

HENNEPIN COUNTY

MINNESOTA



2024 Community Forestry Progress Report

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Introduction

Hennepin County foresters were busy throughout 2024. Some highlights of the work that was accomplished include:

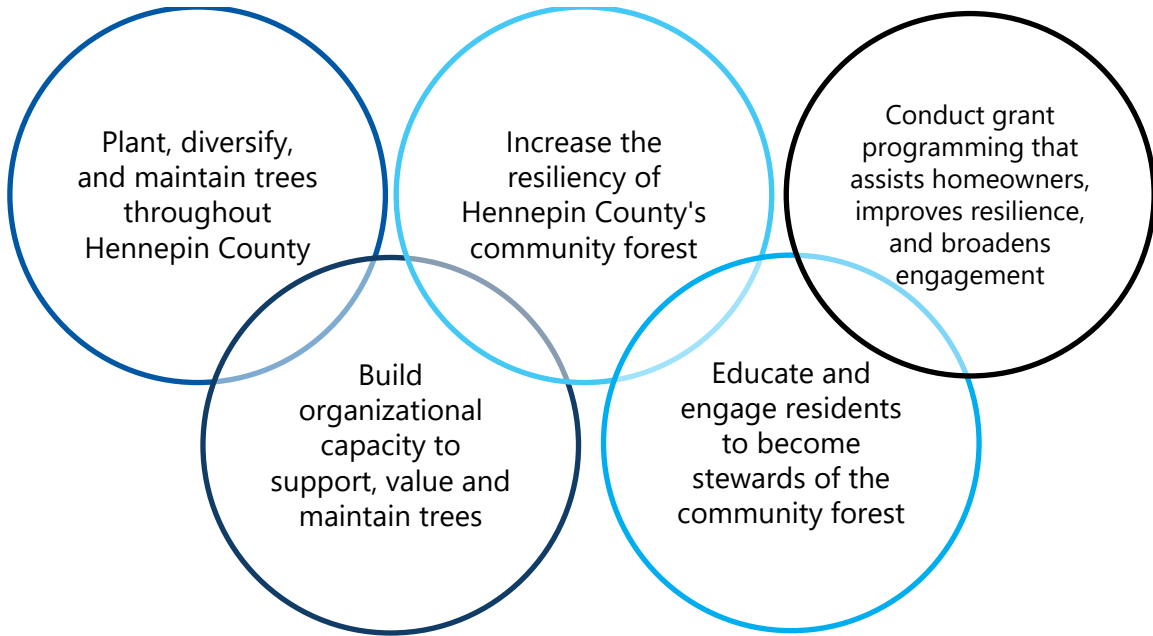
- Planted 1,956 gravel bed trees and shrubs throughout the county.
- Planted 30,345 seedlings.
- Removed 115 trees on private property of homeowners with low incomes.
- Held a tree sale where residents purchased nearly 8,350 seedlings.
- Funded 17 Healthy Tree Canopy grant projects totaling \$433,923. The grants include thirteen cities, two affordable housing providers, and ten schools and nonprofits. More than 920 trees will be planted or treated through grant projects.
- Planted 72 different species of trees to maximize tree canopy diversity and resilience.

Creating a community forestry program in the Environment and Energy Department was part of the county's expanded role in natural resource conservation. The forestry program focuses on protecting the county's tree canopy to increase the benefits that trees provide. Trees improve air quality by absorbing fine particulate matter and other pollutants and protect water by slowing down and infiltrating stormwater runoff. They also provide shade, reduce the urban heat island effect, lower stress, and increase property values.

Aspects of the county's forestry program include growing healthy trees, partnering in large-scale planting events, managing threats to the tree canopy, raising awareness about tree pests and disease, educating the public on the benefits of trees, and supporting partners through the Healthy Tree Canopy Grant program.

In 2020, Hennepin County Forestry created a Community Forestry Strategic Plan with program-specific goals and objectives in support of the Environment and Energy Department's mission and climate resiliency initiatives and the Natural Resource Strategic Plan. Additionally, Hennepin County adopted a Climate Action Plan in 2021 and set a goal to plant one million trees, as well as support existing goals to plant, diversify, and maintain trees throughout Hennepin County and increase the resiliency of the county's community forest.

With the help of grant funding, Hennepin County forestry began work in 2024 to help homeowners with low incomes get trees removed and replaced from their properties. This funding addresses a significant need identified by community members as the emerald ash borer has swept through the county. The following sections of this report follow the four overarching goals identified in the Community Forestry Strategic Plan, which are named below, and provide status updates for the associated objectives. A fifth goal, to conduct grant programming that assists homeowners, improves resilience, and broadens engagement was added in 2024 and helps to achieve the four overarching goals. Overall, many projects and efforts were successful in 2024.



Goal 1: Plant, diversify, and maintain trees throughout Hennepin County

Overview of trees planted in 2024

Locations	# large bareroot trees planted in 2024	# seedlings planted 2024	Total trees planted in 2024	# total trees planted since 2015
Facilities	202	2,825	2,967	12,969
Rights-of-way	358	900	1,248	7,481
Trees sold to cities and residents	1,107	9,625	10,732	23,700
Three partner cities	0	13,655	13,655	14,137
MnDOT rights-of-way	160	0	160	237
Regional Railroad Authority	20	1,425	1,445	2,045
Easements	91	665	756	12,588
Other	78	1,250	1,328	2,855
<i>Total</i>	<i>1,956</i>	<i>30,345</i>	<i>32,291</i>	<i>76,012</i>

Objective 1.1: Plant trees on Hennepin County properties

In 2024, the Hennepin County forestry program planted 1,956 large bareroot gravel bed trees throughout the county. The program also undertook large scale seedling plantings, resulting in 30,345 seedlings planted. Seventy-one different species were planted to maximize tree canopy diversity and resilience, including climate adaptive species such as Osage orange, dawn redwood, and black gum. These trees generally have a more southern range but are being planted locally as the climate warms. Trees were planted by Hennepin County foresters, Sentencing to Service (STS) crews, and both internal and external volunteers.

Facilities

In 2024, Hennepin County forestry planted 202 large bareroot trees and 8,600 seedlings at Hennepin County facilities. This included undertaking what was perhaps our largest facilities projects to date. County foresters, in partnership with STS crews, the Productive Day program, and additional Hennepin County Environment and Energy staff removed over an acre of woody invasives and replanted with native tree species at the Public Works facility in Medina. As part of the ongoing restoration of the natural area landscape, Hennepin County forestry planted 8,600 seedlings as well as 16 larger bareroot trees, representing 11 different genera and 13 different species. The county was able to utilize its Fecon forestry

mower to effectively clear over an acre of degraded forest to be prepped for restoration in the coming year.

Another large facility tree planting project that was completed this year was the planting of the new HC Public Safety Services Division Headquarters (PSSD). This was one of forestry's most challenging and ambitious plantings to date, needing to coordinate closely with the facility construction team on planting scheduling and logistics. This project was a great success, leading to 191 trees being planted on the property.

The Hennepin County forestry program also was tasked with removing and replacing trees at the Medical Examiners facility. This year, we removed a handful of trees that failed to survive the winter and replanted with 48 additional trees of a wide variety of species.

There were additional scattered replacements or plantings at the Northpoint facility, Ridgedale Library, and Rockford Road Library.

Beginning in 2024, Hennepin County forestry renewed its commitment to the maintenance of our growing canopy at our county facilities. We completed structure pruning of over a quarter of all the county facilities. This structure pruning is critical to the long-term health and resilience of the trees and makes them less prone to tear-outs and storm damage in the future.

Partnerships with cities

Forestry partnered with three different Hennepin County cities on habitat improvement projects in city parks. The partner cities completed several years of invasive species removal before they approached the county about partnering on replanting efforts in 2024.

Minnetonka – Ford Park

Hennepin county contributed 8,100 trees to a 10,000 seedling planting on this 7-acre city park. The first day of planting had nearly one hundred people on site to assist with the planting. Tree planters consisted of employees and volunteers from Minnetonka and Hennepin County, Conservation Corps, Department of Community Corrections and Rehabilitation (DOCCR) crews, volunteers from the community, Cargill, and the tree stewards program.

Robbinsdale – South Halifax Park

1,000 seedlings planted in partnership with the city of Robbinsdale. Seedlings replaced buckthorn removals in forest understory and along lakeshore. The city also performed outreach and purchased tree protection tubing to account for deer browse pressure.

Saint Louis Park – Westwood Hills Nature Center

3,500 seedlings were planted in a habitat improvement planting to replace invasive species removed over the last five years by the city of Saint Louis Park. Over four acres were improved with the help of 20 Minnesota GreenCorps members, six volunteers from the Lifetime Foundation, and 15 volunteers from Hennepin County.

Rights-of-way

A total of 358 large bareroot trees from the county's gravel bed nursery were planted on various sites along county roads in 2024. This includes corridor tree plantings in Brooklyn Center, Brooklyn Park, Maple Grove, Minneapolis and Plymouth. Many trees planted in 2024 were in high priority planting locations (see map below). The image depicts the 2024 projects on a color-coded base map of priority planting areas. This base map was developed through a [geographic-information-system \(GIS\) analysis](#) of existing tree canopy and a weighted prioritization of areas for tree planting initiatives based on environmental, population, income, employment, education, housing, and health factors. Using the gravel bed trees

results in large cost savings compared to purchasing and installing trees with a contractor. These trees also have large fibrous root systems are light and easy to plant, and require fewer inputs like soil in the nursery.

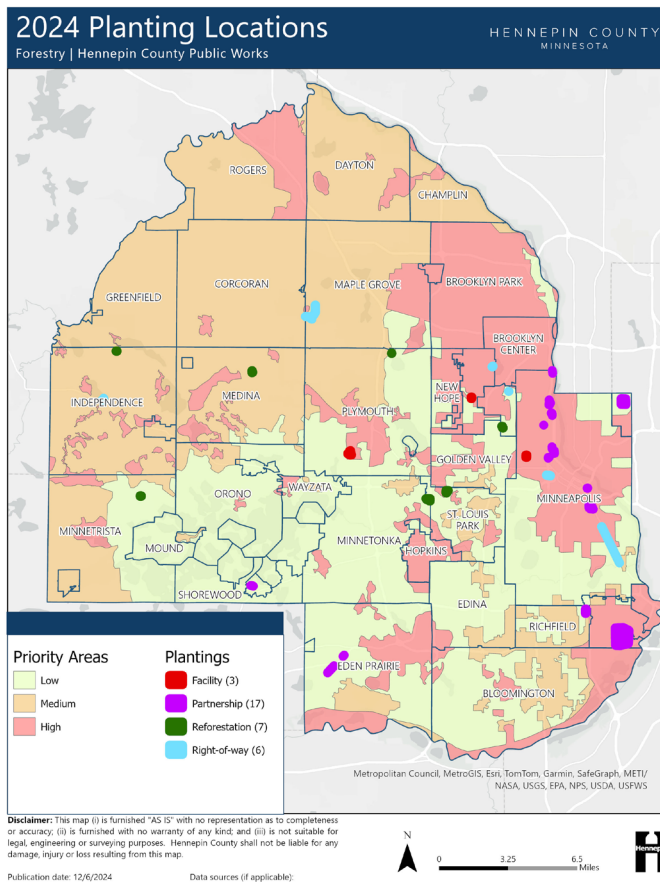


Figure 1 - Sites planted by Hennepin County foresters in 2024, 358 of which were on rights-of-way

Foresters received permission to plant on more underutilized Minnesota Department of Transportation (MnDOT) rights-of-way in high priority planting areas in 2023. In 2024, the partnership between Hennepin County and MnDOT officially launched and will last until 2074. This year 160 bareroot trees were planted in North Minneapolis along the I-94 corridor in the neighborhoods of McKinley, Near North, Hawthorn, and Fowell. Tree species planted were selected to tolerate conditions such as road salt, a variety of different soils, and trap particulate matter, The diversity of tree species also increases their resiliency to climate change.

The remaining county right-of-way sites were chosen to address specific corridor needs, including replacing ash trees that were removed proactively because of the threat of the emerald ash borer.

Objective 1.2: Enhance gravel bed nursery operations

2024 saw the construction of a new 5,250 square foot paved gravel bed. Construction work was completed quickly in July with minimal disruptions to forestry operations. The new slab increases capacity to hold stock over the summer by 38 percent. Techniques for holding seedlings over the summer for fall plantings were also improved in 2024, leading to healthier fall planting stocks for reforestations.



An example of fibrous root growth from the gravel bed

Objective 1.3: Expand programming to increase tree canopy cover

Resident tree sale

Building on our success in 2021 and 2022, and 2023 the seedling sale continued to expand in 2024. As part of its role as a Soil & Water Conservation District (SWCD), the county sold about 8,350 seedlings to residents. This is over 2,000 more sold than in 2023. Those who purchased the seedlings indicated that they were interested in planting the trees for the purposes of visual screening, creating or enhancing wildlife habitat, and reforestation.

City tree sale

For several years, Hennepin County has operated a tree sale directed at our constituent communities for the purposes of improving the access of a wider variety of trees to communities that may otherwise have difficulty sourcing these trees, as well as providing access to trees at a wholesale price so that cost wasn't a barrier for communities hoping to expand their tree plantings. Our 2024 city tree sale was our most successful year to date, with 1057 trees sold to 14 of our communities. The trees sold in this program represented 50 different species/ cultivars from 32 unique genera. This is an outstanding success and a big step towards a more diverse and resilient urban canopy.

Goal 2: Increase the resiliency of Hennepin County's community forest

Objective 2.1: Provide more robust data and information to help with tree management efforts, planning, and prioritization

Community tree inventories

In 2018, Hennepin County created a free tree inventory application that allows any entity within the county to collect and store tree inventory data. This resource can help smaller cities and organizations better understand their tree resources and maintenance needs to help prioritize work and reduce the overall costs. Tree inventories are the first step for organizations to understand their current canopy and develop canopy management strategies. It is important for communities to understand ash tree locations to help prioritize emerald ash borer management strategies and to diversify their canopy.

In 2023, Hennepin County updated the tree inventory application and migrated it to new servers on Azure. Municipal partners continued to utilize the application, and county foresters gave demonstrations to additional communities who intend to utilize the app in 2024. We continue to commit to updating our inventorying to accurately represent County trees.



St. Anthony Village tree inventory

Objective 2.2: Implement emerald ash borer preparedness actions

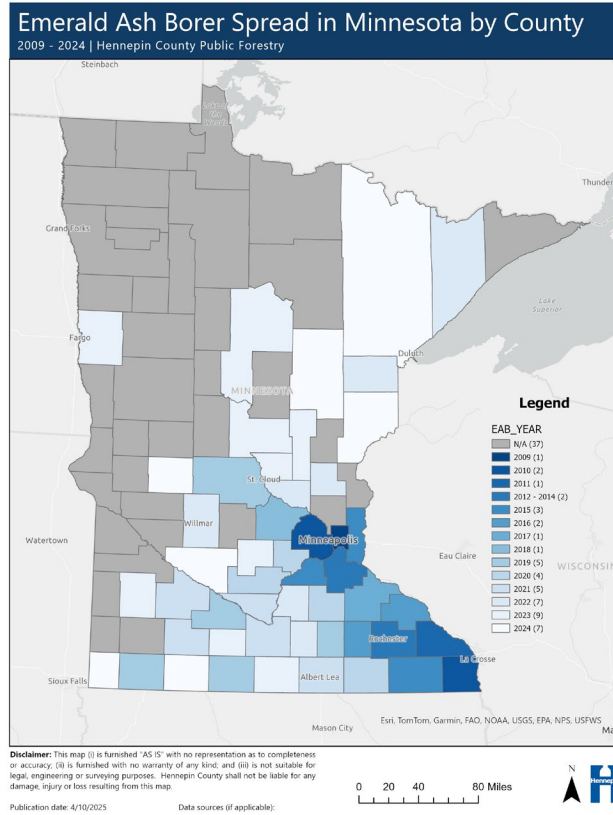
Emerald ash borer (EAB), an invasive tree pest from Asia that attacks and kills ash trees, has continued to intensify in 2024. In 2024, seven additional counties in Minnesota have had confirmed infestations, bringing the total number of counties with confirmed EAB infestations to 50 counties. All confirmed counties are under at least partial quarantine, which prohibits ash tree waste from being transported outside of quarantined areas.

The Minnesota Department of Agriculture considers all of Hennepin County to be within the “generally infested area” of the state.

Hennepin County foresters continue to update the inventory of ash trees on county property. As of December 2023, there are 1,314 existing ash trees within the right-of-way along county roads. Transportation Operations assisted with removal of infected trees during the 2023 to 2024 winter. Proactive removal of infected trees before they become hazardous is necessary to reduce the overall removal costs and eliminate threats along county roadways.

DNR Bonding grant:

In 2023, Hennepin County forestry was awarded a Minnesota Department of Natural Resources Bonding grant from the Minnesota Department of Natural Resources with the purpose of removal and replacement of diseased ash trees on county Right-of-Way (ROW) property. While project activities were slated to begin in 2024, the selection process for a tree removal contractor was unusually complex, delaying progress on the removal portion of the grant. However, in November of 2024 a tree removal contractor was selected and will be ready to start tree removals in earnest in 2025.



Objective 2.3: Continue the Healthy Tree Canopy grant program

In July 2024, the Hennepin County Board approved seventeen Healthy Tree Canopy grant projects. The Healthy Tree Canopy grant program promotes a more diverse, resilient, and equitable tree canopy, mitigates the effects of tree pests and pathogens on the community forest, and facilitates tree canopy improvements at affordable housing developments and in other areas of need. Grants are available to cities, affordable housing providers, schools, and nonprofit organizations and the tree planting prioritization map is used as a tool to help select grantees.

The 2024 approved grants include eight cities, two affordable housing providers, three schools, and five nonprofits. Ten of the seventeen grants are located entirely within moderate and high priority planting areas or contain canopy deficient areas. In total, 495 trees will be planted and 425 will be treated for emerald ash borer.

Additionally, twenty-two projects from previous grant rounds were completed in 2024.

Objective 2.4: Protect and increase trees on Hennepin County property

Hennepin County Forestry is taking a proactive approach to protect the existing canopy on Hennepin County property. As we know, protecting the canopy that already exists and produces benefits is the preferred practice to removing with or without replacement in construction projects.

One new tree preservation measure, introduced in 2023, aims at assigning a tree preservation score for all trees involved in new transportation and facilities reconstruction projects. This consists of creating an inventory of all trees on site that may be impacted by project construction activities, and assessing them for factors like size, health, location, etc. This information is used two ways. Firstly, this allows staff to quantify benefits that each tree provides. Quantifiable benefits can include carbon sequestered, greenhouse gasses averted, stormwater intercepted, stormwater runoff avoided, and kilowatt hours saved. Secondly, the trees are then given a tree preservation number that can be used to make a compelling case to project managers for the preservation of high-quality trees on each site. Hennepin County's Tree Preservation Prioritization Inventory has been utilized in 2024 on six transportation reconstruction projects to inventory over 1,730 trees. While it is impossible to determine the number of trees saved by this initiative, project designers are now able to work with complete, accurate data and can integrate tree preservation earlier into their design processes than ever before.

Goal 3: Build organizational capacity to support, value, and maintain trees

Objective 3.1: Foster partnerships across Hennepin County lines of business

Landscape planning and improvement in transportation corridors

Roadways are harsh environments for plants due to the high levels of salt applied during winter and extreme heat and drought in the summer. Hennepin County or hired contractors maintain the landscape during the plant establishment period.

Environment and Energy staff participate on roadway design teams, advocating for stormwater green infrastructure practices, one of which is saving existing trees and planting new trees. When streets and county roads are designed, it's important to save existing trees as large trees are more efficient at sequestering and storing carbon and reducing stormwater runoff compared to smaller, new trees. Foresters inventory the roadway trees (type, size, and condition) in the reconstruction zone and supply the design consultant with this information. The tree inventory informs the design process.

Conservation easements

Forestry improved a total of 0.75 acres of county held conservation easements with a total of 665 seedlings and 91 large stature trees. One of these plantings completed the final step of the restoration plan for a longstanding easement which Hennepin County has worked to restore since 2019. The other served as habitat improvement and windbreak on a recently acquired easement. Forestry staff also joined several easement walkthroughs with the habitat conservation team to serve as topic experts on woodland issues. We continue to work closely with habitat conservation to plan for further opportunities for collaboration.

Young tree pruning

Planting trees comes with the necessary maintenance of those trees. The cost of maintaining large trees with defects can be quite expensive. Young tree pruning is one of the easiest, and most neglected, practices in tree maintenance. Pruning trees for form when they are young allows for improved structure while the branches are small and leaves smaller pruning wounds. Hennepin County Forestry offers this service and keeps detailed files on recently planted trees along roadways and facilities. Working with facility or road managers, after the first year or two of growing in the landscape, foresters will then go out and do the young tree pruning on the Hennepin County owned properties. This continued practice will enable these trees to be free of some common defects that lead to tree issues and high costs when older. This will also result in lower tree mortality from branch tear-outs and lower pruning costs.

Carbon credit sales

Hennepin County Forestry has successfully sold all their carbon credits in 2024. The revenue generated from these sales will directly go towards the purchase and maintenance of trees on Hennepin County maintained property. Forestry intends to continue to package right-of-way tree plantings for further sales to act as another revenue source for forestry activities. For 2025, forestry plans to complete and receive approval of another package. In 2023, Hennepin County entered into an agreement with Green Cities Accord to act as the project operator and facilitator of carbon credit sales. The carbon credits are generated from the newly planted right-of-way trees over the previous three years. These are then packaged and approved by City Forest Credits, and urban forestry carbon credit registry.

Objective 3.2: Protect mature trees

Diseased and hazardous tree survey

Every August, Hennepin County forestry surveys infested, diseased, and hazardous trees within the rights-of-way along county roads for Transportation Operations. A full survey was conducted in 2024 which identified 217 high priority disease trees for removal. Among these trees were 18 Dutch elm disease infested trees, 139 emerald ash borer infested trees, 19 oak wilt infested trees, and 41 trees deemed otherwise hazardous and in need of removal.

As was the case in 2023, we continued to work in 2024 to clean up the diseased tree inventory to reflect current conditions. This consists of field truthing the presence of select trees to verify removal status. This process will be ongoing but has helped to improve the accuracy of the data contained in our tree inventory.

Goal 4: Educate and engage residents to become stewards of the community forest

Objective 4.1: Educate and engage volunteers

Volunteer tree plantings

Hennepin County's forestry team led three volunteer tree planting events in 2024.

- Ford Park in Minnetonka: nearly 8,100 seedlings
 - Planting help from: Minnesota Conservation Corps, tree stewards, Cargill, Sentence to Serve crews, Productive Day crews.
- North Minneapolis MnDOT site: 41 trees
 - Planting help from: tree stewards and ten community members
- Westwood Hills nature Center in St. Louis Park: 3,500 seedlings
 - Planting help from: Lifetime Foundation, Minnesota Green Corps, Hennepin County staff



Tree Stewards

In 2024, Hennepin County partnered with the University of Minnesota Urban Forestry and Outreach to hold a tree steward class that educated residents about proper tree pruning, planting, maintenance, and basic tree ailments in North Minneapolis. This session was conducted in concert with the MnDOT planting that happened on 4th St N and 37th Ave N in Minneapolis. Hennepin County Forestry plans to host at least one tree stewards class per year moving forward. The county can call on these educated residents as a volunteer resource for opportunities in the future.

Objective 4.2: Educate and engage youth

Tree Trek signs were installed to create an educational self-guided tour for community members at the Homewood site in Minneapolis. Tree Treks are a great educational tool that contains information and fun facts about the tree species and includes a figure of what the overall species looks like when mature.

Objective 4.3: Educate and engage residents

Hennepin County foresters tabled at several events in 2024. Events included Arbor Day events in Minneapolis, Eden Prairie, BatFest in Bloomington, and Festival of Trees in Maple Plain. At these events, residents were engaged, provided with educational materials and tree seedlings, as well as information about county programs.

Foresters also assisted with monthly educational and outreach sessions that covered a wide variety of topics such as tree ID, best planting practices, seed art, storytelling, etc. These educational sessions have been very well attended by residents of Hennepin County. We hope to continue our residential outreach efforts in 2025.

Objective 4.4: Foster effective partnerships

Partnerships are an important part of the county forestry program. These partnerships allow for relationship building across government entities and the community at large.

Hennepin County hosts a bi-monthly tree canopy expansion cohort meeting with municipal partners within the county. This cohort has been used to increase communication and cooperation between organizations, as well as giving communities a platform to voice their needs. These meetings led to the inception of joint reforestation projects between the county and the cities of Minnetonka, St. Louis Park, and Robbinsdale in 2024.

Forestry also continues to hold board seats on the Minnesota Shade Tree Advisory Committee and the Minnesota Shade Tree Short Course. Both allow for the Hennepin County Forestry's voice to be heard in the future path for Minnesota's urban forestry and educational opportunities.

Goal 5: Conduct grant programming that assists homeowners, improves resilience, and broadens engagement

Objective 5.1: assist homeowners with low incomes get trees removed and replaced

With grant funding, Hennepin County forestry is helping homeowners with low incomes get trees removed and replaced from their properties. This funding addresses a significant need identified by community members as the emerald ash borer has swept through the county.

County foresters have heard from residents about the overwhelming financial burden of removing a diseased tree. Without help, some residents could be at risk of losing their home to tax forfeiture if the property is assessed for the removal of a tree. Many others aren't likely to be able to afford to replace the removed tree, which furthers the disparities in the urban tree canopy.

The forestry grant team has processed 422 intake applications, conducted 217 tree inspections, and 115 trees were removed by contracted tree care companies. Trees will be replaced beginning in 2025, after coordination with residents to select the best species for their property.

Objective 5.2: Improve resilience to climate change, pests, and extreme heat events in disadvantaged communities

Workforce development programming will be a component of the grant program activities, reaching youth and adults experiencing barriers to employment and developing the workforce within Hennepin County to enable residents of underserved neighborhoods to access the resources and develop the skills to practice tree care and urban forest management within the community. Multiple requests for proposals were launched in 2024, and Spark-Y, a local 501(c)(3) nonprofit that provides education to youth and young adults in sustainability and entrepreneurship, is under contract to provide youth and adult introductory workforce development programming. A contract is underway with another local organization to provide wraparound support services to participants of workforce development programming.

Objective 5.3: Broaden community engagement in local urban forest planting and management.

In April 2024, foresters began offering free monthly learning opportunities about trees and forests for residents. These sessions require no previous knowledge and are open to the public. Topics have included how to select a tree species to plant, tree identification, tree issue or disease identification, tree seed art, tree-themed storytelling, fruit tree pruning, and winter tree identification. About 200 residents attended learning series offerings in 2024.

Educational materials have been updated including a brochure on emerald ash borer and its management strategies, an ash tree identification card, and a decision guide for managing ash trees. All outreach materials are available digitally and in print and have been published in English, Spanish, Hmong and Somali, as well as in large print English.

Forestry and grant staff partnered in 2024 to offer programming at community events. County staff developed new outreach materials and content to engage a broader audience, including puppet shows, engaging tree-themed activities, and incorporating storytelling. These approaches engage community in ways that are more culturally connective than some traditional environmental outreach practices. Through partnerships with local artists, storytellers, and engaged community residents, staff have been developing more adaptable hands-on engagement to bridge gaps between urban forest management, natural resources sciences, and community cultural values and engagement.

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