2016 Project Abstract

For the Period Ending June 30, 2019

PROJECT TITLE: School Forest Outdoor Classrooms

PROJECT MANAGER: Amy Kay Kerber

AFFILIATION: MNDNR

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FUNDING SOURCE: Environment and Natural Resources Trust Fund

LEGAL CITATION: M.L. 2016, Chp. 186, Sec. 2, Subd. 05b

APPROPRIATION AMOUNT: \$440,000

AMOUNT SPENT: \$425,100 AMOUNT REMAINING: \$14,900

Sound bite of Project Outcomes and Results

Land management projects were completed on 67 School Forests, 3,314 students engaged in service learning, and 412 school staff and volunteers completed training on projects such as creating trails, building amphitheaters, and removing invasive species. These efforts created healthier, safer, and more accessible outdoor learning spaces, while renewing student interest and use.

Overall Project Outcome and Results

The Minnesota Department of Natural Resources worked with the Conservation Corp of Minnesota and Iowa to improve 67 School Forests throughout Minnesota, completing land management projects that schools were unable to do on their own. The work improved the safety, accessibility, and effectiveness of School Forests, making them better outdoor classrooms. DNR and CCMI staff worked with school leaders to identify needed projects that aligned with their existing School Forest Stewardship Plan, secure school contributions for materials, and complete all work. Efforts included repair of unsafe structures, removal of hazard trees and invasive species, building and maintenance of trails, and construction of amphitheaters, sitting spaces, boardwalks, and bridges. Project highlights can be found in attachments C, D, E, and F to the final report.

School communities were involved in all work. Over 3,300 students participated in service learning activities tied to the work projects done at their School Forest. To support long-term site maintenance, 412 school staff and community volunteers were trained to care for their School Forests.

At these newly improved School Forests, students will continue to learn math, science, art, social students and more for decades to come. These learning experiences connect students to their natural surroundings and provide hands-on, real-world experiences for Minnesota students. School staff and community volunteers have a renewed interest in using and increased confidence in maintaining the sites. They also report that these projects have enriched learning experiences, and bolstered relationships between students, staff, and their School Forest. Students enjoyed participating in the projects and have an increased sense of ownership.

This project furthered our knowledge of what elements make effective outdoor classrooms that support long-term outdoor education for Minnesota schools.

Project Results Use and Dissemination

The School Forests Outdoor Classrooms Project was featured in many newspaper articles, TV news stories, and school newsletters throughout Minnesota, such as a Lakeland Public Television story on the <u>Dean Makey School</u> Forest buckthorn removal project. The Pine River-Backus School Forest project was featured multiple times in

their local news media, including a Lakeland Public Television story "Pine River-Backus Students Remove Buckthorn," and an article "Pine River-Backus School Board Revisits Buckthorn" featured in the PineandLakes Echo Journal. The Edgewood School Forest project and DNR School Forest Program were highlighted in a video created by the Mounds View School District titled "Edgewood School Forest Project" that was shared widely throughout the district via e-newsletters and social media. The Clearview Elementary School Forest project was featured in the local newspaper, Citizen-Tribune, with an article titled "Clearview Forest Gains a Handicapped Accessible Trail." The Hutchinson School Forest service learning and invasive species education activities at Rollie Johnson Ecological Site project were featured in the Hutchinson Leader. Additionally, Lake Minnetonka Magazine printed an article in the Outdoors section about the 2018 St. David's School Forest CCM project.

The DNR posted 62 tweets resulting in 54,615 impressions, 85 retweets, 346 likes, and 1,249 media views and engagements. Many schools and partners also tweeted or posted to Facebook. In 2016, the Minnesota Lottery created a <u>short video</u> about this ENRTF project that was shared by the Lottery during an event at the Mall of America and on its online blog.

Project findings have been shared with School Forest teachers and volunteers at School Forest conferences, summits, and regional trainings. Project learnings and evaluation results have been shared with DNR field foresters to help improve their relationships and serves provided to local School Forest sites. Additionally, project evaluation results relating to how best to support teachers in outdoor classrooms will be shared with environmental educators through regional and state conferences and meetings.



Environment and Natural Resources Trust Fund (ENRTF) M.L. 2016 Work Plan Final Report

Date of Report: August 13, 2019

Final Report

Date of Work Plan Approval: June 7, 2016 **Project Completion Date:** June 30, 2019

PROJECT TITLE: School Forests Outdoor Classrooms

Project Manager: Amy Kay Kerber

Organization: Minnesota Department of Natural Resources

Mailing Address: 500 Lafayette Rd.

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Email Address: amykay.kerber@state.mn.us **Web Address:** www.mndnr.gov/schoolforest

Location: Statewide. A map of the current School Forest locations is attached.

Total ENRTF Project Budget: ENRTF Appropriation: \$440,000

Amount Spent: \$425,100

Balance: \$14,900

Legal Citation: M.L. 2016, Chp. 186, Sec. 2, Subd. 05b

Appropriation Language:

\$440,000 the second year is from the trust fund to the commissioner of natural resources in cooperation with Conservation Corps Minnesota and Iowa to renovate and restore 60 School Forests and train students, teachers, school district facility staff, and community volunteers to be long-term stewards of the School Forests and provide education and service learning experiences at School Forest sites. This appropriation is available until June 30, 2019, by which time the project must be completed and final products delivered.

I. PROJECT TITLE: Improving Outdoor Classrooms for Education and Recreation

II. PROJECT STATEMENT:

The School Forest Program supports 130 outdoor classrooms across Minnesota ranging in size from .25 to over 300 acres. These outdoor classrooms serve schools and communities with high cultural and socio-economic diversity in rural and urban locations. Each School Forest is unique, with physical features ranging from pine plantations to prairies to small manicured wood lots. The DNR supports these sites by providing teacher training in outdoor education practices and activities, assisting with site issues, developing land management plans, and providing educational materials and help to meet academic standards while teaching outside.

To inspire learning and connect with the natural world, students need outdoor classrooms that are easily accessible and located in healthy, safe environments. DNR foresters create free, site-specific School Forest management plans. These plans are modeled after DNR stewardship plans and incorporate each school's unique educational goals and land management needs. The plans include priority land management projects to create safe and healthy outdoor classrooms. Recent School Forest focus groups and program evaluations show that teachers don't always have the necessary resources to complete the land management projects and activities recommended in their site management plans. The Department of Natural Resources (DNR) and Conservation Corps Minnesota and Iowa (CCM) have the expertise needed to do the heavy lifting on projects such as building boardwalks, removing invasive species, and creating accessible trails and entrances. Together, the DNR and CCM will provide new resources not currently available to schools.

This project will:

- Renovate a minimum of 60 School Forests to improve quality and increase frequency of outdoor education.
- Advance knowledge and skills in sustainable outdoor classroom management through:
 - Hands-on, site-specific training for 200 facility managers, teachers, and community members in conjunction with CCM management projects to maximize long-term site maintenance and sustainability.
 - Four regional trainings for 160 school staff and community members focused on local land management issues including specific management skills and activities.
- Engage 3,000 students in hands-on service learning with CCM management projects.
- Evaluate project outcomes and determine future support needs.

A new .5 FTE temporary DNR School Forest specialist will be funded to maximize project impact and schools served. In conjunction with DNR foresters and School Forest staff, the new specialist will determine 60 sites that have the biggest need for CCM assistance on management projects. CCM crews will jumpstart these projects such as developing new trails, removing hazards (poison ivy, dead tree limbs, etc.), and adding structures (amphitheaters, benches, shelters, etc.). The School Forest specialist and CCM will engage students at each site in service-learning activities. CCM will also train volunteers and school staff at sites to handle future site-specific management needs. Four regionally based land management summits that target district facility managers and lead teachers will be delivered. These summits will elevate land management knowledge and skills to better support long-term outdoor classroom maintenance through hands-on sessions in tree care, trail design, invasive species treatment, tree planting, and land management. The School Forest specialist will use various evaluation techniques to determine the outcomes of the project and future support needs.

This project will provide schools with the boost needed to bring their outdoor classrooms into more manageable, safe, and healthy environments for learning. The training and skill building of teachers and facility managers will initiate sustainable, long-term management of sites and is an important component to the long-term use of outdoor classrooms. By training school staff on-site and offering local natural resource management summits we'll be able to reach a greater number of staff and volunteers and provide higher quality, more relevant information compared to just one statewide training. By engaging students in projects, 21st century skills will increase and students will be more connected to their natural surroundings.

III. OVERALL PROJECT STATUS UPDATES:

Project Status as of December 31, 2016:

The new ENRTF project School Forest specialist was hired in November 2016 to manage the grant deliverables. The contract with CCM was approved and signed. School Forest outdoor classroom project application and selection processes were developed. A tracking system was created to track interest, applications, and project selection. DNR and CCM have reviewed and agreed on the project application and selection process. CCM crew training needs were identified. A rough schedule of CCM project work was established based on estimated work. Information on the grant, including overview, guidelines, and a link to the application was posted to the School Forest website. An email bulletin was sent to all 130 School Forests and DNR foresters with information on the grant and how to apply. Applications will be accepted on a seasonal rolling deadline with the first deadline of January 13, 2017 for projects to be implemented this spring. As of December 31, 2016, four schools have applied for the first round of projects. Began initial planning and preparation for CCM crew training to include sessions on effective service-learning strategies and training of School Forest stewards (site volunteers) in basic forestry skills for long-term site maintenance. The Minnesota Lottery created a short video about this ENRTF project that has received over 29,000 views on Facebook.

Project Status as of June 30, 2017:

An additional 22 project applications were received with six projects completed by the end of June. The remaining projects were scheduled for summer or fall work or held for further review. DNR Foresters and School Forest leaders are strengthening relationships as a result of planning projects and conducting service-learning and school staff and volunteer trainings. A total of 751 students engaged in service-learning activities and 42 school staff and volunteers were trained in land management practices. The 2017 CCM crew training was held March 20-21 for 6 crew members and 1 program manager. Several project management tools were created to keep CCM, DNR, and schools organized and on task to improve project success. These tools include a school-specific CCM project plan that confirms all details of each approved project and an ENRTF project budget and detailed tracking spreadsheet. A presentation and work session was provided at the School Forest Conference in March for teachers and DNR foresters to discuss CCM project opportunities. A project evaluation plan was developed to systematically collect data from the CCM crew and school project contacts to evaluate the overall project and CCM project work for continuous improvement and to share outcomes and stories.

Project Status as of December 31, 2017:

To date, 31 projects have been recruited and 23 projects completed. Projects include invasive species removal, trail expansion, bridge construction, a 12-bench amphitheater, hazard tree removal, forest stand thinning, and a deer exclosure (see Attachment C for projects highlights). The remaining projects will be scheduled for 2018. A total of 1,490 students engaged in service-learning experiences and 160 school staff and volunteers were trained in land management concepts and practices. A tracking form was created to manage individual project tasks and details during the planning process. Regular grant monitoring meetings were held with CCM and DNR project leaders to review overall project status and address issues and opportunities. Several projects received local media attention including TV spots, news articles, and social media posts. The School Forest specialist engaged additional technical resources, such as the local SWCD, to build long-term support for the projects. Initial planning began for two regional summits to be held in 2018. The Northwest Regional Summit is scheduled for March 14 in Pine River and the Metro Regional Summit is scheduled for May 3 in Savage.

Project Status as of June 30, 2018:

To date, 60 projects have been recruited and 33 projects completed. Projects completed between March and June 2018 include ADA trail construction, bridge and boardwalk construction, wood bench classroom seating, storm damage clearing, tree pruning and mulching, and erosion control using buckthorn wattles (see Attachment D for project highlights). The remaining 27 projects are being scheduled through June 2019. Spring weather, including a blizzard and late snow melt, caused projects to be postponed. A total of 2,136 students

engaged in service-learning experiences and 184 school staff and volunteers were trained in land management concepts and practices. The 2018 CCM crew training was held March 21-22 for four crew members and one assistant program manager. Regular grant monitoring meetings were held with CCM and the School Forest specialist to review overall project status and address issues and opportunities. Several spring 2018 projects were highlighted in news articles and social media posts, including regular DNR tweets from @mnforestry. Several schools used timber sale revenue or local business donations to secure project materials and enlisted parent volunteers for labor. These efforts support the short-term project while building long-term connections for School Forests.

DNR foresters were actively involved in project planning, implementation, and project management. Both school staff and DNR foresters have reported positive experiences and stronger working relationships as a result of the grant projects. The Northwest Regional Summit was held March 14 in Pine River and the Metro Regional Summit was held May 3 in Savage.

Project Status as of December 31, 2018:

To date, 57 projects are completed. Projects completed between July and December 2018 include construction of wooden stairs, 60-seat stone amphitheater, classroom pavilion concrete foundation, nature playhouse, teaching podium and outdoor chalkboard, ADA trail, bridge and boardwalk, wood bench for classroom seating, plus hazard tree removal, invasive species removal and trail erosion control. See Attachment E for project highlights. An additional three projects are needed to reach the target and more than five projects are scheduled by June 2019. A total of 3,129 students engaged in service-learning experiences and 267 school staff and volunteers were trained in land management concepts and practices. Routine grant monitoring with CCM reviewed overall project status and addressed issues and opportunities. Schools used timber sale revenue, local business donations, partner resources, or other fundraising efforts to provide project materials and resources valued at \$27,219. Schools also enlisted parent and community volunteers for labor. Outreach to media outlets resulted in several projects highlighted in local newspapers. In addition, school social media posts and regular DNR tweets from @mnforestry shared project stories to tens of thousands of viewers.

DNR foresters continued to actively support projects, providing staff and volunteer training or initiating and managing projects for schools. The Southern Regional Summit was held September 26, 2018 at Whitewater State Park and the Northeast Regional Summit was held October 4, 2018 at the Cloquet Forestry Center.

Amendment Request (01/29/2019):

Revise Activity 1, Outcome 3 text to delete "to 160 school staff and volunteers." Delete text in Activity 1, Outcome 2 and replace with "Train 360 school staff and volunteers in land management practices through customized, hands-on, skill-based activities."

This change eliminates the minimum number of people trained through regional summits and expands the successful strategy of reaching staff and volunteers at their School Forest site with customized, hands-on, land management trainings. The amendment provides flexibility to reach the original goal to provide advanced land management knowledge and natural resource skill development to 360 school staff and volunteers, so they can do long-term outdoor classroom maintenance.

Attendance at the regional summits was lower than anticipated despite considerable promotion and personal invitation by DNR staff to School Forest coordinators, principals, and other staff. While the reasons are not entirely clear, we surmise there may be several factors, including:

- The time an travel required by educators to attend a full-day, off-site training.
- It can be challenging for the principal, and other administrators to leave the school site for an entire day. For example, a principal was called back to school due to an incident.

Grounds and facilities staff were difficult to reach and attract to this training. It was particularly difficult
for them to attend a full-day, off-site training. Some showed interest but were unable to attend due to
school needs, lack of administrative support, or the need to use personal vacation time.

Amendment Approved: 02/05/2019

Overall Project Outcomes and Results:

The Minnesota Department of Natural Resources worked with the Conservation Corp of Minnesota and Iowa to improve 67 School Forests throughout Minnesota, completing land management projects that schools were unable to do on their own. The work improved the safety, accessibility, and effectiveness of School Forests, making them better outdoor classrooms. DNR and CCMI staff worked with school leaders to identify needed projects that aligned with their existing School Forest Stewardship Plan, secure school contributions for materials, and complete all work. Efforts included repair of unsafe structures, removal of hazard trees and invasive species, building and maintenance of trails, and construction of amphitheaters, sitting spaces, boardwalks, and bridges. Project highlights can be found in attachments C, D, E, and F to the final report.

School communities were involved in all work. Over 3,300 students participated in service learning activities tied to the work projects done at their School Forest. To support long-term site maintenance, 412 school staff and community volunteers were trained to care for their School Forests.

At these newly improved School Forests, students will continue to learn math, science, art, social students and more for decades to come. These learning experiences connect students to their natural surroundings and provide hands-on, real-world experiences for Minnesota students. School staff and community volunteers have a renewed interest in using and increased confidence in maintaining the sites. They also report that these projects have enriched learning experiences, and bolstered relationships between students, staff, and their School Forest. Students enjoyed participating in the projects and have an increased sense of ownership.

This project furthered our knowledge of what elements make effective outdoor classrooms that support long-term outdoor education for Minnesota schools.

IV. PROJECT ACTIVITIES AND OUTCOMES:

ACTIVITY 1: Renovate 60 School Forest sites and train long-term site stewards.

Description:

The School Forest specialist will use surveys, teacher feedback, DNR forester assessments, and individual site management plans to determine sites that need land management assistance. Sites will be prioritized based on:

- School demonstrated need for land management project assistance.
- Priority projects identified by DNR foresters within the site's School Forest management plan.
- CCM's ability to complete the type of project needed.

CCM crews will work with site leaders to complete sustainable forest management projects including: removing invasive species, treating poison ivy, building educational structures, developing trails, etc.

During these projects the School Forest specialist will connect with lead teachers, facility managers, and School Forest committee members to coordinate on-site land management training. CCM and DNR will instruct school staff and community members on site-specific natural resources skills so they can continue land management work on their own to maintain the site. DNR staff will work with CCM crews to ensure that proper techniques, resources, and connections are in place for each training. In addition, school staff (facility managers, teachers, and administrators) and volunteers will further their knowledge and skills at four regional land management summits (northeast, northwest, south, and Twin Cities metro). The summits will be organized by the School

Forest specialist and provide hands-on skills, detailed information, and resources on land management practices. Topics will include invasive species treatment and monitoring, trail maintenance, tree care (pruning, mulching, etc.), and risk assessment. Professionals such as arborists, DNR foresters, U of M Extension staff, and forest health specialists will be invited to lead sessions on specific topics related to School Forests in that region. Summits will be full day events held at School Forest sites or nature centers depending on site availability and outdoor features.

The DNR will use multiple techniques to evaluate the project outcomes and look at what future support and resources are needed. Techniques may include surveys, focus groups, or interviews. It is important to evaluate project success and identify the most helpful project components to assess future options and continued assistance.

Summary Budget Information for Activity 1: ENRTF Budget: \$311,240

Amount Spent: \$ 300,156 Balance: \$ 11,084

Outcome	Completion Date
1. Coordinate (DNR) and complete (CCM) management projects at a minimum of 60	June 2019
School Forests.	
5 projects by June 2017	
40 projects by June 2018	
60 projects by June 2019	
2. Train 360 school staff and volunteers in land management practices through	June 2019
customized, hands-on, skill-based activities. CCM/DNR	
18 people by June 2017	
120 people by June 2018	
360 people by June 2019	
3. Provide four regional land management summits offering area specific information,	October 2018
proper land management practices, and hands-on skill building. DNR	
2 summits by June 2018	
2 summits by June 2019	
4. Evaluate project outcomes and determine future support and resource needs. DNR	June 2019

Activity Status as of December 31, 2016: The ENRTF School Forest specialist, working with the School Forest Program Coordinator, developed the application process. School Forests have been notified of the opportunity to apply for CCM assistance through email bulletins, phone calls, direct emails, and face-to-face meetings. As of December 31, 2016, four schools have applied and seven others have indicated strong interest by contacting the LCCMR School Forest specialist or their DNR forester. The application deadline for spring 2017 outdoor classroom project work by CCM is January 13, 2017.

A project selection process, including required criteria, preferred criteria and scoring system, was developed to determine if a proposed project fulfills the grant requirements. Projects that meet the requirements will be referred to CCM. Projects that do not will be reviewed by the ENRTF School Forest specialist with school staff to identify what needs to be done to meet the requirements (e.g. having a current stewardship plan, providing more detailed information, increased school involvement). Once requirements are met, those projects will be put in the next application round for project selection. The ENRTF School Forest specialist is working collaboratively with the School Forest Program Coordinator, DNR foresters, and CCM staff to identify projects that maximize CCM assistance while meeting the goals of the School Forest stewardship plan. A project tracking system was created to monitor interest in this grant, project selection, and activity progress.

CCM has established one dedicated School Forest CCM crew that will work exclusively on projects related to this grant. The School Forest CCM crew will travel around Minnesota completing activities at different sites. Every January, CCM will hire a new School Forest CCM crew. School Forest and DNR staff will provide training to the CCM crew to make sure crew members have the education, outreach and forestry skills needed to deliver grant activities. The ENRTF School Forest specialist began initial planning for CCM crew training, with special attention on how to train School Forest volunteers to become site stewards and provide long-term care and maintenance to School Forest sites. The first round of projects to be implemented in spring 2017 will happen after the School Forest CCM crew has completed its full training in March 2017.

Activity Status as of June 30, 2017:

A total of 22 project applications were received with six projects completed by the end of June. The remaining projects were scheduled for summer or fall work or held to resolve issues, such as an outdated stewardship plan, school fundraising for needed materials, or additional planning needed.

A process for approving, managing, and monitoring individual project work was developed. It involves a lot of communication and input from the school, DNR Forester, and CCM crews. This includes steps to confirm work to be done, conduct site evaluations by a DNR Forester or CCM Project Manager, identify service-learning opportunities, and develop a school staff and volunteer training approach. School Forest teachers and CCM staff have helped improve the process over time and report positive interactions as result of all the organization and attention to detail.

The CCM crew training was held March 20-21 at Afton State Park. The agenda focused on technical skills, such as tree pruning, safe tool use, age-appropriate student service-learning activities, and school staff and volunteer training approaches. Special attention was given to training School Forest volunteers to become site stewards and provide long-term care and maintenance to School Forest sites. Six crew members and 1 program manager participated. Evaluation feedback was positive and indicated that more time spent on service-learning would be helpful at future trainings.

A total of 42 school staff and volunteers were trained in land management practices and CCM project maintenance to date. Two of the trainings were conducted by the DNR School Forest specialist to increase the confidence of School Forest land managers in long-term site maintenance and increase outdoor classroom use. Topics emphasized included invasive species identification and management, PlayCleanGo concepts to prevent the spread of invasive species, proper tree pruning techniques, safe tool use, and trail maintenance.

Activity Status as of December 31, 2017:

A total of 31 projects were recruited in 2017. Seventeen projects were completed between August 14 and December 5 for a total of 23 completed projects in 2017. The remainder are being scheduled for spring, summer or fall 2018 or are under further consideration as additional details are finalized.

A wide variety of projects were completed, including trail expansion or clearing, bridge construction, a 12-bench amphitheater, hazard tree removal, forest stand thinning, a deer exclosure, storm damage clearing, tree pruning and mulching, fence construction, installing beaver guards and beaver dam deconstruction, and other tasks (see Attachment C for projects highlights). Most projects involved buckthorn and other invasive species removal.

There were 119 school staff and volunteers trained between August 14 and December 5 for a total of 161 trained to date. CCM crew and DNR staff provided specific training to meet school needs and support long-term maintenance of the CCM project and management of the School Forest. Activities were mostly hands-on including buckthorn identification and removal techniques, proper tree pruning, safe tool use, bridge construction, trail maintenance, identifying potential hazards (trees and plants), and proper tree planting. Forestry concepts such as long-term management, monitoring and managing buckthorn removal sites, maintenance of construction projects, and managing forest stands were discussed. Emphasis was placed on

PlayCleanGo concepts to prevent the spread of invasive species with a demonstration on the use of boot brushes and boot brush stations before entering the School Forest.

Initial planning began for two regional summits to be held in 2018. The Northwest Regional Summit is scheduled for March 14 in Pine River and the Metro Regional Summit is scheduled for May 3 in Savage.

Activity Status as of June 30, 2018:

An additional 27 projects were recruited from January through May 2018, making 60 projects selected. Additional projects are in the queue pending remaining funding in this grant, CCM crew availability, or if a scheduled project cancels. Ten school projects were completed between March and June 2018 for a total of 33 projects completed to date. The CCM crew is scheduled to work on seven projects by August 31 for a full summer workload, with remaining projects to be scheduled through June 2019.

A variety of projects were completed between March and June 2018, most of which involved trail work or hazard tree removal. Other projects included ADA trail construction, bridge and boardwalk construction, wood bench classroom seating, storm damage clearing, tree pruning and mulching, and erosion control using buckthorn wattles (see Attachment D for project highlights).

There were 23 school staff and volunteers trained between March and June for a total of 184 trained to date. Training was generally provided by the CCM crew while at the project site, but in the case of La Academia School (Chaska School Forest), the DNR forester provided training during a teacher in-service day. Activities were mostly hands-on including trail construction and maintenance, identifying potential hazard trees, proper tree pruning techniques, streambank erosion control, and identifying buckthorn. Forestry concepts focused on long-term management, monitoring and managing buckthorn removal sites, trail design and preventing the spread of invasive species using PlayCleanGo concepts.

CCM has had trouble recruiting and maintaining crew members over the past year. To compensate for a smaller crew, School Forest projects receive additional "crew days" to ensure the work is completed.

Two regional summits were held. The Northwest Regional Summit happened March 14 in Pine River and the Metro Regional Summit happened May 3 in Savage. The Northwest Regional Summit had 24 participants representing 16 schools. The Metro Regional Summit had 34 participants representing 20 schools. These full-day regional summits provided resources, knowledge, and skills to help coordinators, maintenance staff, and dedicated volunteers do long-term maintenance and management on their School Forest sites. Topics presented by DNR staff and other natural resource professionals included forest management, vandalism, wetland and water resources, wildlife habitat, trail design and maintenance, invasive species management, hazard tree identification and hands-on pruning techniques. Attendance at these two summits was lower than anticipated despite advertising through an e-newsletter and personal invitation through email and phone calls to the School Forest coordinator and the school principal. While the reasons are not entirely clear, we speculate that spring is a very busy time for educators. The next two summits are planned for fall.

Planning and advertising for the two remaining regional summits is underway. The Southern Regional Summit is scheduled for September 26 at Whitewater State Park and the Northeast Regional Summit is scheduled for October 4 at the Cloquet Forestry Center. While these are regionally-focused summits, all School Forests are invited to participate in any summit and we hope to have higher attendance at these events.

Activity Status as of December 31, 2018:

To date, 57 projects are completed. Twenty-four new projects were completed between July and December 2018. The final three projects needed to reach the target of 60 projects have been selected and are scheduled in 2019. The DNR is no longer actively recruiting projects and is on target to meet, and possibly exceed, the target of 60 projects.

Unique projects completed between July and December 2018 include construction of a 60-seat stone amphitheater; concrete foundation for a classroom pavilion; nature playhouse; teaching podium and outdoor chalkboard; and repair and replace wooden stairs. See Attachment E for project highlights.

There were 63 school staff and volunteers trained between July and December 2018, plus an additional 20 not previously reported due to delayed evaluations, for a total of 267 trained to date. CCM provided 14 on-site trainings that included bridge and bench construction; trail construction and maintenance; identifying hazard trees; erosion mitigation; proper tree pruning techniques; and identifying and managing buckthorn. Local DNR foresters capitalized on existing School Forest Committee meetings to give two off-site trainings focused on forest stewardship plan implementation (Linwood School Forest) and long-term buckthorn management (Bailey School Forest, Newport).

There was significant CCM crew member turnover this summer. This combined with weather challenges contributed to some incomplete projects. The School Forest specialist worked closely with the CCM program director and program manager to create a plan to ensure project work was completed as planned and stayed on target. This involved additional "crew days" provided by the Northeast District CCM and the Summer Youth Corps to supplement the effort and finish projects.

The final two regional summits were held. The Southern Regional Summit happened September 26 at Whitewater State Park and the Northeast Regional Summit happened October 4 at the Cloquet Forestry Center. The Southern Regional Summit had six participants representing all five existing southern schools in the program. The Northeast Regional Summit had 24 participants representing 20 schools. These full-day regional summits provided resources, knowledge, and hands-on skill building to help coordinators, maintenance staff, and dedicated volunteers do long-term maintenance and management on their School Forest sites. Feedback from evaluations of the first two summits was considered in designing these summits. Topics presented by DNR staff and other natural resource professionals were selected to meet the needs of the schools in those geographic areas and included vandalism and trespass; forest management; wetland and water resources; wildlife opportunities and impacts; trail design and maintenance; invasive species management; hazard tree identification; and hands-on pruning techniques.

Final Report Summary:

Between January and June 2019:

- Ten new projects were completed, for a total of 67. This exceeds the target outcome of 60.
- The final CCM crew training was held focusing on student service-learning and adult training approaches, PlayCleanGo concepts to reduce spread of invasive species.
- An additional 66 school staff and volunteers trained by CCM during projects or DNR foresters and School Forest staff.

The 67 projects completed between March 2017 and June 2019 achieved the goals of providing easy and safe access to outdoor classrooms in a healthy, safe, and inspiring environment. Projects include:

- forest health improvements through invasive species control (primarily buckthorn), clearing storm and logging debris, protecting trees from beaver activity, stand thinning, weeding, pruning, mulching seedlings, removing grapevine, removing dead/diseased trees
- safety improvements through hazard tree and poison ivy removal and repair of unsafe structures such as broken benches, stairs and bridges
- student and community spaces through placement or construction of new or improved outdoor classroom spaces, amphitheater seating (including those made of rocks, wood, or steel), picnic tables, and benches

- erosion control along trails and streambanks
- new and improved trails, bridges and boardwalks providing increased accessibility including meeting ADA standards in some cases
- teaching tools such as podiums and chalkboards
- concrete foundations for classroom pavilions
- wildlife features such as bird feeders and turtle logs
- native vegetation planting and seeding
- deer exclosures to protect environmental learning laboratories
- digital trail mapping
- natural play features, including a nature playhouse created as a safe, calming retreat for students on the autism spectrum.

See Attachments C, D, E, and F for highlights over the course of this project.

Schools used grants, PTA funds, local business and community donations, timber sale revenue, and creative fundraising to obtain project materials and in-kind resources valued at \$57,226. CCM worked closely with schools to provide design guidance and help them determine what materials were needed.

Schools enlisted SWCDs, NRCS, Eagle Scouts, 4H members, retired DNR, local government, businesses and churches, parents and community volunteers for additional labor, technical advice, funding and other assistance. These projects served as a catalyst to engage these entities and build a network of local, long-term support for future efforts.

Overall, CCM was up to the challenge of implementing diverse projects across the state and adapting to the varying School Forests from inner city to remote rural communities and from less than 1 acre to over 300 acre sites. Each year a new School Forest CCM crew was established and, when needed, CCM provided more experienced staff from other crews to ensure the work projects were completed. The CCM program manager, and program director provided consistent oversight and direction. Routine project monitoring and evaluation of site selection, planning, implementation, reporting, and invoicing with CCM helped identify and resolve issues.

Twenty-seven DNR foresters actively engaged in project planning and implementation to ensure projects met priority goals of the individual site stewardship plan and maximized CCM labor. Several foresters took the lead on projects to ensure that the schools got much needed work done and wrote stewardship plans required in order for a project to proceed. Foresters also provided training on topics including invasive species identification and control, hazard tree identification, proper tree pruning, and general forest stewardship. Forester engagement resulted in strengthened relationships with school contacts.

A total of 412 teachers, staff, facility managers and community volunteers were trained in land management practices at School Forest sites, School Forest Committee meetings, and four regional summits This exceeds the target outcome of 360. These trainings involved active participation in management techniques unique to the individual site project and general forest management such as bridge and bench construction; trail construction and maintenance; identifying hazard trees and poison ivy; erosion mitigation; proper tree pruning techniques; managing buckthorn and other invasive species; and identifying trees and plants.

Throughout the grant, various evaluation methods were used to gather information to improve project workflow and inform program staff on changes and needs for the future. A few key findings are highlighted below.

All foresters felt their participation in site projects was valuable and 92 percent felt the work created a better relationship with their school. One forester wrote, "It is inspiring to see the success this grant has brought to the School Forests, staff, and students I have worked with."

Post-project surveys completed by project leads showed that schools overwhelming had a positive experience with the CCM crew, staff and volunteer training, and student service-learning experiences. One person commented on the student's work: "The students have such a strong connection to this trail. They wanted to know if they could take out all of the 7th grade students to check out it out. They are very, very proud of their work." In addition, a majority of project leads felt they had what they needed for long-term success although some remarked that more work needs to happen and a similar grant would be helpful.

In a final evaluation of all project leads, school administrators, and School Forest site coordinators, 77 percent of respondents felt the project was valuable because it made the School Forest more accessible and 74 percent said it helped students have a better connection to the School Forest. In addition, many respondents felt it created a healthier School Forest (68 percent) and got more students outside (69 percent). Service-learning projects were especially valued because more students got outside, they enjoyed helping, felt more ownership of the space, and felt their work made a difference. One respondent commented, "Third grade students really enjoyed learning...They were excited to see females on the (CCM) team and working. They were curious about getting jobs with CCM and also other jobs related to forestry and the outdoors." When asked about how the program can help teachers with land management, half of the respondents requested additional training. As to future program needs the most common ideas were for continued help with land management projects or site features, ways to increase teacher participation in the School Forest, and additional lessons and strategies for outdoor learning.

Anecdotally we learned that school staff and volunteers not only prefer, but also benefit from on-site, hands-on training. In particular, assistance is appreciated for trail building and maintenance skills. Also, when CCM was able to do an on-site visit prior to the project, it created a better experience for both CCM and the school. We believe this was from the ability to determine what the crew could do on the site and set realistic expectations for the school staff during the visit. Many also noted the importance of the project work. One comment from the evaluation was "This project was so incredibly valuable to our School Forest. I wouldn't have been able to put in the bridge by myself due to lack of knowledge, tools, and man power. It truly was amazing to see how many teachers were willing to use the School Forest after the gravel and bridge was put in." For some, this work was a catalyst for more engagement in the school or led to additional land management projects.

ACTIVITY 2: Engage students in land management service-learning experiences at School Forest sites.

Description:

Site improvement projects will engage 3,000 students in hands-on, service learning activities with CCM crews and DNR staff. The School Forest specialist will work with CCM crews on the educational aspects of the overall grant. This will be done as part of the initial new CCM crew training each fall and as work is progressing at School Forest sites to help ensure crew member comfort using best practices for service-learning in school settings. The School Forest specialist will engage teachers in using the CCM management projects as an opportunity to further student land management knowledge and hands-on experiences outside. CCM will work with students to do service-learning activities related to site-specific management projects. Projects and activities will vary depending on the type of management project being completed and the age and ability of students. This will further the connection that students have with their site and increase their knowledge of land management best practices.

Summary Budget Information for Activity 2:

ENRTF Budget: \$ 128,760 Amount Spent: \$ 124,944 Balance: \$ 3,816

Outcome	Completion Date
1. Engage 3,000 students in hands-on service learning experiences with CCM	June 2019
management projects at School Forest sites. CCM/DNR	
150 students by June 2017	
1950 students by June 2018	
3000 students by June 2019	

Activity Status as of December 31, 2016: Began initial planning and preparation for CCM crew training to include sessions on effective service-learning strategies.

Activity Status as of June 30, 2017:

During the project planning process, the School Forest specialist encouraged schools to engage students in some form of a service-learning experience. Some teachers involved students in the pre-project planning process, such as designing a trail. Other teachers preferred to have students involved with project-related activities after the CCM crew finished their work. However, most students were actively engaged in learning about and helping with the project or their School Forest while the CCM crew was on site. Examples include hauling buckthorn or building a boardwalk.

A total of 751 students were engaged in service-learning experiences associated with the six spring projects. A few highlights include:

- Hugo Elementary School Forest had all 15 of their K-1 classes involved in learning about buckthorn and wildlife habitat while helping to haul cut buckthorn to a collection pile.
- Glacier Hills School Forest involved 242 students in removing buckthorn.
- Proctor Middle School Forest's seventh grade class helped design and mark their trail, following ADA standards. They also helped lay gravel with the CCM crew.

Activity Status as of December 31, 2017:

In addition to the School Forest specialist, the CCM Program Manager became more actively involved in encouraging student service-learning at the pre-project site visits and helped identify appropriate activities based on the project and School Forest environment. Some projects did not lend themselves to service-learning, so it was necessary to identify another service-learning experience appropriate for the students, such as mulching trees at the very small and highly urban Northrop Urban School Forest in Minneapolis (see Attachment C for projects highlights).

A total of 749 students were engaged in service-learning experiences associated with the summer and fall projects. To date, a total of 1,490 students have engaged in service-learning experiences to date, including preproject planning and post-project activities. A few highlights include:

- Duluth East High School Forest students extended the CCM work and further developed their outdoor classroom site by installing a step system using boulders and gravel; erecting a chain railing system; laying class 5 gravel along the path and across the seating area; and completing trail construction.
- Cromwell-Wright School Forest high school students helped plan the CCM project, flagged and cleared trails, and constructed bog bridges.
- Karner Blue School Forest students marked trees for forest thinning, removed small trees, and learned
 about forest management prior to CCM project work. During the project, a DNR Forester and CCM crew
 members talked about their jobs and forest management techniques, and demonstrated tools and
 safety gear. Karner Blue Education Center exclusively serves students with special needs.

The School Forest specialist worked directly with the CCM crew leader throughout the project year to ensure that the CCM crew was comfortable with the service-learning activities and had the resources needed to be effective. The crew was provided 20 boot brushes, donated by PlayCleanGo, to have students clean their shoes before entering the School Forest for service-learning to learn about preventing the spread of invasive species.

Activity Status as of June 30, 2018:

The DNR School Forest specialist, CCM program manager, and CCM assistant mangers actively encouraged student service-learning during the project approval process and at the pre-project site visits. This involved helping to identify appropriate activities based on the project, site, and student abilities (including pre-K and students with special needs). Some projects did not lend themselves to service-learning while the CCM crew was on site, so alternative service-learning opportunities were found. At Hidden School Forest in Prior Lake, a DNR forester led a large buckthorn control project with tools provided by CCM (see Attachment D for project highlights).

A total of 646 students were engaged in service-learning experiences from March through June. To date, a total of 2,136 students have engaged in service-learning experiences, including pre-project planning and post-project activities. A few highlights include:

- Clearview Elementary School Forest students helped create a 200-foot ADA accessible trail that includes
 a passing point. Students cleared sod removed by CCM, released tree seedlings from competing
 vegetation, and placed gravel and bricks.
- Rockford Middle School Forest students created wattle bundles, made from buckthorn removed by CCM, and live-staked them to a streambank with red-osier dogwood stems for erosion control. The longterm vision is that the wattle bundles will reduce soil erosion and slowly decompose over a few year as the live red-osier dogwood stakes sprout and grow into shrubs to stabilize the streambank.
- Pre-K students at Marlene Myers School Forest in Minneapolis pulled weeds and helped CCM prepare garden beds.
- The Hidden School Forest in Prior Lake involved five students in a small buckthorn removal project last fall. They were so excited by the project, they invited their DNR forester to work with students on a larger buckthorn effort they organized this spring involving over 75 students.

The School Forest specialist continued to work closely with the CCM crew to ensure that they were comfortable with the service-learning activities and had the resources needed to be effective. The 2018 CCM crew members were trained on preventing the spread of invasive species and encouraged to use boot brushes, donated by PlayCleanGo, to have students clean their shoes before entering the School Forest for service-learning.

Activity Status as of December 31, 2018:

The DNR School Forest specialist, CCM program managers, and DNR foresters continued to actively encourage student service-learning during the project approval process and at the pre-project site visits. DNR foresters assisted with service-learning activities during several projects. See Attachment E for project highlights.

Between July and December 2018, 993 students engaged in service-learning experiences. To date, a total of 3,129 students have completed service-learning experiences, exceeding the target of 3,000 for this outcome. A few highlights include:

- One hundred and ten elementary students at Bayview School Forest in Proctor helped clear trails by collecting and piling sticks.
- Mankato East School Forest involved 220 high school students throughout a weeklong project to remove cut buckthorn and pull buckthorn seedlings to improve the health of the School Forest. Students also helped build 21 benches for their outdoor classroom.

- North Shore School Forest in Duluth had 40 sixth grade students lay out and clear lines in preparation for CCM to rebuild a deer exclosure the students use for forestry-related math lessons such as stand density, plant surveys, and forest health assessments.
- Forty-five pre-K students at St. David's School Forest in Minnetonka helped clean up after hazard trees were removed by gathering small branches and sticks to be used as natural Lincoln Logs.
- Princeton School Forest involved 200 third through fifth grade students to spread mulch in their new outdoor classroom and plant milkweed seedlings donated by Great River Greening.

The School Forest specialist worked with the CCM program manager and crew leader to ensure that the new crew members were properly trained and comfortable with service-learning activities.

Final Report Summary:

A total of 3,314 students have completed service-learning experiences, exceeding the target of 3,000 for this outcome. Service-learning activities varied and included working with teachers on pre-project planning and preparation such as designing and flagging new trails, working directly with CCM to build benches or clear buckthorn, and laying mulch or gravel in new outdoor classrooms. DNR foresters assisted with many service-learning activities. A few highlights from 2019 include:

- One hundred and thirty elementary students at SEA-cret School Forest in Golden Valley learned about chainsaw safety and buckthorn, and worked with community volunteers from Calvary Lutheran Church to spread mulch on trails.
- Twenty-four high school students helped design and clear new trails at Laporte School Forest.
- Fifteen middle school students at Rockford School Forest and 16 high school students at Waubun School Forest learned how to construct and install benches in their new outdoor classroom spaces.

Student involvement in hands-on service-learning experiences before, during, and after CCM project work has helped to create a sense of ownership in their School Forest. For some students, this provided their first experience with their School Forest. For others, this gave them the opportunity to engage differently with their School Forest. Students not only learned about nature and forest management, but they also learned about potential careers in forestry and natural resources by engaging with CCM crew members.

This quote exemplifies much of the sentiment received from School Forest contacts about having a project at their school and the service-learning aspect involved:

"Thanks so very much for this grant opportunity. You have no idea how much this means to these kids. I have parents stopping me in the hallways and talking buckthorn. I have a kid that found buckthorn on a local property and pointed out to the oblivious owners (the kid was delighted). I went to get posts at the local hardware store today for our signs, and the owner stopped to talk to me about it because he saw it in the paper, and ended up giving me the posts for free!"

-- Mrs. Schlueter, Pine River-Backus School Forest

V. DISSEMINATION:

Description:

Results will be promoted to the public through news releases, Facebook posts, and the School Forest enewsletter. Some schools will be featured in the monthly school highlight on the School Forest website (www.mndnr.gov/schoolforest).

Status as of December 31, 2016:

The Minnesota Lottery created a <u>short video</u> about this ENRTF project that was shared by the Lottery during an event at the Mall of America and on its online blog. The video was also shared by the DNR on its main Facebook page, the School Forest Facebook page, and in an email bulletin to all School Forests to help recruit project applications. The video received over 29,000 views on Facebook. The November School Forest email newsletter featured a highlight on this grant and the new ENRTF School Forest specialist. Information on the grant, including overview, guidelines, and a link to the application was posted to the School Forest website.

Status as of June 30, 2017:

Glacier Hills Elementary School Tweeted about their buckthorn project. The Principal of Lakewood Elementary School wrote an article and shared project pictures in the "Lakewood Lynx" school newsletter.

Status as of December 31, 2017:

DNR staff reached out to local media outlets where projects were occurring with news releases and story ideas. A few highlights include:

- A Lakeland Public Television story on the <u>Dean Makey School Forest buckthorn removal project</u>.
- Pine River-Backus School Forest project was featured multiple times in their local news media, including
 a Lakeland Public Television story "Pine River-Backus Students Remove Buckthorn," and an article "Pine
 River-Backus School Board Revisits Buckthorn" featured in the PineandLakes Echo Journal.
- The Edgewood School Forest project and DNR School Forest Program were highlighted in a video
 created by the Mounds View School District titled "<u>Edgewood School Forest Project</u>" that was shared
 widely throughout the district via e-newsletters and social media.
- The DNR posted 10 tweets featuring 9 projects resulting in 4,335 impressions, 22 retweets, 28 likes, and 46 media views and engagements. One tweet on the Floodwood School Forest buckthorn removal project garnered 901 impressions, 6 retweets, 12 likes and 10 media hits.

CCM has also shared information about this project on their website and through their social media outlets, including re-tweeting DNR Tweets.

Status as of June 30, 2018:

The DNR Division of Forestry communications coordinator provided support to the School Forest specialist with social media outreach and general communications. Several of the schools posted information about their CCM project to their Facebook pages. A few highlights include:

- An article showcasing DNR forester work on this ENRTF project was featured in the January-February 2018 edition of *ROOTS*, the DNR Division of Forestry newsletter.
- The School Forest specialist wrote a feature article for the spring 2018 PlayCleanGo.org newsletter <u>Teaching Play.Clean.Go, One School Forest at a Time</u>.
- The Clearview Elementary School Forest project was featured in the local newspaper, *Citizen-Tribune*, with an article titled "Clearview Forest Gains a Handicapped Accessible Trail."
- DNR Forestry (@mnforestry) posted eight tweets featuring 6 projects resulting in 7,771 impressions, 18 retweets, 55 likes, and 159 media views and engagements. @mnenrtf was tagged in all tweets. One tweet on the Stillwater School Forest trail improvement project garnered 1,564 impressions, 5 retweets, 12 likes and 39 media hits.

Activity Status as of December 31, 2018:

The DNR increased media and social media outreach efforts. Schools were excited to share information about their CCM projects through local media, social media, newsletters, and personally at staff meetings. A few highlights include:

- The DNR Division of Forestry communications coordinator worked with St. David's School Forest's
 (Minnetonka) public relations agency to create an article in the <u>Sun Sailor</u> and generate TV coverage by
 KSTP (no TV archives available). Additionally, Lake Minnetonka Magazine will print an article about St.
 David's School Forest CCM project in the February 2019 issue.
- The Mankato School Forest project was featured in the Mankato Free Press and The Land Online.
- DNR Forester Andy McGuire led a discussion on invasive species management with the Newport Park Board that was broadcast live via local cable television.
- The Anoka County Union/Herald published an article on the Ramsey School Forest.
- The Hutchinson School Forest service learning and invasive species education activities at Rollie Johnson Ecological Site project were featured in the Hutchinson Leader.
- DNR Forestry (@mnforestry) posted 28 tweets featuring 20 projects resulting in 27,303 impressions, 44 retweets, 127 likes, and 714 media views and engagements. @mnenrtf and @conservcorps was tagged in all tweets.
 - The Chaska School Forest stair replacement and repair project tweet garnered 3,290 impressions, two retweets, 10 likes and 147 media views and engagements.
 - An additional nine tweets each received more than 1,000 impressions for projects at seven different School Forests.

Final Report Summary:

From January through June 2019, DNR Forestry (@mnforestry) posted 16 tweets featuring 11 projects resulting in 15,206 impressions, 1 retweet, 136 likes, and 330 media views and engagements. Both @mnenrtf and @conservcorps were tagged in all tweets. Additional media includes:

- <u>Lake Minnetonka Magazine</u> printed an article in the *Outdoors* section about the 2018 St. David's School Forest CCM project.
- The Pilot Independent ran an article on the Walker-Hackensack-Akeley School Forest project.

In 2016, the Minnesota Lottery created a <u>short video</u> about this ENRTF project that was shared by the Lottery during an event at the Mall of America and on its online blog. Subsequently, School Forest CCM projects were promoted by the DNR and CCM through newsletters, media, and social media outreach efforts. The DNR worked closely with the CCM crew and School Forest contacts to obtain project details and images for timely Tweets. Schools shared information about their CCM projects through local media, social media, newsletters, and personally at staff meetings. In some instances, students wrote articles and contacted media outlets.

The School Forest specialist prepared an article for the summer 2019 edition of *ROOTS*, the DNR Division of Forestry newsletter, and a DNR Radio Minute on the overall grant outcomes.

VI. PROJECT BUDGET SUMMARY:

A. ENRTF Budget Overview:

Budget Category	\$ Amount	Overview Explanation
Personnel:	\$128,000	DNR, Division of Forestry, new School Forest
		specialist, .5 FTE, three years.

Budget Category	\$ Amount	Overview Explanation
Professional/Technical/Service Contracts:	\$308,000	Two years of Conservation Corps Minnesota for
		completing management activities at sites, leading
		school staff and volunteer trainings, and providing
		student service-learning activities.
Equipment/Tools/Supplies:	\$4,000	Four regional land management summits,
		(educational materials, workshop supplies, room
		rental fees, etc.) 4 summits with 20-60 participants
		at each, 2 summits x \$1200 & 2 summits x \$800
		=\$4000
TOTAL ENRTF BUDGET:	\$440,000	

Explanation of Use of Classified Staff: N/A

Explanation of Capital Expenditures Greater Than \$5,000: N/A

Number of Full-time Equivalents (FTE) Directly Funded with this ENRTF Appropriation: 1.5 FTE for three years.

Number of Full-time Equivalents (FTE) Estimated to Be Funded through Contracts with this ENRTF Appropriation: 7 total FTEs from CCM across duration of the grant.

B. Other Funds:

	\$ Amount	\$ Amount		
Source of Funds	Proposed Spent		Use of Other Funds	
Non-state				
School districts local on-site support from schools, parents, businesses and community organizations.	\$120,000	\$140,033	Assistance with management steps, training, and education time (varies by school district and community), estimated \$30/hour x 4000 hours = \$120,000	
School District supplies	\$20,000	\$57,226	Match provided by supplying tools, building materials, planting materials, etc. for management projects.	
State				
DNR Forestry education staff	\$26,000	\$27,370	.15 FTE/year for 2 years	
Direct & Necessary for .5FTE School Forest specialist	\$10,884	\$ 0		
DNR forester time	\$120,000	\$142,485	Approximately .5 FTE/3 years	
Travel in-state costs	\$6,000	\$6,201	School Forest specialist, forestry education staff, and forester travel cost: fleet, lodging, and meals.	
Mileage or sub-stipend reimbursement	\$15,000	\$9,829	Substitute teacher stipends or mileage reimbursement provided for participants to attend summits and onsite trainings, who would be otherwise unable to attend.	
Regional Land Management Summits	\$1,600	\$20,944	Photocopies of handouts, food, and speaker fees for 4 regional land management summits.	
TOTAL OTHER FUNDS:	\$319,484	\$404,088		

VII. PROJECT STRATEGY:

A. Project Partners:

- 1. MN DNR:
 - A new part-time, temporary DNR School Forest specialist will be funded to coordinate schools, enhance student participation, create four new regional land management summits, complete an evaluation of grant outcomes, and manage the overall grant. .5FTE, three years, \$128,000.
 - Existing DNR Forestry education staff, DNR foresters, and other DNR natural resource staff will provide in-kind education assistance, natural resource expertise, and guidance.
- 2. CCM crews will complete site management projects, lead students in service-learning activities, and instruct school staff and community volunteers in land management trainings. Three years, \$308,000.
- 3. About 130 schools and their School Forest committee volunteers will partake in activities and trainings through on-site management projects, regional land management summits, or student service-learning activities providing in-kind match hours. School districts will also provide in-kind match through supplies and materials purchased for management projects.
- 4. County, city, and other local and state natural resource staff will provide in-kind support on projects.

B. Project Impact and Long-term Strategy:

The DNR School Forest Program has been in existence for over 60 years. A 2010 ENRTF grant expanded the program by establishing new School Forests, improving outdoor education quality, and improving program efficiencies. Focus groups conducted during the 2010 ENRTF grant and recent program evaluations show that a lack of site management knowledge and resources are inhibiting outdoor student experiences. This project will complete major site maintenance tasks and equip schools to more easily maintain their outdoor classrooms in the future. This will increase the quality and frequency of student experiences outdoors, as many teachers have called out trail safety and site access as major barriers to outdoor education. In the long-term, more environmentally literate citizens will be created through School Forest and CCM experiences. DNR will continue to provide forestry education staff to support general program needs during this grant and into the future.

C. Funding History:

Funding Source and Use of Funds	Funding Timeframe	\$ Amount
2010, Project 180-F, Expanding Outdoor Classrooms at	FY11-13	\$300,000
Minnesota Schools, provided funding to establish and		
enhance outdoor classrooms through improved educational		
resources (teacher workshops, curriculum, and website		
development) and increased capacity to serve schools		
(additional staff to meet demand).		

VIII. FEE TITLE ACQUISITION/CONSERVATION EASEMENT/RESTORATION REQUIREMENTS:

A. Parcel List: N/A

B. Acquisition/Restoration Information: N/A

IX. VISUAL COMPONENT or MAP(S): See Attachment B.

X. RESEARCH ADDENDUM: N/A

XI. REPORTING REQUIREMENTS:

Periodic work plan status update reports will be submitted no later than January 2017, July 2017, January 2018, July 2018, and January 2019. A final report and associated products will be submitted between June 30 and August 15, 2019.

Final Attachment A Environment and Natural Resources Trust Fund M.L. 2016 Project Budget

Project Title: School Forests Outdoor Classrooms Legal Citation: M.L. 2016, Chp. 186, Sec. 2, Subd. 05b

Project Manager: Amy Kay Kerber

Organization: MN DNR

M.L. 2016 ENRTF Appropriation: \$440,000

Project Length and Completion Date: 3 Years, June 30, 2019

Date of Report: August 13, 2019

			Activity 1			Activity 2		TOTAL
ENVIRONMENT AND NATURAL RESOURCES TRUST	Activity 1	Amount Spent	Balance	Activity 2	Amount Spent	Balance	TOTAL	BALANCE
FUND BUDGET	Budget	as of 6/30/19	as of 6/30/19	Budget	as of 6/30/19	as of 6/30/19	BUDGET	as of 6/30/19
BUDGET ITEM	Renovate 60 School Forest sites and train			Engage students in land management				
	long-term stewards.			experiences at School Forest sites.				
Personnel (Wages and Benefits)								
1 new School Forest specialist, .5 FTE, \$128,000 total,	\$94,720	\$83,859	\$10,861	\$33,280	\$29,464	\$3,816	\$128,000	\$14,677
75.47% salary 24.53% benefits, three years								
Professional/Technical/Service Contracts								
Conservation Corps Minnesota Project Work	\$212,520	\$212,520	\$0	\$95,480	\$95,480	\$0	\$308,000	\$0
Equipment/Tools/Supplies								
Four regional Land Management Summits, \$1,200 x 2	\$4,000	\$3,777	\$223	\$0	\$0	\$0	\$4,000	\$223
summits, \$800 x 2 summits = \$4,000								
COLUMN TOTAL	\$311,240	\$300,156	\$11,084	\$128,760	\$124,944	\$3,816	\$440,000	\$14,900



Improving Outdoor Classrooms for Education and Recreation

Photos below include: Edgewood School Forest, Mounds View; Lakewood School Forest, Duluth; Como Woodlands School Forest, Saint Paul; Lake of the Woods School Forest, Baudette.

















