- SCC-RW A C. Cordes, J. Tracy, and A. Amendola
- CT MDC A. Hubbard and D. Lawrence
- Massachusetts DCR DWSP K. Canfield and H. Eck
- McLean Wildlife Refuge C. Hogan

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Special thanks to partnership leaders and utility staff for organizing and for stimulating meaningful connections. For more information on the partnership, how to be involved, and future meetings visit: <u>https://northeastmidatlanticpartnershipforforestsandwater.com/</u>