

Final Abstract

Final Report Approved on July 23, 2024

M.L. 2021 Project Abstract

For the Period Ending June 30, 2024

Project Title: Oak Wilt Suppression at the Northern Edge - Phase II

Project Manager: Shannon Wettstein

Affiliation: Morrison Soil and Water Conservation District

Mailing Address: 16776 Heron Road USDA Service Center

City/State/Zip: Little Falls, MN 56345

Phone: (320) 631-3553

E-mail: shannon.wettstein@morrisonswcd.org

Website: <https://morrisonswcd.org/>

Funding Source:

Fiscal Year:

Legal Citation: M.L. 2021, First Special Session, Chp. 6, Art. 6, Sec. 2, Subd. 06c

Appropriation Amount: \$423,000

Amount Spent: \$423,000

Amount Remaining: -

Sound bite of Project Outcomes and Results

Morrison SWCD partnered with DNR Forest Health Specialists and local DNR Foresters to suppress oak wilt at 37 sites and 50 pockets within Morrison County through mechanical means. These sites are the northern-most occurrences of oak wilt in the state through on the edge of healthy state forest habitats.

Overall Project Outcome and Results

Morrison SWCD partnered with DNR Forest Health Specialists and local DNR Foresters to suppress oak wilt at 37 sites within Morrison County. Control work was done by an experienced contractor using successful vibratory plow and tree destruction methods. Morrison County is at the leading edge of the known disease range in Minnesota. While the project was focused on private lands, the public good comes from controlling the spread to public forests of the state, and the continued habitat for turkey, grouse, deer and other wildlife.

The DNR Forest Health Specialist made numerous trips to the area to help train local resource professional staff on identification of oak wilt and confirm new spots and local DNR Foresters painted wilting trees throughout the season. Morrison SWCD and DNR worked to prioritize work zones based on the proximity of the site to northern public forests.

Highest priority sites were largely rural with large intact forests and lower priority sites in the epicenter of infection were found near Little Falls, Minnesota in an actively developing residential area.

Landowners were approached by the SWCD to gain interest in oak wilt suppression activities on their properties. These property owners signed a “Landowner Agreement” which outlined program requirements, landowner and contractor responsibilities and timelines for treatment. Almost all of the sites outside of the epicenter area had participating landowners who worked with our office, the DNR and the contractor to stop the spread. Treatment mainly occurred in Morrison County but sites within Crow Wing, Cass and Benton Counties were also treated. Overall, since our first oak wilt grant we have controlled the spread at 67 pockets. The DNR estimates we have saved over 1 million oak trees on over 9,000 acres of forest.

Project Results Use and Dissemination

Morrison SWCD and Crow Wing SWCD provided outreach to the surrounding communities through press releases, radio shows and feature articles and coordinates with DNR on these publications. Information packets and handouts describing disease information was available to interested landowners at the SWCD offices. Generic oak wilt information as well as grant details were updated and made available on the University of Minnesota Extension, DNR Forest Health and Morrison SWCD websites. The Environment and Natural Resources Trust Fund is acknowledged on final documentations and the use of the trust fund logo or attribution language was used in public outreach campaigns.



Environment and Natural Resources Trust Fund

M.L. 2021 Approved Final Report

General Information

Date: November 21, 2024

ID Number: 2021-162

Staff Lead: Tom Dietrich

Project Title: Oak Wilt Suppression at the Northern Edge - Phase II

Project Budget: \$423,000

Project Manager Information

Name: Shannon Wettstein

Organization: Morrison Soil and Water Conservation District

Office Telephone: (320) 631-3553

Email: shannon.wettstein@morrisonswcd.org

Web Address: <https://morrisonswcd.org/>

Project Reporting

Final Report Approved: July 23, 2024

Reporting Status: Project Completed

Date of Last Action: July 23, 2024

Project Completion: April 30, 2024

Legal Information

Legal Citation: M.L. 2021, First Special Session, Chp. 6, Art. 6, Sec. 2, Subd. 06c

Appropriation Language: \$423,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with the Morrison Soil and Water Conservation District to continue to eradicate the northernmost occurrences of oak wilt in the state through mechanical means on select private properties to prevent oak wilt's spread to healthy state forests.

Appropriation End Date: June 30, 2024

Narrative

Project Summary: Suppress oak wilt at the leading edge to prevent infestation in private and public forests to the north and west including Pillsbury State Forest and Camp Ripley.

Describe the opportunity or problem your proposal seeks to address. Include any relevant background information.

The overall goal for this project is to suppress oak wilt on all known sites in Morrison County. Eradicating the oak wilt sites will protect the surrounding forest, arrest oak wilt spread to the north and west, and ease the financial burden of oak wilt to landowners in Morrison County and communities to the north.

Oak wilt is a burgeoning invasive problem near Little Falls and threatens movement into the Brainerd area. It has the potential to kill significant percentages of trees in the nearly pure red oaks forests of the area. Oak wilt spots in Morrison County are at the edge of the known disease range in central Minnesota. Control of invasive species is optimal at their leading edge. If oak wilt is not controlled soon in this area, it will quickly grow to an unmanageable situation.

What is your proposed solution to the problem or opportunity discussed above? Introduce us to the work you are seeking funding to do. You will be asked to expand on this proposed solution in Activities & Milestones.

Morrison County SWCD staff will contact landowners to explain the importance of oak wilt control and seek permission for control. SWCD will use grant funds to contract out 100 percent of the control work, including vibratory plowing and diseased tree removal and destruction. DNR forest health (FH) staff will help the SWCD through their on-going forest health detection surveys and through technical training and advising. If oak wilt is found in the Brainerd area, this grant would be applied there, as well as at other future oak wilt outlier locations in Todd, Cass, Crow Wing, or northern Mille Lacs counties.

What are the specific project outcomes as they relate to the public purpose of protection, conservation, preservation, and enhancement of the state's natural resources?

While the project is focused on private lands, the public good comes from controlling and preventing the spread of oak wilt to both public and private forests, resulting in preserved wildlife habitat and ecosystem services these healthy forests provide. Oak wilt will be eradicated in all disease locations identified by DNR and SWCD staff where landowners sign up for control, thus enhancing those forests and protecting surrounding healthy forests. Currently there are 85 known unmanaged or partially managed pockets of oak wilt in Morrison County. With projected spread, it is estimated this funding would allow treatment at 95 sites.

Project Location

What is the best scale for describing where your work will take place?

Region(s): Central

What is the best scale to describe the area impacted by your work?

Region(s): Central

When will the work impact occur?

During the Project

Activities and Milestones

Activity 1: Control Oak Wilt

Activity Budget: \$380,538

Activity Description:

Control oak wilt by mechanical means including vibratory plowing and diseased tree removal and destruction. An optional additional control tactic would be for threatened tree removal (i.e. removal of healthy oaks inside plow lines that likely will die of oak wilt in the future).

Activity Milestones:

Description	Approximate Completion Date
Begin oak wilt control on selected properties with known oak wilt pockets	October 31, 2021
Complete oak wilt control on selected properties with known oak wilt pockets	April 30, 2022
Begin oak wilt control on selected properties identified in 2021-2022	October 31, 2022
Complete oak wilt control on selected properties identified in 2021-2022	April 30, 2023

Activity 2: Secure Permission to Control Oak Wilt and Hire Contractor for Mechanical Control

Activity Budget: \$42,462

Activity Description:

SWCD staff will establish face to face meetings with affected landowners to secure permission to control oak wilt on their land. The SWCD will also establish contracts with vibratory plow companies to do the mechanical removal of trees and the disposal of infected wood.

Currently there are 85 unmanaged or partially managed pockets of oak wilt on 48 different landowner parcels. Northernmost sites (closest to the Pillsbury State Forest, Camp Ripley, and Brainerd) will be controlled first. As the disease spreads and where landowners agree, treatment could be funded on up to 95 sites. SWCD will also provide technical assistance to affected landowners throughout the project.

Activity Milestones:

Description	Approximate Completion Date
Host an open house for affected landowners	July 31, 2021
Request for Proposal (RFP) for work released via newspaper and vibratory plow company solicitation	August 31, 2021
Secure contracts with company or companies	September 30, 2021
Get signed landowner agreements from affected property owners - known locations	December 31, 2021
Get signed landowner agreements for affected property owners - those identified 2021-2022	December 31, 2022
Provide public outreach materials throughout project	April 30, 2023
Provide technical assistance to affected landowners throughout project duration	April 30, 2023

Project Partners and Collaborators

Name	Organization	Role	Receiving Funds
Rachel Dube	Department of Natural Resources	Forest Health Specialist for DNR Forestry, Northwest Region to provide early detection of oak wilt through on-going forest health surveys in Crow Wing and Cass counties; public notification on oak wilt locations; advise and train SWCD staff on all aspects of oak wilt control; communicate to relevant SWCDs.	No
John Korzeniowski	Department of Natural Resources	DNR Area Forestry Manager for Little Falls and Backus areas will provide assistance as needed to area SWCD staff with landowner contacts and public meetings. Will also provide assistance, as needed, to DNR Forest Health Unit staff.	No
Brian Schwingle	Department of Natural Resources	Forest Health Specialist for the DNR Forestry, Central Region will do early detection of oak wilt through on-going forest health surveys in Todd, Morrison and Mille Lacs counties; public notification on oak wilt locations; advise and train SWCD staff on all aspects of oak control; communicate with relevant SWCDs.	No

Dissemination

Describe your plans for dissemination, presentation, documentation, or sharing of data, results, samples, physical collections, and other products and how they will follow ENRTF Acknowledgement Requirements and Guidelines.

Morrison SWCD will provide outreach to the surrounding communities through press releases, radio shows and feature articles and will coordinate with DNR on these publications. Information packets and handouts describing disease information will be available to interested landowners at both the local DNR and SWCD offices. Generic oak wilt information as well as grant details will be updated and made available on the University of Minnesota Extension, DNR Forest Health and Morrison SWCD websites. The Environment and Natural Resources Trust Fund will be acknowledged through use of the trust fund logo or attribution language on project print and electronic media, publications, signage, and other communications per the ENRTF Acknowledgment Guidelines.

Landowners who have identified oak wilt on their properties will receive technical assistance and financial assistance throughout the life of the grant and follow-up visits after the grant expires will be available to ensure treatment was successful.

The success of the project will be tracked with the help of the DNR Forest Health Specialist and number of sites infected, treated and success rate of treatment will be shared with local governments, landowners and surrounding SWCD's.

Long-Term Implementation and Funding

Describe how the results will be implemented and how any ongoing effort will be funded. If not already addressed as part of the project, how will findings, results, and products developed be implemented after project completion? If additional work is needed, how will this work be funded?

The DNR Forest Health team receives a forest health monitoring grant to generally survey the health of the state's forest canopy every year. They will monitor the success of oak wilt eradication efforts in Morrison County, and they will continue to track the leading edge of oak wilt in the state. Also, the DNR secured funding to control oak wilt on public lands in the state on priority sites. If oak wilt arises after control efforts have been completed in Morrison County, the SWCD or DNR may seek another control grant for private lands.

Other ENRTF Appropriations Awarded in the Last Six Years

Name	Appropriation	Amount Awarded
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Morrison County Performance Drainage and Hydrology Management	M.L. 2016, Chp. 186, Sec. 2, Subd. 04r	\$209,000
Oak Wilt Suppression at its Northern Edge	M.L. 2019, First Special Session, Chp. 4, Art. 2, Sec. 2, Subd. 06b	\$100,000

Budget Summary

Category / Name	Subcategory or Type	Description	Purpose	Gen. Ineligible	% Benefits	# FTE	Classified Staff?	\$ Amount	\$ Amount Spent	\$ Amount Remaining
Personnel										
Project Manager/Administration		Billing, reporting, contract management, support			33%	0.03		\$2,925	-	-
Technician		Landowner outreach and technical assistance			33%	0.3		\$39,197	-	-
							Sub Total	\$42,122	\$42,122	-
Contracts and Services										
Private Contractor TBD	Professional or Technical Service Contract	Vibratory plowing, tree felling and tree removal contractor. Competitive bids will be solicited.				1		\$380,538	\$380,538	-
							Sub Total	\$380,538	\$380,538	-
Equipment, Tools, and Supplies										
	Tools and Supplies	Diagnostic Laboratory Testing	For detection of oak wilt on difficult sites					-	-	-
							Sub Total	-	-	-
Capital Expenditures										
							Sub Total	-	-	-
Acquisitions and Stewardship										
							Sub Total	-	-	-
Travel In Minnesota										
	Miles/ Meals/ Lodging	Mileage	Travel to affected landowner properties					-	-	-
							Sub Total	-	-	-
Travel Outside Minnesota										

							Sub Total	-	-	-
Printing and Publication										
	Publication	Legal Notices	RFP Annoucement					\$80	\$80	-
	Printing	Public outreach mailings	Outreach to affected landowners, information packets on disease and cost share assistance, landowner interest forms and documentation					\$260	\$260	-
							Sub Total	\$340	\$340	-
Other Expenses										
							Sub Total	-	-	-
							Grand Total	\$423,000	\$423,000	-

Classified Staff or Generally Ineligible Expenses

Category/Name	Subcategory or Type	Description	Justification Ineligible Expense or Classified Staff Request
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Non ENRTF Funds

Category	Specific Source	Use	Status	\$ Amount	\$ Amount Spent	\$ Amount Remaining
State						
In-Kind	Department of Natural Resources, Area Forestry Office Staff, Little Falls	Assistance, as needed to area SWCD staff with landowner contacts and public meetings. Assistance, as needed to DNR Forest Health Unit staff.	Secured	\$8,000	\$8,000	-
In-Kind	Department of Natural Resources, Forest Health Specialist	Early detection of oak wilt through on-going forest health surveys; public notification on oak wilt locations; advise and train SWCD staff on all aspects of oak wilt control; communicate to all SWCDs which landowners are affected.	Secured	\$14,170	\$14,170	-
Cash	SWCD State Aid FY24	Contract/Services for Pioneer Tree Service to mechanically control oak wilt	Secured	\$80,576	-	\$80,576
			State Sub Total	\$102,746	\$22,170	\$80,576
Non-State						
			Non State Sub Total	-	-	-
			Funds Total	\$102,746	\$22,170	\$80,576

Attachments

Required Attachments

Visual Component

File: [8efb031a-dee.pdf](#)

Alternate Text for Visual Component

Map shows red oak densities in north central Minnesota with known oak wilt locations pinpointed. The map draws attention to the leading edge of oak wilt infestation located in Morrison County and the proximity to Camp Ripley and the Pillsbury State Forest. The area circled shows the working area of the grant which includes Morrison County but could extend into Todd, Crow Wing, Cass and Mille Lacs Counties if oak wilt were identified....

Board Resolution or Letter

Title	File
Morrison SWCD Board Resolution	b18bf1a6-84d.docx

Supplemental Attachments

Capital Project Questionnaire, Budget Supplements, Support Letter, Photos, Media, Other

Title	File
Camp Ripley Letter of Support	157a0109-36f.docx
DNR Letter of Support	e846bb05-a8f.pdf
Morrison 2021-162 Background Check Certification	67ab5566-d66.pdf
Letter to Landowners in Epicenter	4305bbd1-0bf.docx
LCCMR Oak Wilt 2019-2024 Morrison SWCD	de93331c-92b.pdf
DNR Forestry Partnership Award	12edaa31-f4e.pdf
Oak Wilt Prevention Control	e7d24c15-e4d.pdf
Oak Wilt Fact Sheet	fe53188f-dae.pdf
Revised - LCCMR Oak Wilt 2019-2024 Morrison SWCD	af37b4f0-a31.pdf

Media Links

Title	Link
Morrison SWCD Oak Wilt Web Page	https://morrisonswcd.org/gallery/fy2019-projects-events/oak-wilt-main
UofM Extension Oak Wilt Page	https://extension.umn.edu/plant-diseases/oak-wilt-minnesota
MNDNR Oak Wilt Website	https://www.dnr.state.mn.us/treecare/forest_health/oakwilt/index.html

Difference between Proposal and Work Plan

Describe changes from Proposal to Work Plan Stage

Adjustments to the budget have been made to reflect the recommended amount. Adjustments were made to the number of sites we will be able to treat. Dissemination and Activities and Milestones sections have been revised per LCCMR staff request. Language clarified on Activities and Milestone section 2/10/21.

Additional Acknowledgements and Conditions:

The following are acknowledgements and conditions beyond those already included in the above workplan:

Do you understand and acknowledge the ENRTF repayment requirements if the use of capital equipment changes?

N/A

Do you agree travel expenses must follow the "Commissioner's Plan" promulgated by the Commissioner of Management of Budget or, for University of Minnesota projects, the University of Minnesota plan?

Yes, I understand the Commissioner's Plan applies.

Does your project have potential for royalties, copyrights, patents, sale of products and assets, or revenue generation?

No

Do you understand and acknowledge IP and revenue-return and sharing requirements in 116P.10?

N/A

Do you wish to request reinvestment of any revenues into your project instead of returning revenue to the ENRTF?

N/A

Does your project include original, hypothesis-driven research?

No

Does the organization have a fiscal agent for this project?

No

Work Plan Amendments

Amendment ID	Request Type	Changes made on the following pages	Explanation & justification for Amendment Request (word limit 75)	Date Submitted	Approved	Date of LCCMR Action
1	Amendment Request	<ul style="list-style-type: none"> Budget - Personnel Budget - Capital, Equipment, Tools, and Supplies Budget - Printing and Publication 	Publication expenses exceeded original budget line item; Adjusted in the same budget line item. Diagnostic testing for oak wilt detection on difficult sites will ensure best use of funds; adjusted from the personnel line item.	July 8, 2022	Yes	August 16, 2022
2	Completion Date	Previous Completion Date: 07/31/2023 New Completion Date: 06/30/2024	We have not spent all of our funding yet for the project and continue to work towards project goals.	May 25, 2023	Yes	May 25, 2023
3	Amendment Request	<ul style="list-style-type: none"> Activities and Milestones Budget - Personnel Budget - Professional / Technical Contracts Budget - Capital, Equipment, Tools, and Supplies Budget - Travel and Conferences Budget - Printing and Publication 	We want to shift almost all of the unspent funds in the listed budget categories (Personnel, Capital, Equipment, Tools and Supplies, Travel and Conferences, Printing and Publication) over to the Professional / Technical Contracts line to cover the final season treatment of oak wilt. More funds are needed to help cover the existing sites because the oak wilt had spread further and was more expensive to control than originally budgeted.	February 27, 2024	Yes	February 29, 2024
4	Amendment Request	<ul style="list-style-type: none"> Budget - Non-ENRTF Funds Contributed 	Cash funding was contributed from the Morrison SWCD FY24 State Aid funding pool to enable more oak wilt control on priority properties. This was paid directly to the Pioneer Tree Service to complete work on private lands.	May 10, 2024	Yes	May 15, 2024
5	Completion Date	Previous Completion Date: 06/30/2024 New Completion Date: 04/30/2024	The project is complete so we would like to submit a final update. Thanks, Shannon	May 10, 2024	Yes	May 15, 2024

Status Update Reporting

Final Status Update June 14, 2024

Date Submitted: May 29, 2024

Date Approved: June 18, 2024

Overall Update

This was the third and final season of oak wilt control and in this season we treated 16 pockets at 12 different sites. That totals 50 pockets at 37 sites over the three seasons. The sites that were not treated were contained to an epi center area that is a housing development with many small lots. Work over the course of both our grants was prioritized to those sites outside of this epicenter with the northern most sites being the highest priority. Almost all of the sites outside of the epicenter area had participating landowners who worked with our office, the DNR and the contractor to stop the spread. Treatment mainly occurred in Morrison County but sites within Crow Wing, Cass and Benton Counties were also treated. Overall since our first oak wilt grant we have controlled the spread at 67 pockets. The DNR estimates we have saved over 1 million oak trees on over 9,000 acres of forest. See PowerPoint attachment.

Activity 1

This is the third season of oak wilt identification and treatment of this grant with prior oak wilt control conducted in fall 2021 / spring 2022 and fall 2022 / spring 2023. Oak wilt control is done by mechanical means including vibratory plowing and diseased tree removal and destruction. Morrison SWCD worked with landowners which they and the DNR had prioritized for treatment. There were 12 landowners which agreed to work with Morrison SWCD to control oak wilt on their properties. There were 16 pockets of oak wilt at these sites that were vibratory plowed in October 2023 and felled and destroyed in 2024. Overall there were 37 sites and 50 pockets treated by the contractor. The Morrison SWCD contributed a substantial amount of in-kind and cash to the project as did MNDNR Forestry staff in the local offices and with the MNDNR Forest Health Specialists. MNDNR developed literature throughout the life of the project which helped communicate with landowners. See attachments.

(This activity marked as complete as of this status update)

Activity 2

Morrison SWCD continued to work with the experienced contractor Pioneer Tree Service. Morrison SWCD was onsite during treatment and ensured treatment was being completed as agreed between the landowner, DNR contractor and "Landowner Agreement" which lays out the terms of participating in the grant. During the time leading up to treatment often times there were buried private utilities or considerations landowners had for when the work is completed, or things that needed to be communicated better between the contractor and landowners or the DNR and the SWCD Forester has been able to aid in all of this. The Morrison SWCD Board extended the contract with Pioneer Tree Service to work with the district into 2023 as the original contract was for two years. The Morrison SWCD worked to get additional landowner agreements for the 2023/2024 treatment season. There were 12 sites and 16 pockets treated in the 2023/2024 season. Many more sites were inspected to confirm oak wilt over the course of the grant with the help of the DNR. Due to drought conditions there were many sites that had oak death that were not due to oak wilt. The partnership on this project was outstanding..

(This activity marked as complete as of this status update)

Dissemination

Morrison SWCD and Crow Wing SWCD provided outreach to the surrounding communities through press releases, radio shows and feature articles and coordinates with DNR on these publications. Information packets and handouts describing disease information was available to interested landowners at the SWCD offices. Generic oak wilt information as well as grant details were updated and made available on the University of Minnesota Extension, DNR Forest Health and Morrison SWCD websites. The Environment and Natural Resources Trust Fund is acknowledged through use of the

trust fund logo or attribution language on project print and electronic media, publications, signage, and other communications per the ENTRF Acknowledgment Guidelines. Shannon Wettstein accepted an award from the MNDNR Forestry Division for her offices partnership on this project. See attachment. A final mailing was sent to the residents in and near the epicenter area to let them know that although we have been successful in suppressing the disease in other parts of the county we have not been able to in their neighborhood and gave them information on how to identify and move forward if they have the disease in their trees. See attachment letter.

Status Update Reporting

Status Update June 1, 2024

Date Submitted: April 24, 2024

Date Approved: May 8, 2024

Overall Update

This was the third and final season of oak wilt control and in this season we treated 16 pockets at 12 different sites. That totals 50 pockets at 37 sites over the three seasons. The sites that were not treated were contained to an epi center area that is a housing development with many small lots. Work over the course of both our grants was prioritized to those sites outside of this epicenter with the northern most sites being the highest priority. Almost all of the sites outside of the epicenter area had participating landowners who worked with our office, the DNR and the contractor to stop the spread. Treatment mainly occurred in Morrison County but sites within Crow Wing, Cass and Benton Counties were also treated. Overall since our first oak wilt grant we have controlled the spread at 67 pockets. The DNR estimates we have saved over 1 million oak trees on over 9,000 acres of forest. See PowerPoint attachment.

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(This activity marked as complete as of this status update)

Activity 2

Morrison SWCD continued to work with the experienced contractor Pioneer Tree Service. Morrison SWCD was onsite during treatment and ensured treatment was being completed as agreed between the landowner, DNR contractor and "Landowner Agreement" which lays out the terms of participating in the grant. During the time leading up to treatment often times there were buried private utilities or considerations landowners had for when the work is completed, or things that needed to be communicated better between the contractor and landowners or the DNR and the SWCD Forester has been able to aid in all of this. The Morrison SWCD Board extended the contract with Pioneer Tree Service to work with the district into 2023 as the original contract was for two years. The Morrison SWCD worked to get additional landowner agreements for the 2023/2024 treatment season. There were 12 sites and 16 pockets treated in the 2023/2024 season. Many more sites were inspected to confirm oak wilt over the course of the grant with the help of the DNR. Due to drought conditions there were many sites that had oak death that were not due to oak wilt. The partnership on this project was outstanding..

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Status Update Reporting

Status Update December 1, 2023

Date Submitted: November 29, 2023

Date Approved: January 18, 2024

Overall Update

This is the third season of oak wilt identification and treatment of this grant. Since the beginning of the grant we have been able to work with 37 landowners to treat 41 pockets of oak wilt. Since the last update the Morrison SWCD and DNR have been working to identify oak wilt sites based off of past imagery and calls that have been received from the public. Of those, 17 were considered priority sites based off past priority zoning areas but only 11 of those were oak wilt, much of the tree death this season, like last was due to the two lined chestnut borer because of the stress caused from the drought. Treatment of eleven of these sites which contained 15 oak wilt pockets began in October 2023. The Morrison SWCD worked with the same experienced contractor as last season to do the vibratory plowing. Tree felling and removal will be conducted later in this winter at these sites and be completed prior to April 1.

Activity 1

This is the third season of oak wilt identification and treatment of this grant with prior oak wilt control conducted in fall 2021 / spring 2022 and fall 2022 / spring 2023. Oak wilt control is done by mechanical means including vibratory plowing and diseased tree removal and destruction. Morrison SWCD worked with landowners which they and the DNR had prioritized for treatment. There were 11 landowners which agreed to work with Morrison SWCD to control oak wilt on their properties. There were 15 pockets of oak wilt at these sites that have been vibratory plowed in October 2023. Felling buffer trees and destroying infected trees happened later in the winter and early spring of 2024.

Activity 2

Morrison SWCD continues to work with the experienced contractor Pioneer Tree Service. Morrison SWCD is onsite during treatment and is ensuring treatment is being completed as agreed between the landowner, DNR contractor and "Landowner Agreement" which lays out the terms of participating in the grant. During the time leading up to treatment often times there are buried private utilities or considerations landowners have for when the work is completed, or things that need to be communicated better between the contractor and landowners or the DNR and the SWCD Forester has been able to aid in all of this. The Morrison SWCD Board extended the contract with Pioneer Tree Service to work with the district into 2023 as the original contract was for two years. The Morrison SWCD is worked to get additional landowner agreements for the 2023/2024 treatment season. This seasons work began in October with vibratory plowing, the first step in the treatment process.

Dissemination

Morrison SWCD and Crow Wing SWCD provided outreach to the surrounding communities through press releases, radio shows and feature articles and coordinates with DNR on these publications. Information packets and handouts describing disease information was available to interested landowners at the SWCD offices. Generic oak wilt information as well as grant details were updated and made available on the University of Minnesota Extension, DNR Forest Health and Morrison SWCD websites. The Environment and Natural Resources Trust Fund is acknowledged through use of the trust fund logo or attribution language on project print and electronic media, publications, signage, and other communications per the ENTRF Acknowledgment Guidelines.

Status Update Reporting

Status Update June 1, 2023

Date Submitted: May 31, 2023

Date Approved: June 26, 2023

Overall Update

This was the second season of oak wilt identification and treatment of this grant. Treatment of fifteen high priority sites began in November 2022 and were completed through the winter and early spring of 2023. The Morrison SWCD worked with the same experienced contractor as last season to do the vibratory plowing and tree removal. DNR staff contributed a significant amount of staff time towards the project in training area SWCD technicians and DNR foresters, conducting site visits and talking with local landowners.

To date from 2019 to 2023 we have estimated that over 5100 acres of oak forest have been protected from natural spread of oak wilt that would have otherwise occurred had it not been for the ENRTF grants. This equates to approximately 1,020,000 oaks that would be killed over about seven years from below ground spread of oak wilt.

Activity 1

This is the second season of oak wilt identification and treatment of this grant with prior oak wilt control conducted in fall 2021 / spring 2022. Oak wilt control is done by mechanical means including vibratory plowing and diseased tree removal and destruction. Morrison SWCD worked with landowners which they and the DNR had prioritized for treatment. There were 15 sites which agreed to work with Morrison SWCD to control oak wilt on their properties. Landowners were encouraged to cut to the line so buffer trees as well as infested trees were cut and infested trees were destroyed. Control was completed on 15 sites with vibratory plowing starting the beginning of November 2022. Felling buffer trees and destroying infected trees happened later in the winter and early spring of 2023.

Activity 2

Morrison SWCD continues to work with the experienced contractor Pioneer Tree Service. Morrison SWCD was onsite during treatment and is ensuring treatment is being completed as agreed between the landowner, DNR contractor and "Landowner Agreement" which lays out the terms of participating in the grant. During the time leading up to treatment often times there are buried private utilities or considerations landowners have for when the work is completed, or things that need to be communicated better between the contractor and landowners or the DNR and the SWCD Forester has been able to aid in all of this. The Morrison SWCD Board extended the contract with Pioneer Tree Service to work with the district into 2023 as the original contract was for two years. The Morrison SWCD is working to get additional landowner agreements for the 2023 treatment season.

Dissemination

Morrison SWCD and Crow Wing SWCD provided outreach to the surrounding communities through press releases, radio shows and feature articles and coordinates with DNR on these publications. Information packets and handouts describing disease information was available to interested landowners at the SWCD offices. Generic oak wilt information as well as grant details were updated and made available on the University of Minnesota Extension, DNR Forest Health and Morrison SWCD websites. The Environment and Natural Resources Trust Fund is acknowledged through use of the trust fund logo or attribution language on project print and electronic media, publications, signage, and other communications per the ENRTF Acknowledgment Guidelines.

Status Update Reporting

Status Update December 1, 2022

Date Submitted: December 1, 2022

Date Approved: December 16, 2022

Overall Update

This was the second season of oak wilt identification and treatment of this grant. The DNR Forest Health staff, DNR area forestry technicians and Morrison SWCD worked together to ground truth potential infected oak pockets. Due to the drought conditions in 2021 much of the flagged site were not oak wilt but were death caused from stress. No new sites were found in Cass or Crow Wing counties, only in Morrison County. Oak wilt verified sites were mapped on a newly developed site by the DNR and prioritized by local DNR and SWCD staff for treatment based on the furthest north locations. Fifteen of these high priority sites have agreements signed for treatment after outreach by Morrison SWCD staff. Treatment of these sites began in November but will not be complete until later this winter. Morrison SWCD is working with the same experienced contractor as last season to do the vibratory plowing and tree removal.

Activity 1

This is the second season of oak wilt identification and treatment of this grant with prior oak wilt control conducted in fall 2021 / spring 2022. Oak wilt control is done by mechanical means including vibratory plowing and diseased tree removal and destruction. Morrison SWCD worked with landowners which they and the DNR had prioritized for treatment. There were 15 sites which agreed to work with Morrison SWCD to control oak wilt on their properties. Landowners were encouraged to cut to the line so buffer trees as well as infested trees were cut and infested trees were destroyed. Control on these 15 sites is currently underway with vibratory plowing starting the beginning of November 2022. Felling buffer trees and destroying infected trees will happen later this winter.

Activity 2

Morrison SWCD worked with landowners which they and the DNR had prioritized for treatment. Our leadership team decided to again target landowners along the leading edge of oak wilt. DNR worked very closely once again with district technicians to provide training and support to the new Morrison SWCD forester. Morrison SWCD sent letters, visited properties and had ongoing conversations with landowners who had affected oaks on their properties to secure permission for treatment. Fifteen landowners have agreed to allow treatment to happen on their properties. Morrison SWCD continues to work with the experienced contractor Pioneer Tree Service. Morrison SWCD is onsite during treatment and is ensuring treatment is being completed as agreed between the landowner, DNR contractor and "Landowner Agreement" which lays out the terms of participating in the grant.

Dissemination

On October 1st Morrison SWCD in partnership with private foresters, DNR, NRCS and other public and private partnerships held the largest forestry field day in the region in the last 15 years with 110 landowners in attendance for the day. One classroom session was hosted by Brian Schwingle of the DNR Forest Health team and his presentation focused mainly on the threat of oak wilt to the regions trees. All landowners in attendance would have heard his presentation.

In addition, Morrison SWCD and Crow Wing SWCD provided outreach to the surrounding communities through press releases, radio shows and feature articles and coordinates with DNR on these publications. Information packets and handouts describing disease information was available to interested landowners at the SWCD offices. Generic oak wilt information as well as grant details were updated and made available on the University of Minnesota Extension, DNR Forest Health and Morrison SWCD websites. The Environment and Natural Resources Trust Fund is acknowledged through use of the trust fund logo or attribution language on project print and electronic media, publications, signage, and other communications per the ENTRF Acknowledgment Guidelines.

Status Update Reporting

Status Update June 1, 2022

Date Submitted: May 31, 2022

Date Approved: July 6, 2022

Overall Update

The DNR conducted a fly over of northern Morrison County and Cass and Crow Wing counties and identified potential oak wilt pockets which were then ground truthed to confirm or deny oak wilt. DNR found additional pockets in Cass and northern Morrison and one site in Crow Wing from this method. Morrison SWCD then worked to get signed agreements from landowners to allow treatment on their sites. Morrison SWCD contracted with an experienced contractor to do the work. Grant funds covered treatment on 11 high priority sites, one in Crow Wing, two in Cass and the rest in Morrison County.

Activity 1

Control oak wilt by mechanical means including vibratory plowing and diseased tree removal and destruction. Morrison SWCD worked with landowners which they and the DNR had prioritized for treatment. There were 11 sites and 13 pockets treated in the fall/winter of 2021 and early spring of 2022. Landowners were encouraged to cut to the line so buffer trees as well as infested trees were cut and infested trees were destroyed. Two sites, after field site visits with the contractor, ended up doing a chemical stump treatment as vibratory plowing was determined not to be a safe or viable treatment option. This was pre-approved by the project manager and is a control technique which DNR does allow when you cannot plow.

Activity 2

Morrison SWCD worked with landowners which they and the DNR had prioritized for treatment. Our leadership team decided to target landowners north of Highway 27 so an initial mailing was sent to 22 landowners. The furthest most site was located on the east side of Gull Lake in Crow Wing County and five sites in Cass County so Morrison SWCD worked with the surrounding SWCD's to solicit these landowners. Crow Wing SWCD helped do additional outreach in the area once the site was discovered. All of the pockets in Cass are clustered in one small development and there were no additional sites in Crow Wing which were discovered. The remaining sites were all in Morrison County and even though the DNR ground truthed over 100 sites, very few turned out to be Oak Wilt, most death was due to the drought conditions. We are still working to secure permission with landowners for the 2022 season.

Morrison SWCD solicited bids for a contractor to do the treatment. We received two bids and the Morrison SWCD board selected Pioneer Tree Service.

Dissemination

Morrison SWCD and Crow Wing SWCD provided outreach to the surrounding communities through press releases, radio shows and feature articles and will coordinate with DNR on these publications. Information packets and handouts describing disease information was available to interested landowners at the SWCD offices. Generic oak wilt information as well as grant details were updated and made available on the University of Minnesota Extension, DNR Forest Health and Morrison SWCD websites. The Environment and Natural Resources Trust Fund is acknowledged through use of the trust fund logo or attribution language on project print and electronic media, publications, signage, and other communications per the ENTRF Acknowledgment Guidelines.