



State and Private Forestry Fact Sheet Nebraska 2019



Investment in State's Cooperative Programs

Program	FY 2018 Final
Community Forestry and Open Space	\$0
Cooperative Lands - Forest Health Management	\$145,600
Forest Legacy	\$0
Forest Stewardship	\$143,776
Landscape Scale Restoration	\$100,000
State Fire Assistance	\$1,152,547
Urban and Community Forestry	\$615,000
Volunteer Fire Assistance	\$329,983
Total	\$2,486,906

NOTE: This funding is for all entities within the state, not just the State Forester's office.

Nebraska's forest resources provide important environmental and economic benefits, such as soil and water conservation, wildlife habitat, wood and specialty forest product, wind protection and beauty. Unfortunately many of the rural woodlands are unmanaged and community forests are declining.

In Nebraska there are about 470,000 acres of community forest that improve air and water quality, benefit in storm water management, and provide a sense of place for our towns and communities. Currently about 2/3 of all Nebraskans live and work in one of our community forests.

Nebraska's rural forests include our native forest areas, and conservation plantings such as windbreaks and riparian buffers. These forests contribute to the resources by filtering harmful chemicals and improving water quality, reducing the wind to help keep soils in place and protecting rural homes, farms, and ranches along with their livestock.

At the Nebraska Forest Service (NFS), we continue to generate substantial impacts by implementing, improving and expanding programmatic, technical and financial assistance. In 2018, NFS staff worked with tens of thousands of people and hundreds of communities across the state to address our mission: to improve lives by protecting, enhancing and utilizing Nebraska's tree and forest resources.

Program Goals

- Ensure that our mission remains relevant to current and emerging needs of our clients and the people of Nebraska, and to clearly articulate our vision and role in meeting those needs.
- Ensure the effective management and stewardship of the NFS, our people, programs, and resources.
- Cultivate partnerships - supporting and enhancing existing partnerships as well as developing new relationships with non-traditional partners. Provide benefits to Nebraskans and the forest of Nebraska by leveraging relationships to effectively and efficiently serve the people of Nebraska.
- Foster an entrepreneurial organization to create an innovative and creative staff that supports program design and implementation.
- Continue to develop Wildland-Urban fuels reduction programs to thin acres around communities and infrastructure, thin to protect lives and thin to reduce costs associated with catastrophic wildfires.
- Deliver programs that are voluntary and non regulatory.
- Address the critical issues including forest health threats, timber management and wildfire.
- Locate staff and focus programming on critical habitat and high priority landscapes to maximize the overall benefit for the resource and for all Nebraskans.
- Promote species diversity in both rural and community forests.
- Develop markets to help offset cost of management for landowners and communities. Utilize

biomass, CLT technology, mass timber, biochar and other technology to maximize utilization.

- Restore forest areas affected by natural disasters and wildfires.

Key Issues

- High fuel load in unmanaged forest areas. These areas are at risk to catastrophic wildfires.
- The encroachment of eastern redcedar into hardwood and coniferous forests. The uncontrolled spread of eastern redcedar into native grasslands.
- Emerald ash borer and other invasive insects.
- Declining health of community forests due to age and other factors.
- Community forests canopy cover is on the decline.
- Fuels within the WUI and the expanding acres and homes in the wildland urban interface.
- Herbicide drift and the affect on both community and rural forests.
- Removal of conservation forests including riparian forest and windbreaks.
- Lack of economically viable markets for forest products which leads to a decline in management.
- Emerald ash borer is now in Colorado, Kansas, Iowa, Missouri and Minnesota and discoveries in Eastern Nebraska now threatens our 44 million ash trees across the state. This is a huge threat to Nebraska's forest resources. In Nebraska's community forests alone, costs to remove and replace ash trees killed by EAB are estimated to exceed \$1.0 billion. Ash trees in Nebraska represent nine percent of the state's entire tree population.

Forest Facts and Accomplishments

Selected Facts	Value	FY 2018 Accomplishments	Value
Population	1,826,341	Landowners Receiving Educational or Technical Assistance	1,242
Acres of Forest Land	1,532,084	Acres Covered by New or Revised Forest Stewardship Plans	52,729
Acres of Nonindustrial Private Forest Land	1,092,000	Acres in Important Forest Resource Areas Covered by New or Revised Stewardship Plans	46,271
Number of NIPF Landowners	57,000	Volunteer Fire Departments Assisted	112
Acres of Federal Land Under State Fire Protection	741,247	State Fire Communities Assisted	300
Acres of Private Land Under State Fire Protection	48,342,273	Coop Forest Health Acres Protected	156
Number of Rural Fire Departments	494	Forest Legacy Project Acquisitions	0
Cities and Towns	530	Communities Provided Urban Forestry Program Assistance	160
Forest Based Employment	2,200	Population Living in Communities Provided Urban Forestry Program Assistance	1,273,079
Economic Impact of Forestry (by rank)	34,000,000	Urban Forestry Volunteer Assistance	3,850
State Forestry Budget (All Sources)	5,306,217		

Program Highlights

Community Forestry and Open Space

Tree City USA Recognition Day and training with 92 communities certified as TCUSA (\$6.8 million locally invested), 4 utility providers certified as Tree Line USA and 5 campuses certified as Tree Campus USA. On-going coordination and collaboration with Nebraska Statewide Arboretum, Inc. to implement programs and projects statewide. Granting efforts included investing more than \$365,000 in more than 112 community projects to support tree planting and landscaping efforts across the state. The total value of these projects was more than \$950,000

INITIATIVES:

Concluded the ten year investment of the ReTree Nebraska Initiative with 128 participating communities

investing in 280 local projects. 14 nursery sponsors worked with 295 ReTree Ambassadors and 1,400 local volunteers who indirectly supported and planted 450,000 trees statewide via green industry partners. ReTree volunteers provided more than 38,000 hours valued at \$570,000 and a total local investment in the community forest valued at \$65 million. The LSR grant Arborists Safety grant was fully implemented this program year. LSR grants of Nebraska's Ten Largest Communities (TLC) and Full Circle Benefits (FCB) also being implemented with participating partners

Conservation Education

Conservation education this year was able to reach educators and children in all six of the regions of the state, further spreading the CE impacts. CE offered new programming through field trips and specialty workshops, also expanding online educator opportunities, and continued to build partnerships. Through the various educator workshops, CE enriched the lives of Nebraskans throughout the state. Each workshop has a ripple effect where trained educators take the curriculum back to their classroom, nature center, after school program, or scout group, and use it to teach young Nebraskans about the value of the trees they see every day. Students gain the knowledge; they develop decision making and problem solving skills; and become informed citizens and future natural resource leaders.

This year we gauged interest in forestry field trips by offering them for free throughout the summer. Interest was high and groups were on campus almost every week, ready to learn about trees and forests.

Cooperative Fire Protection

NFS Wildland fire training provided NWCG training to local, state, and federal agency personnel. The NFS worked directly with local fire chiefs and firefighters to broaden their knowledge of wildland fire suppression and mitigation tactics through classroom and hands on training. This year alone, more than 1,350 firefighters from departments across the state attended training hosted by the NFS and partners.

The Fire Prevention program with cooperators and local VFDs provided over thirty events that reached approximately 19,000 people. The second community in Nebraska was certified as Fire Wise with a third community working toward that goal.

The impact that the NFS has had throughout the state in 2018 has been substantial; through the training program, NFS, cooperating agencies, VFDs, and the communities are better prepared to keep fire small and avoid large for catastrophic wildfire and large scale incidents.

The SEAT spent 60 days on contract working 25 missions on 6 fires in two states. The NFS now has it's third fully qualified SEAT base manager to bring the total in the state to 4 Fully Qualified SEAT managers in State of Nebraska. To date 4 permanent SEAT Base are operational in the state with 2 mobile bases available for deployment in any part of the state. We place the 850th piece of heavy equipment with a Volunteer Fire Department.

Economic Action

2018 was another year of significant growth for the Forest Products Utilization (FPU) program, with 803 workshop/presentation contacts and nearly 2,700 hours of contact time. In addition to these recorded contacts, FPU staff remain heavily involved in general technical assistance with landowners, homeowners, communities, agencies and private businesses. We continue to find FPU at the table for high-level discussions and involved in large efforts, demanding more attention and dedication from the current staff.

The area of focus with the most significant increase in assistance requests has been urban wood utilization as it relates to emerald ash borer impacts on community forests. FPU staff facilitated multiple demonstrations of urban wood processing, wood utilization demonstrations and partnerships in response to urban wood inquiries. This assistance is very much expected to continue for the next several years. 2018 saw an increase in requests for assistance (many of them longer-term partnerships and projects) is to be expected as:

- Workshop training hours have increased year over year for the past 4 years;
- Newly developed information resources (such as forest inventory data) have opened the eyes of potential forest products industry businesses;
- FPU staff have continued to develop strategic partnerships (partnering with University, state agencies, natural resource agencies, economic development groups, private businesses and landowners);
- FPU staff expertise is as diverse and in-depth as it has ever been (forest operations, traditional wood

products manufacturing, urban wood utilization, biochar, wood energy)

Furthermore, FPU continues to be innovative in our efforts to increase the utilization of state tree and forest resources. An example of this innovation includes an effort to provide sawmills and include wood processing training in the agricultural education programs in select western Nebraska high schools.

Forest Health Protection

Forest Health provided education and outreach in FY 2018 to professionals and the public on a wide variety of insect, disease and other tree health issues, including twenty-seven workshop presentations that reached over 700 people. Many of these presentations focused on emerald ash borer (EAB), considered the most destructive insect pest ever to occur in the U.S. Four Tree Pest Detection workshops were held to train citizens and tree care professionals in invasive pest identification and survey. These EAB activities raised awareness, increased detection efforts, prompted readiness planning, and helped to clarify the complex issues surrounding treatments.

Herbicide damage to trees was another issue Forest Health addressed in FY18, beginning with organizing and hosting the annual meeting of the Great Plains Tree Pest Council. The growing herbicide issue was a featured topic--which set the stage for planning a collaborative plains project investigating herbicide levels in tree tissues. Forest Health also discussed herbicides in several workshop presentations, and, with CFSL and Communications, produced a web page on herbicide damage.

Additional, Forest Health activities included pest diagnoses, media interviews and articles, and distribution of pest brochures, which cover more than 60 tree pests and problems. These Forest Health activities and materials assisted the public, the green industry and other agencies and groups.

Forest Health surveyed for emerald ash borer and thousand cankers disease in multiple high-risk locations in the state and distributed federal cost-share funds to counties with land near federal properties to help control noxious weeds.

Forest Legacy

NFS is working on the development of 3 potential projects in the Pine Ridge and one in the Niobrara Valley (5 miles east of Valentine) with the help of Nebraska Land Trust. These projects are in the planning stages. Lincoln City project is high on the list to move forward after review by the R2 Coordinator, project is worth pursuing due to the unique nature of what we are trying to do.

One potential new project has come to the forefront in the northeast part of the state. A highly prized partial containing an oak savanna woodland is in discussion with the landowners. NFS prepared an update draft of AON and presented for approval by the Stewardship Committee, draft presented to WO for comment and review.

Forest Stewardship

This past year has been a year of significant impact for the Rural Forestry staff, along with significant transition for the program itself. Staff were heavily involved in two large initiatives; Great Plains Initiative 2 windbreak/shelterbelt inventory project and Ponderosa Pine Reforestation Program, these two projects will have a lasting impact into the future

The Rural Forestry Program provided direct, on-the-ground, technical assistance to woodland owners, agricultural producers, and land stewards to improve the health and productivity of their forest resources. Additionally, NFS worked in partnership with natural resources conservation agencies and organizations at the county, state and federal level to provide assistance and advice to carry out programs that serve woodland owners.

The Rural Forestry program implements the Forest Stewardship program which provides woodland owners with access to cost- share assistance programs and forest certifications schemes through the preparation and implementation of Forest Stewardship Management plans. Staff met with 410 woodland owners on their property to provide management advice to help them meet their goals; met with 347 woodland owners with established Forest Stewardship Management plans to discuss the implementation: 41 Forestry Stewardship Management Plans were written bringing the total of actively managed acres to 259,550 acres,

Rural Forestry also increased forest management planning through developed plans on a 90-acre Forest Stewardship silvopasture project demonstrating eastern redcedar management in Wheeler County.

Landowner Assistance

Cooperating with the Middle Niobrara and Upper Niobrara White Natural Resources Districts, and a tree planting contractor, the Nebraska Forest Service provided discounted seedlings and a planting service to area landowners. Approximately 107,000 ponderosa pine seedlings were planted on burned areas in north central and western Nebraska that had previously been forested by this native tree species.

In addition, NFS wrote 43 fuels reduction plans treating nearly 2,000 acres of fuels reduction. Also, 2,400 acres of forest were managed via practice plans and increased value of high-value timber through 6 walnut timber marking projects.

Landscape Scale Restoration

The NE-TLC project focuses on communities within which 50% of the state's population resides. Urbanization of rural areas is expanding by 3,200 acres/year. Strategies for this priority landscape include targeted planting of large maturing shade trees to address critical issues of energy use, storm water management and air/water quality. This project leverages diverse state and national partnerships to design, promote and implement the strategic planting of 10,000 trees in targeted community locations.

Full Circle Benefits (FCB) is a forest management initiative which identifies and captures the full worth of community tree resources and land management opportunities to maximize public benefit. This effort proactively puts in place a market driven conservation plan to capitalize on expanding benefits of trees from shade to edible forest landscapes to wood products. Project partners will demonstrate and promote traditional and non-traditional practices to mitigate loss of canopy and maximize local benefits.

Completed LSR for Arborists Safety which increased the accessibility and availability of green industry training to maximize safety, increase production and leverage management investment within identified critical landscapes. These effort targeted: arborists, city forestry staff, loggers and firefighters to help mitigate and reverse the identified degradation of the urban and rural canopies which inventories and SFRAS characterized as extreme risk due to over-maturity, current and future invasives and multiple severe weather events. This project increased safety, awareness of critical forestry issues and effectiveness among tree care workers during a time of increased urban and rural canopy removal and fire mitigation work.

Urban and Community Forestry

NFS awarded grants to targeted communities across the state resulting in 125 projects that have high impacts on stormwater management, increased pollinator habitat and other tree and environmental benefits. NFS directly impacted over 5,163 people through education and outreach events, volunteering and project implementation. NFS indirectly impacted 240,000 through newspaper articles, videos and social media. Additionally, NSA's projects and grant dollars were distributed to communities large and small. Over 29,000 people were directly impacted through education and outreach events collaboration with NFS, NSA Inc., NNLA, LONM, NE Turf Grass Association, UNL-Extension and NE Arborists Association. Supported and promoted the annual arborists training seminar and arborists outreach program efforts including hosting 2 MWISA classes for ISA certification. Supported training series on tree defects, root health and proper planting practices targeting green industry professionals.

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