

**Southeastern Wisconsin Invasive Species Consortium, Inc.
Period 2 Progress Report**

Date: January 11, 2024

Report #1 Period: January 1 – December 31, 2023

Overall Grant Project Period: May 2, 2022 – May 1, 2024

Sub-award Recipient: Ulao Creek Partnership

USDA Award Number: 22-DG-1109420000-015

Recipient Contact Person: Marjie Tomter, Mitch Vincent

Principal Investigator/Project Director: Andrew Struck

Progress Achieved in Accomplishing Project Results and Outcomes:

- 1) **Established Great Lakes priority non-native invasive species (NISS) detected, mapped, controlled and monitored contributing to community resiliency, watershed stability.**

Throughout the 2023 Grant Period (Report #2 Period), the Ulao Creek Partnership (UCP) and Ozaukee County Planning and Parks Department (Department) coordinated and prioritized non-native invasive species (NNIS) management and native tree planting activities for UCP members, Department staff, conservation corps teams and other volunteers. UCP and Department staff coordinated with conservation corps organizations and developed contractual agreements with AmeriCorps NCCC and WisCorps conservation corps. WisCorps and AmeriCorps NCCC teams required on-site lodging, which was provided by the Department and involves significant coordination, training, additional funding and communication with the team. UCP and the Department organized, promoted and coordinated several workdays for community volunteers as well. All individuals implementing invasive species management and restoration activities (e.g. tree planting) received training by experienced Department staff on local ecology and history of the work location (e.g. unique features, restoration efforts), identification of applicable plant species (e.g. invasives vs. natives, toxic/harmful species), tree planting techniques, proper use of equipment (e.g. chainsaws and woodchipper), safety procedures, use of herbicide (as needed) and technical methods for management activities.

Department staff utilized previous inventories and conducted additional field visits to identify populations of focal invasive species and priority locations for control/management. Phenology of the plants also often dictated species and timing chosen for management.

In spring 2023, efforts were focused on controlling cut-leaved and common teasel, Dame's rocket, garlic mustard and comfrey throughout the Ulao Creek Nature Preserve County Park (Preserve). Herbaceous invasive species control efforts consisted of hand-pulling, digging up and bagging plants for disposal. Phragmites and teasel are the most prevalent and problematic species currently found at the Preserve. Native tree and shrub planting (both seedlings and potted stock) was also conducted in spring in areas of previous NNIS management including two bur oak, two butternut hickory, 10 common hackberry, five American hornbeam, 15 quaking aspen, six swamp white oak and three winterberry (43 trees and shrubs total). All trees were mulched, caged/tubed and watered.

In summer and fall 2023, efforts focused on buckthorn, honeysuckle, phragmites, purple loosestrife and cut-leaved and common teasel management throughout the Preserve and clearing additional areas (including dead ash removal resulting from Emerald Ash Borer (EAB)) for future native tree planting. Common buckthorn is the most problematic woody invasive species in the Preserve (extremely high stem density), but honeysuckle and autumn olive were managed as well. Fruiting shrubs were prioritized to make the greatest impact. Phragmites and common and cut-leaved teasel were also managed during this period. Woody invasive species and phragmites control efforts consisted of cutting (e.g. hand saws, loppers, brush-cutters and chainsaws) or brush-mowing and treating the stumps or stems with herbicide (e.g. glyphosate). Teasel was either dug up or flowering seed-heads were cut and bagged depending on the life stage of the plant at that time. Purple loosestrife was dug up and discarded. The cut woody material was also chipped in a woodchipper to maintain a clear and safe working environment during current and future management as well as retaining clear areas for future native tree planting.

During the 2023 management period, invasive species control activities took place throughout the entire 7 acre Preserve. This effort included pulling and digging up approximately 684 pounds (19, 40-gallon bags) of Dame's rocket, garlic mustard, and teasel. Department staff (eight employees), an AmeriCorps team (team of nine members), a WisCorps team (team of five members), two volunteers from the Ulaio Creek Partnership and five Starbucks employees participated in invasive species control and tree planting efforts. Educational/project signage (e.g. SEWISC and USFS-CWMA) is also displayed at the Preserve.

Efforts to continue control of Dame's rocket, garlic mustard, comfrey, common and cut-leaved teasel phragmites and purple loosestrife as well as additional buckthorn, honeysuckle, and autumn olive are planned for 2024. Additional native tree planting is also planned for spring 2024.

2) Prevent new introductions of NNIS contributing to community resiliency, watershed stability, and biological diversity.

Department staff utilized existing inventories and conducted additional reconnaissance within the Preserve to identify priority work areas as well as identify new populations of priority and other NNIS to prevent any further spread. In addition, extensive NNIS management efforts were conducted near and along Ulaio Creek to reduce the potential for seed spread downstream.

3) Protect, restore, enhance and maintain habitats to help sustain healthy populations of native species contributing to community resiliency, watershed stability, and biological diversity.

Reduced competition from NNIS supports the re-establishment of native vegetation, which improves biological diversity and provides stormwater management and water quality benefits at the project areas and downstream. Over time, maturing native vegetation will also replace the lost ash tree canopy (due to emerald ash borer) and help to shade out certain invasive species and prevent new growth from the existing seedbank. Tree planting within the management zones was conducted in spring 2023 and additional planting is planned for spring 2024, but native tree and shrub planting efforts within the Preserve have been ongoing in conjunction with NNIS management since 2014. Cumulative and ongoing restoration efforts actively contributes to the protection, restoration, enhancement and maintenance of diverse and sensitive native ecosystems found within the Preserve.

4) Reduce untreated runoff from urban watersheds contributing to community resiliency, watershed stability, and biological diversity.

NNIS removal followed by native species plantings in conjunction with ongoing restoration projects will help mitigate NNIS impacts to locally important floodplain, wetlands and adjacent woodland areas, protect prior restoration investments, and improve filtration of stormwater runoff entering Ulao Creek and ultimately, the Milwaukee River.

5) Demonstrate long-term (> 5 years) commitment to monitoring and necessary follow-up treatment.

The UCP has been dedicated to improving the Ulao Creek watershed since 1995 resulting in significant improvements and along with the Department, are committed to carrying out long-term monitoring and follow-up treatments, particularly at the Ulao Creek Nature Preserve County Park. The Department has been involved with invasive species management and restoration in the Ulao Creek watershed since the early 1990s (and helped establish the UCP, Inc.) and recently acquired (Feb 2022) the Ulao Creek Nature Preserve County Park as a way to provide public access and management along and to Ulao Creek in the long term. This is the first public access site along Ulao Creek. Several invasive species populations within the project area will require multiple treatments for effective-long term management due to the accumulation of seed in the soil over multiple years. In addition, some new invasive populations will require follow-up treatments to previous rapid response efforts to ensure any re-sprouts or new seeding plants are eliminated and we can reduce the need for extensive management efforts in the future. Thus, in addition to management of new acreage in the Preserve as part of the project, several areas that were managed in 2022-2023 will be managed again in 2024 and beyond as needed. Continued long-term management efforts to control target invasive species are important to protect past restoration investments, increase native species biodiversity and long-term resiliency, and improve general ecosystem function. The UCP and Department are committed to continue NNIS management beyond the current proposed grant activities as part of general long-term maintenance of the Preserve as well as seeking additional funding, strengthening organizational partnerships and utilizing support from community stewards. UCP and the Department have also noticed an increase in invasive species populations (e.g. phragmites and teasel) showing up in properties neighboring the Preserve (mostly commercial) and have started conversations with those property owners to help communicate the importance of cooperative invasive species control with the goal of developing new partnerships that will facilitate continued control and restoration efforts in and around the Preserve in the long-term.

Activity Description (e.g. treatment method, type of outreach)	Output (numeric value)	Metric/unit (e.g. acres treated; people engaged)
NNIS controlled	7	acres
NNIS surveyed	7	acres
Native vegetation restored/enhanced/protected	7	acres
Native trees planted	43	number of individual trees
Volunteer effort	16	number of individual volunteers
Youth effort	0	number of youth (K-12)
Education and stewardship	29	number of active participants
Volunteer time	131.5	hours
NNIS control protection for past restoration efforts	7	acres
Watershed protection	16	square miles

Difficulties Encountered:

The Department submitted an application to host a fall 2023 AmeriCorps team, but, unfortunately, the Department was not chosen to receive a team for that period. The Department is planning to apply for a spring 2024 AmeriCorps NCCC team to assist with NNIS management activities in conjunction with other conservation corps groups (as future funding allows) and volunteers. If awarded and funded, spring conservation teams are not awarded until May or June, so future efforts (January – May 2024) as part of the current CWMA grant would be conducted by UCP members, Department staff and community volunteers.

Despite extensive efforts throughout the Preserve in 2022-2023, invasive species populations persist and will require additional and follow-up treatments to keep under control. This will require additional efforts to secure additional funding and participation by volunteers. As mentioned above, invasive species populations around the Preserve have been spreading (especially teasel and phragmites) and will require communication and cooperative efforts from UCP, the Department and neighboring property owners to reduce the spread.