

Signature Cover Sheet:

Principal Investigator: North Branch Land Trust

North Branch Land Trust (NBLT) is a registered 501(c)(3) conservation nonprofit operating in Northeastern Pennsylvania since 1993. NBLT conserves properties in an eight-county region of Pennsylvania (Bradford, Susquehanna, Sullivan, Wayne, Wyoming, Lackawanna, Luzerne, and Columbia) in the Susquehanna and Upper Lehigh Watersheds.

Mission: North Branch Land Trust partners with landowners, communities, and stakeholders to conserve and care for Northeastern Pennsylvania's lands and waters.

Title: Invasive Species Management for Watershed Restoration

Amount Requested: \$5,000

Project Start Date: 10/1/2025

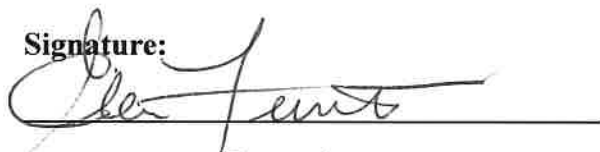
Project End Date: 9/31/2026

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Signature:

A handwritten signature in black ink, appearing to read "Ellen Ferretti", is written over a horizontal line.

/ **Ellen Ferretti, Executive Director North Branch Land Trust**

Project Summary: Invasive Species Management for Watershed Restoration

This project aims to enhance the conservation of wetland habitats in Luzerne County by focusing on the management of invasive species in two critical sanctuaries: Hanover Crossings Marsh Sanctuary and Forest Echo Bird Sanctuary. Grant funds will be directed toward expanding existing invasive species management efforts, targeting species such as Phragmites, Japanese Barberry, and Mile-a-minute. The project will emphasize the importance of native species and the role of wetlands in filtering stormwater, improving local water quality, and mitigating impacts from acid mine drainage (AMD) and surrounding development.

To carry out the removal of invasive species, funds will support hiring of professionally licensed contractors and staff time for managing these species. Activities will include professional treatment, biological inventories, and cleanup efforts. In addition, the project will focus on community education, with resources and events designed to raise awareness about the impact of invasive species. Educational hikes led by NBLT's staff, along with targeted outreach to local businesses and landowners, will promote awareness, native habitat protection and invasive species management. Through these efforts, the project aims to foster greater community involvement in preserving the region's natural resources and ecological health.

Project Narrative: Invasive Species Management for Watershed Restoration

Project Description:

This project aims to enhance the conservation of wetland habitats in Luzerne County by focusing on the management of invasive species in two critical sanctuaries: Hanover Crossings Marsh Sanctuary and Forest Echo Bird Sanctuary. These are working watershed units that not only provide natural resource and habitat protection but will serve as real time learning opportunities based upon the management activities performed.

Grant funds would be utilized to expand existing invasive species management plans at Hanover Crossings Marsh Sanctuary and Forest Echo Bird Sanctuary. The invasive species management plan would focus on the removal of highly invasive species, such as Phragmites, Japanese Barberry, Mile-a-minute, etc., and educating the public who utilize the sanctuaries on the importance of native species and the role of the wetland in local water quality, and stormwater quality, filtration, and infiltration, especially in regions with abandoned mine drainage and development pressures.

Funds dedicated to removal would be utilized to hire licensed contractors necessary to sustainably manage invasives and non-native species at the Hanover Crossings and Forest Echo Sanctuaries, as well as staff time devoted to ongoing active management of the project. Necessary activities surrounding the professional treatment, including native planting, water quality testing, biological inventory, and cleanups will involve NBLT staff and conservation partners as well as community volunteers when feasible.

Funds allocated for community education will be utilized to develop educational resources and events focused on the watershed, habitat and water quality attributes of Forest Echo Bird Sanctuary and Hanover Crossings Marsh. In addition to educational hikes led by NBLT's staff and passive educational opportunities through signage and brochures, NBLT will also use educational resources in targeted outreach to the surrounding businesses and landowners encouraging cold water habitat protection and invasive species management.

At a Glance:

Water Quality in Solomon Creek Watershed and Huntsville Creek Watershed

- Goal – Reduce invasive species presence and improve habitat of NBLT-owned Hanover Crossings Marsh and Forest Echo Bird Sanctuaries.
- Objective – To achieve this goal, NBLT staff will work with project partners Native Habitat Restoration and Fruittown Land Stewardship Services to implement best-practice second phase invasive species management at both site locations to help restore native wetland species.
- Activities – Phased treatment of Barberry, Phragmites, Japanese stiltgrass, purple loosestrife, and Mile-a-minute; mapping of other invasive species on site; native species planting
- Measurable Outcomes - Acreage of treated invasive species; Native trees, shrubs, and grasses planted; Mapping of untreated invasives for ongoing focus

Community stewardship in Solomon Creek Watershed and Huntsville Creek Watershed

- Goal – Provide active and passive wetland habitat and stewardship education opportunities for preserve visitors at NBLT owned Hanover Crossings Marsh and Forest Echo Bird Sanctuaries.
- Objective – To achieve this goal, NBLT staff will develop educational hikes and will work with conservation partners like the Luzerne Conservation District to develop specific informative materials regarding the impact of invasive species on wetland habitats for visitors and local businesses.
- Activities – For each site: 2 cleanups and/or educational events; and stewardship mailing campaign to reach surrounding homeowners, landowners, and businesses.
- Measurable Outcomes - Number of cold-water educational events and participants; Number of volunteers engaged and total in-kind hours; Number and types of signage produced for passive education opportunities; Number of contact points with surrounding landowners regarding invasive management and native habitats

Outreach Plan:

North Branch Land Trust will pursue an array of avenues to inform appropriate audiences about project progress and results. These avenues will include press releases to media partners including local news and regional conservation publications; free public educational events hosted by staff; digital distribution of project updates on nblt.org, [@northbranchlandtrust](https://www.facebook.com/northbranchlandtrust) social media accounts and mass email campaigns; and a physical mailing campaign to nearby landowners and businesses.

Project Timeline:

Cleanups, Volunteer Plantings and Educational Hikes will be single-day events proposed to be scheduled within the time frame of the grant to occur with cognizance of invasive management timelines and treatments. An invasive management timeline has been proposed by contracted professionals to occur annually between April and August, weather permitting. Educational and outreach materials have flexible timelines that may be developed throughout the grant period with definitive final deadlines for mailing surrounding Earth Day 2026.

Budget Table:

Item	Description	Grant Request	Match	Total	Source
Contracted invasive species management	Contracted invasive species management at Forest Echo and Hanover Crossings	\$4,500	\$5,000	\$9,500	Donated Services; Grant (pending); and NBLT Budgeted funds
Administrative	NBLT Staff Time Devoted to managing project as well as Stewardship, Enviro. Edu. and Outreach	\$500	\$3,500	\$4,000	Grant (pending); and/or NBLT Budgeted funds
Travel	Travel expenses for site visits		\$500	\$500	NBLT Budgeted Funds

Budget Justification:Grant Request:

The majority of grant resources will be committed to managing the professional removal of invasive species and the subsequent planting of native species. Additional funds are requested to offset administrative costs.

It is possible that this project could be completed with a modified scope if the full grant request cannot be fulfilled.

Item Justifications:

Annual invasive species management costs have been quoted by contracted professionals and include permits, materials, and administrative costs.

Administrative costs have been calculated for NBLT staff involved with the project. Calculations account for approximately 80 combined total project hours at an average rate of \$50/hour.

Travel expenses for site visits associated with the project have been estimated from 2024 stewardship activities and 2025 increase in standard mileage reimbursement rates.

Match:

Additional Private & Foundation Grant funds committed to this project are in hand or pending. Private Grant funds secured are committed to 2025 invasive species management at NBLT properties. NBLT has applied for supplemental grant funds for 2025 invasive species management and informative watershed outreach materials that will be announced early in the calendar year.

NBLT's Operating Budget accounts for staff time and necessary management activities when external funding is not available. With the financial backing of the Mid Atlantic Panel on Aquatic Invasive Species and similar granting organizations, NBLT would be able to maximize our stewardship impact.

Donated Services:

Native Habitat Restorations has committed to donating 20% of the total cost of their services for the 2025 treatment plan at Hanover Crossings Marsh.

Curriculum vitae: North Branch Land Trust

North Branch Land Trust (NBLT) is a registered 501(c)(3) conservation nonprofit operating in Northeastern Pennsylvania since 1993. NBLT conserves properties in an eight-county region of Pennsylvania (Bradford, Susquehanna, Sullivan, Wayne, Wyoming, Lackawanna, Luzerne, and Columbia) in the Susquehanna and Upper Lehigh Watersheds. NBLT's approach to outreach is regional, focused on the needs of the Susquehanna and Upper Lehigh Watersheds, and cross-curricular, inviting a variety of perspectives to the conservation conversation.

Mission: North Branch Land Trust partners with landowners, communities, and stakeholders to conserve and care for Northeastern Pennsylvania's lands and waters.

Our Goals: We envision a future where abundant conserved lands help maintain clean air and water, diverse forests and wildlife habitats, vibrant working farms, and inspiring natural beauty.

We envision a future in which North Branch Land Trust is a highly respected leader in conservation and a vital institution that enhances the quality of life for all.

Core Values: Although there are many important principles that guide our work, the North Branch Land Trust emphasizes the following values as core to our efforts:

- We are committed to preserving the beauty and environmental health of Pennsylvania for the benefit of future generations.
- We are committed to achieving that goal by working in collaboration with individuals, organizations, businesses, communities, and governments on all levels.
- We are committed to helping create a sustainable balance between economic growth and the healthy, natural surroundings that sustain flourishing communities.
- We are committed to conserving a wide variety of natural landscapes for the benefit of all living things, utilizing the standards and practices established by the National Land Trust Alliance.
- We are committed to working at all times with the highest degree of informed, conscientious, and cutting-edge professionalism.

NBLT is uniquely suited to carry out this project, not only as the owner of the project site locations, i.e., NBLT fee-owned preserves, but also based on our track record of project success through diverse partnerships. NBLT maintains strong partnerships with regional conservation organizations and connections with private entities that support our mission. In addition to our initial successes at the subject project locations, which resulted in major strides in the reduction of Japanese Barberry and Phragmites in our region's tributaries, these partnerships have recently resulted in the protection of the riparian forest surrounding one of NEPA's largest drinking reservoirs with Pennsylvania American Water and the addition of several thousand acres of land to the PA DCNR Bureau of Forestry to be managed as part of the State Forest system.