

Executive Summary for Action

Lower Minnesota River Watershed District Board of Managers Meeting Wednesday, August 17, 2022

Agenda Item

Item 4. E. - Accept report from 2021 Cost Share Application – Sarazine, 11451 Landing Road, Eden Prairie and authorize reimbursement

Prepared By

Linda Loomis, Administrator

Summary

In April 2021, the Board of Managers approved a cost share application from the resident at 11451 Landing Road in Eden Prairie. The project submitted proposed to manage stormwater and restore habitat by removing invasive garlic mustard and buckthorn. The original date for completion was November 1, 2021. The contractor had supply issues obtaining live stakes to plant in areas cleared of buckthorn, so the applicant requested an extension to July 31, 2022. LMRWD staff allowed the extension.

The project is now complete. The applicant has submitted a final report, with receipts and photos. On July 15th, I visited the site. It looks much different than what it looked like when I visited the site before the project. The understory of buckthorn has been cleared and native forbs such as red twig dogwoods have been planted the area has been seeded with a native shade seed mix. This was the first summer after seeding. I plan to visit again next summer to see how the seed has taken. Reimbursement is recommended.

The resident has another area that she is interested in habitat restoration, upland of the house, is an area that is open and steep. It may be a good site to establish a tall grass prairie.

Attachments

Report from 11451 Landing Road 2021 Cost Share

Excerpt from April 2021 LMRWD Board of Managers meeting minutes approving Cost Share application Cost Share Agreement between Delina Sarazine and the LMRWD

April 2021 Agenda Item 5. B. - Authorize 2021 Cost Share Project for 11451 Landing Road, Eden Prairie

Recommended Action

Motion to accept the final report for 2021 Cost Share Application – Sarazine, 11451 Landing Road, Eden Prairie and authorize reimbursement

LOWER MINNESOTA RIVER WATERSHED DISTRICT

Lower Minnesota River Watershed District

112 East Fifth Street, Suite #102 Chaska, MN 55318

(763) 545-4659

lowermnriverwd.org

Cost Share Final Report

Overview

The Final Report documents the entire grant period and must be within 30 days of project completion. The report should be no longer than six pages. Upon staff approval of the report, you will receive the final reimbursement for your grant. Please note, checks are only issued once per month by the District.

Email your report to Linda Loomis, District Administrator, at naiadconsulting@gmail.com. Contact Linda with questions at 763-545-4659 or by email.

naiadconsulting@gmail.com. Contact Linda with questions at 763-545-4659 or by email. Cost Share Grant Final Report Project title: Year grant was awarded: Project location: Project manager's name: Project manager's contact information: Time period addressed in the final report: How much is the reimbursement request? Who should the reimbursement check be made out to? Where should reimbursement check be mailed?

	1.	Summary	of	Mai	or A	ctiv	itie	28
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Provide a short overview of Cost Share activities. Include dates and time periods during which activities were completed and who was involved.

2. Project Goals

Describe how the project addressed one or more of the goals of the Cost Share Program:

- Improve water quality or increase the capacity of the watershed to store water
- Preserve, protect, and restore native plant and wildlife habitats
- Protect and preserve groundwater quality and quantity

3. Educational Value

Describe how the project provided education value regarding the project's environmental benefits. What education and outreach was done about the project and what were the impacts? How were the results of the project shared and with whom?

4. Project Outcomes

- Describe the outcomes of the project.
- Describe what makes you most proud about the project.

5. Project Challenges

- Describe any changes that had to be made to original plans due to site conditions, regulatory processes, etc. and any challenges with implementing the project.
- Indicate any ways in which Nine Mile Creek staff could have better assisted you in addressing the challenges.

6. Project Longevity

- What will the long-term impact of the project be?
- Describe any follow-up projects that will occur because of the Cost Share grant.

7	Dh	otos
7.	rn	otos

•	Provide at least three high resolution photos of the project. If you include the pictures in
	the document file, also email the photos as separate jpg files.

•	Include a	photo of ϵ	each phase	of the p	roject, if	applicable ((before,	during, a	after).
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8. Reimbursement

- How much is the reimbursement request?
- What is the total amount of match?

Submit receipts and/or paid invoices for the reimbursement request and match documentation. Project expenditures without receipts will not be eligible for reimbursement. Copies of paid checks may be asked for with reimbursement requests.

Labor Costs (Contractors, Consultants, In-Kind Labor)

				Re	equested			
				Fu	nds from	М	atching/In-	
Service Provider	Task	# Hours	Rate/Hour	L	.MRWD	К	ind Funds	Total
Ed's Buckthorn Control	Invoice #184 - weed removal			\$	310.00	\$	66.34	\$ 376.34
Ed's Buckthorn Control	Invoice #231 - buckthorn control			\$	-	\$	2,258.03	\$ 2,258.03
Ed's Buckthorn Control	Invoice #260 - planting shrubs & trees			\$	550.00	\$	550.00	\$ 1,100.00
Ed's Buckthorn Control	Invoice #379 - Buckthorn maintenance			\$	-	\$	374.39	\$ 374.39
Ed's Buckthorn Control	Invoice #408 - Seed mix planting			\$	510.00	\$	-	\$ 510.00
Ed's Buckthorn Control	Invoice #428 - Labor for seeding			\$	500.00	\$	-	\$ 500.00
Ed's Buckthorn Control	Invoice #445 - weed control					\$	417.73	\$ 417.73
Ed's Buckthorn Control	Invoice #537 - plant plugs, labor & mulch			\$	630.00			\$ 630.00
		_	Total:	\$	2,500.00	\$	3,666.49	\$ 6,166.49

Project Materials

			Requested		
			funds from	Matching/In-	
Material description	Unit Cost	Total # of Units	LMRWD	Kind Funds	Total
					\$ -
					\$ -
					\$ -
					\$ -
					\$ -
Total: \$ - \$ -					\$ -

 Total Requested Funds from LMRWD*:
 \$ 2,500.00 (A)

 Total Matchin/In-Kind Funds:
 \$ 3,666.49 (B)

 Project Total:
 \$ 6,166.49 (C)

^{*}Please note: total requested funds (A) cannot be more than 50% of the Project Total (C)



Delina Sarazine

11451 Landing Road Eden Prairie, Minnesota 55347

SERVICE ADDRESS:

11451 Landing Road Eden Prairie, Minnesota 55347

Invoice #184	
Issued	May 06, 2021
Due	May 21, 2021
Paid	May 06, 2021
Total	\$376.34
Account Balance	\$0.00

For Services Rendered

PRODUCT / SERVICE	DESCRIPTION	QTY.	UNIT PRICE	TOTAL
May 06, 2021				
Spot Spray Weeds	Spring 2021: Spot spray for garlic mustard, motherwort, burdock, and other invasive/pesky weeds. Backpack sprayer with wand for precise application. Wetland-approved herbicide included. Workers are experts at identifying our target species and licensed herbicide applicators.	1	\$350.00	\$350.00

Subtotal	\$350.00
Minnesota, 80004 District (0.5%)	\$1.75
Minnesota, Hennepin County (0.15%)	\$0.53
Minnesota State (6.875%)	\$24.06
Total	\$376.34
Paid	- \$376.34
Invoice balance	\$0.00





\$0.00

Thank you for your business. Please contact us with any questions regarding this invoice.

Ed's Buckthorn Control, LLC 82-3448968



Delina Sarazine

11451 Landing Road Eden Prairie, Minnesota 55347

SERVICE ADDRESS:

11451 Landing Road Eden Prairie, Minnesota 55347

Invoice #231	
Issued	Jun 23, 2021
Due	Jul 08, 2021
Paid	Jun 29, 2021
Total	\$2,258.03
Account Balance	\$0.00

For Services Rendered

PRODUCT / SERVICE	DESCRIPTION	QTY.	UNIT PRICE	TOTAL
Jun 22, 2021				
Buckthorn Control	Spring 2021: Cut and stump treat buckthorn greater than 3 feet tall. Use some to stabilize slopes. Haul rest of brush to curb for removal.	1	\$1,600.00	\$1,600.00
Brush Removal	Spring 2021: Haul away brush for responsible disposal, usually either burned by the power plant for electricity or burned by a local greenhouse for heat!	1	\$500.00	\$500.00

Subtotal	\$2,100.00
Minnesota, 80004 District (0.5%)	\$10.50
Minnesota, Hennepin County (0.15%)	\$3.15
Minnesota State (6.875%)	\$144.38
Total	\$2,258.03
Paid	- \$2,258.03
Invoice balance	\$0.00





\$0.00

Thank you for your business. Please contact us with any questions regarding this invoice.

Ed's Buckthorn Control, LLC 82-3448968



Delina Sarazine

11451 Landing Road Eden Prairie, Minnesota 55347

SERVICE ADDRESS:

11451 Landing Road Eden Prairie, Minnesota 55347

Invoice #260	
Issued	Jul 29, 2021
Due	Aug 13, 2021
Paid	Jul 29, 2021
Total	\$550.00
Account Balance	\$0.00

For Services Rendered

PRODUCT / SERVICE	DESCRIPTION	QTY.	UNIT PRICE	TOTAL
Jul 16, 2021				
Planting Shrubs/Trees	Spring/Fall 2021: Labor cost for design, species selection, layout, installation, guarding, labeling, and watering. Price is calculated for 11 trees/shrubs that were planted.	1	\$275.00	\$275.00 *
Shrubs/Trees #2 Pot Pot Size. Priced per 20.	Spring/Fall 2021: Native flowering shrubs/trees, #2 pot size. Price is calculated for 11 trees/shrubs that were planted.	1	\$275.00	\$275.00 *

Subtotal	\$550.00
Minnesota, 80004 District (0.5%)	\$0.00
Minnesota, Hennepin County (0.15%)	\$0.00
Minnesota State (6.875%)	\$0.00
Total	\$550.00
Paid	- \$550.00
Invoice balance	\$0.00





* Non-taxable

Thank you for your business. Please contact us with any questions regarding this invoice.

Ed's Buckthorn Control, LLC 82-3448968

\$0.00



Delina Sarazine

11451 Landing Road Eden Prairie, Minnesota 55347

SERVICE ADDRESS:

11451 Landing Road Eden Prairie, Minnesota 55347

Invoice #379	
Issued	Dec 15, 2021
Due	Dec 30, 2021
Paid	Dec 31, 2021
Total	\$374.39
Account Balance	\$0.00

PRODUCT / SERVICE	DESCRIPTION	QTY.	UNIT PRICE	TOTAL
Nov 04, 2021				
Buckthorn Maintenance - Foliar Herbicide Application	Late Fall 2021: Once native plants are dormant, apply herbicide to control smallest buckthorn, and garlic mustard, along with other noxious invasive plants that are still susceptible to herbicide this time of year. Backpack sprayer with wand for precise application. Wetland-approved herbicide included. Workers are experts at identifying our target species and licensed herbicide applicators.	1	\$348.19	\$348.19

Invoice balance	\$0.00
Paid	- \$374.39
Total	\$374.39
Minnesota State (6.875%)	\$23.94
Minnesota, Hennepin County (0.15%)	\$0.52
Minnesota, 80004 District (0.5%)	\$1.74
Subtotal	\$348.19





Hi Delina,

This work was completed back in early November, but the invoice got lost in our software so it didn't get sent out until now. Apologies for the delay.

Happy Holidays,

Ren

Ed's Buckthorn Control

Thank you for your business. Please contact us with any questions regarding this invoice.

Ed's Buckthorn Control, LLC 82-3448968

\$0.00



Delina Sarazine

11451 Landing Road Eden Prairie, Minnesota 55347

SERVICE ADDRESS:

11451 Landing Road Eden Prairie, Minnesota 55347

Invoice #408	
Issued	Jan 12, 2022
Due	Jan 27, 2022
Paid	Jan 20, 2022
Total	\$510.00
Account Balance	\$0.00

PRODUCT / SERVICE	DESCRIPTION	QTY.	UNIT PRICE	TOTAL
Seed - Native Pollinator Mix	Winter 2022: Native pollinator-friendly wildflower seed mix with grasses. near the hot tub and screened porch. Local genotype for best possible outcome. Price per 150 square feet.	1	\$50.00	\$50.00 *
Seed - Woodland Mix	Winter 2022: Shady woodland native plant mix - about 20 wildflowers, plus grasses and sedges. price per 5,000 square feet.	1	\$460.00	\$460.00 *

Subtotal	\$510.00
Minnesota, 80004 District (0.5%)	\$0.00
Minnesota, Hennepin County (0.15%)	\$0.00
Minnesota State (6.875%)	\$0.00
Total	\$510.00
Paid	- \$510.00
Invoice balance	\$0.00





\$0.00

* Non-taxable

Happy New Year!

It's a new year, and that means new beginnings - such as seeding! (paragraph deleted due to character limit. see customer communications if you need to read the original message)

We are currently collecting deposits for seed that we are going to sow this winter. Attached to this email is your quote that includes a seed material line item; we are only invoicing for the seed material right now, because we need to pay for it when we order. We will send another invoice for labor and design once the seeding work is completed. Once seed orders are placed, we will be in touch regarding scheduling. We plan to seed when the conditions are just right, so it will likely happen on short notice.

Looking forward to seeing what comes up in the seasons to come!

(paragraph deleted due to character limit. see customer communications if you



Notes Continued...

need to read the original message)

Thank you for your business. Please contact us with any questions regarding this invoice.

Ed's Buckthorn Control, LLC 82-3448968





Delina Sarazine

11451 Landing Road Eden Prairie, Minnesota 55347

SERVICE ADDRESS:

11451 Landing Road Eden Prairie, Minnesota 55347

Invoice #428	
Issued	Mar 10, 2022
Due	Mar 25, 2022
Paid	Mar 31, 2022
Total	\$500.00
Account Balance	\$0.00

PRODUCT / SERVICE	DESCRIPTION	QTY.	UNIT PRICE	TOTAL
Mar 09, 2022				
Seeding Labor	Spring/Fall 2021: Labor for site prep to maximize seed to soil contact and germination, seed dispersal, and application of seed blankets. Price per ~5,000 square feet	1	\$500.00	\$500.00 *

Subtotal	\$500.00
Minnesota, 80004 District (0.5%)	\$0.00
Minnesota, Hennepin County (0.15%)	\$0.00
Minnesota State (6.875%)	\$0.00
Total	\$500.00
Paid	- \$500.00
Invoice balance	\$0.00





* Non-taxable

Thank you for your business. Please contact us with any questions regarding this invoice.

Ed's Buckthorn Control, LLC 82-3448968

\$0.00



Delina Sarazine

11451 Landing Road Eden Prairie, Minnesota 55347

SERVICE ADDRESS:

11451 Landing Road Eden Prairie, Minnesota 55347

Invoice #445	
Issued	May 04, 2022
Due	May 19, 2022
Paid	May 19, 2022
Total	\$417.73
Account Balance	\$0.00

PRODUCT / SERVICE	DESCRIPTION	QTY.	UNIT PRICE	TOTAL
May 03, 2022				
Spot Spray Weeds	Spring 2021: Spot spray for garlic mustard, motherwort, burdock, and other invasive/pesky weeds. Backpack sprayer with wand for precise application. Wetland-approved herbicide included in estimate, but separate invoice line item. Workers are experts at identifying our target species and licensed herbicide applicators.	1	\$375.00	\$375.00
Herbicide	\$9/gallon	1.5	\$9.00	\$13.50

Subtotal	\$388.50
Minnesota, 80004 District (0.5%)	\$1.94
Minnesota, Hennepin County (0.15%)	\$0.58
Minnesota State (6.875%)	\$26.71
Total	\$417.73
Paid	- \$417.73
Invoice balance	\$0.00





\$0.00

Thank you for your business. Please contact us with any questions regarding this invoice.

Ed's Buckthorn Control, LLC 82-3448968



Delina Sarazine

11451 Landing Road Eden Prairie, Minnesota 55347

SERVICE ADDRESS:

11451 Landing Road Eden Prairie, Minnesota 55347

Invoice #537	
Issued	Jul 19, 2022
Due	Aug 03, 2022
Paid	Jul 20, 2022
Total	\$630.00
Account Balance	\$0.00

PRODUCT / SERVICE	DESCRIPTION	QTY.	UNIT PRICE	TOTAL
Jun 29, 2022				
Plugs	Spring/Fall 2021: Native plant plugs - per tray of 36. Delivery included.	6	\$60.00	\$360.00 *
Plant plugs	Spring/Fall 2021: Layout and planting labor.	1	\$200.00	\$200.00 *
Mulch	1.5 yard natural hardwood shredded mulch, delivery included.	1	\$70.00	\$70.00 *

Subtotal	\$630.00
Minnesota, 80004 District (0.5%)	\$0.00
Minnesota, Hennepin County (0.15%)	\$0.00
Minnesota State (6.875%)	\$0.00
Total	\$630.00
Paid	- \$630.00
Invoice balance	\$0.00





* Non-taxable

Thank you for your business. Please contact us with any questions regarding this invoice.

Ed's Buckthorn Control, LLC 82-3448968

\$0.00









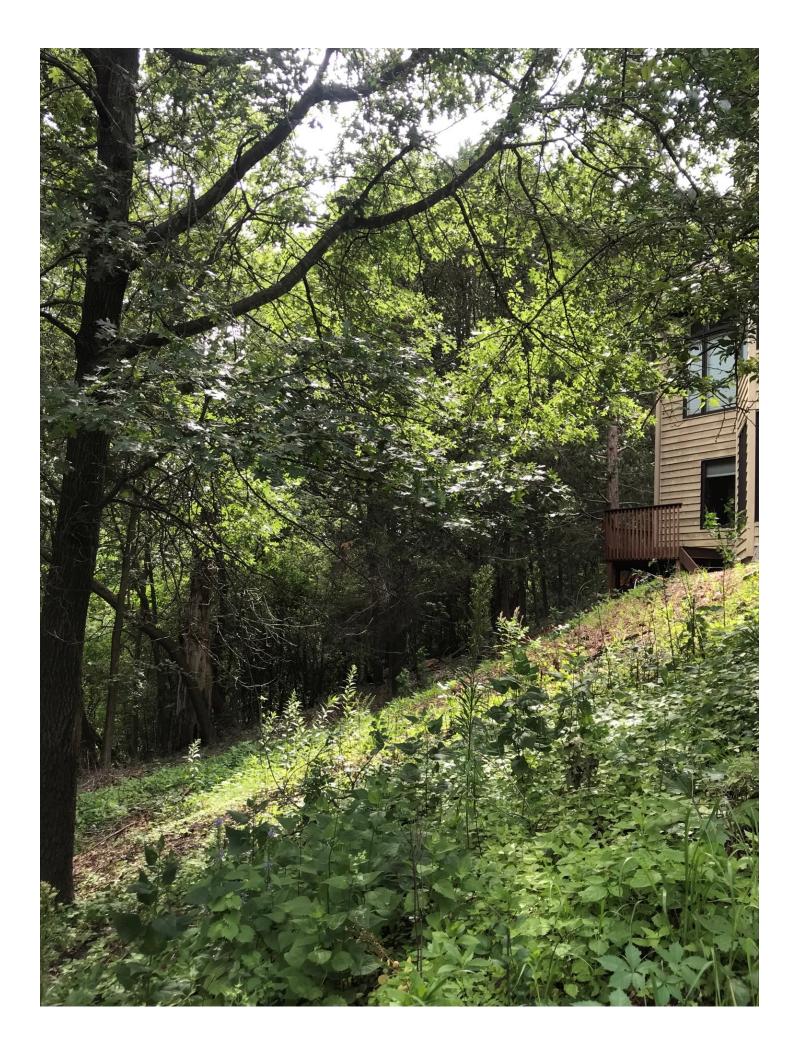














LOWER MINNESOTA RIVER WATERSHED DISTRICT BOARD OF MANAGERS WEDNESDAY, April 21, 2021 MEETING MINUTES

Attorney Kolb said that Manager Mraz might be willing to be the alternate, as it is the responsibilities of the alternate would not be direct and immediate. That way she could attend and be compensated according to the Board compensation polices and it is a good opportunity to learn about watershed planning processes. It would be a great benefit if she were so willing. Manager Mraz said she might be willing to be the alternate, but just can't commit right now to attending additional meetings as she is still working full time. President Hartmann he also has an issue of finding time.

President Hartmann made a motion to appoint Manager Raby as the LMRWD representative to the Lower Minnesota One Watershed One Plan policy committee and to name an alternate at a later date. The motion was seconded by Manager Salvato. Upon a vote being taken the following voted in favor of the motion: Hartmann, Mraz, and Salvato; the following voted against: None. Manager Raby abstained

Manager Mraz asked if it would be possible to appoint an alternate in a month or two. Administrator Loomis said that the Board can appoint someone at any time. She reported that the planning grant is due in June and she was not sure how long it takes for a grant to be approved. The process will not move forward until a grant is received, so it could take a while for any meetings to be scheduled.

B. Authorize 2021 Cost Share project for 11451 Landing Road, Eden Prairie

Administrator Loomis reported that this is an application for the District's Cost Share Program by a homeowner in Eden Prairie that plans to remove invasive species from a steep slope on her property and to address erosion that has been created by roof drains from the home.

Manager Raby said there were some inconsistencies in the application. The Board discussed the inconsistencies. Administrator Loomis noted the applicant has sent a corrected application and that she [Administrator Loomis] has spoken with the contractor. Manager Salvato asked about a previous application to remove buckthorn that the Board tabled. Administrator Loomis noted the District is still working with the other applicant and that some of the concern was that that property was within a home owners association. Manager Raby believed the previous application was only for removal of the buckthorn there were no plans for replacement with species to help mitigate the flow of water. Manager Salvato said she is okay with approving the application, but just wanted to note the application that was received last year.

Manager Raby made a motion to approve the 2021 Cost Share application for 11452 Landing Road. The motion was seconded by Manager Mraz. Upon a vote being taken the following voted in favor of the motion: Hartmann, Mraz, Raby and Salvato; the following voted against: None.

C. Hennepin County Mailing

Administrator Loomis said that the Board directed that a mailing be sent to LMRWD residents living in Hennepin County. She was able to get a list of addresses from Hennepin County and there are more than 7500 individual addresses. She wanted to bring the costs back to the Board for approval, since this mailing will be more costly that the Dakota County mailing.

Manager Raby said he didn't understand why the sizes of the postcard were different in the two proposals. Administrator Loomis said the difference in sizes was just included as options and the one from MPX was based on the Dakota County mailing. Manager Raby said that he supports moving forward with the mailing since the District has money for it in the budget. MAnager Salvato agreed. Manager Mraz thought it was good advertising for the District and made people aware of the existence of the District.

LOWER MINNESOTA RIVER WATERSHED DISTRICT COST SHARE INCENTIVE AND WATER QUALITY RESTORATION PROGRAM

Cost Share Grant Agreement

The parties to this Agreement, made this 24th day of May, 2021 are the Lower Minnesota River Watershed District, a Minnesota Watershed District ("LMRWD") a public body with purposes and powers set forth in Minnesota Statutes Chapters 103B and 103D and Delina Sarazine ("APPLICANT"). The purpose of this Agreement is to provide for the installation and maintenance of a project designed to protect and improve natural resources within the District. by managing storm water and said project to be located at: 11451 Landing Road, Eden Prairie, MN 55437.

- 1. Scope of Work. APPLICANT will install the Project in accordance with the Application submitted to the LMRWD, attached as Exhibit A. A written final report must be presented to the LMRWD at the time a request is made for reimbursement of expenses as specified in Section 2 of this Agreement.
- 2. Reimbursement. When the installation of the project is complete in accordance with Exhibit A, the LMRWD, on receipt of adequate documentation, will reimburse the APPLICANT 50% of the project cost: including materials, equipment rental, delivery and labor, in an amount not to exceed \$2,500. APPLICANT will document all costs with receipts for all direct expenditures. At the time reimbursement is requested, APPLICANT will provide the LMRWD with a written final report and copies of all documents concerning the work.
- 3. Public Access. LMRWD may enter APPLICANT's property at reasonable times to inspect the work to ensure compliance with this Agreement and monitor or take samples for the purpose of assessing the performance of the Project. APPLICANT will permit the LMRWD, at its cost and discretion, to place reasonable signage on APPLICANT's property informing the general public about the Project and the LMRWD's Cost Share Incentive and Water Quality Restoration Program. Any signage proposed by the APPLICANT will acknowledge the LMRWD's contribution to the project. This may be in lieu of signage the LMRWD may wish to place.

APPLICANT will cooperate with the LMRWD in permitting members of the public periodically to enter APPLICANT's property to view the Project in the company of a LMRWD representative. This paragraph does not create any right of public entry onto APPLICANT's property except as coordinated with APPLICANT and accompanied by a LMRWD representative.

- 4. Maintenance. APPLICANT will maintain the Project for at least ten (10) years from the date installation is complete. If APPLICANT does not do so, the LMRWD will have a right to reimbursement of all amounts paid to APPLICANT, unless:
 - a) The LMRWD determines that the failure to maintain the Project was caused by reasons beyond the APPLICANT's control; or
 - b) APPLICANT has conveyed the underlying property, provided APPLICANT notifies the LMRWD at least 30 days before the property is conveyed and facilitates communication between the LMRWD and the prospective owner regarding continued maintenance of the project.
- 5. Agreement Void. This Agreement is void if the project installation in not complete by November 1, 2021. This Agreement may not be modified in any way except in writing and signed by both parties.
- 6. <u>Indemnification</u>. The LMRWD will be held harmless against any and all liability and loss in connection with the installation of the Project.
- 7. <u>Compliance with Laws.</u> APPLICANT is responsible to comply with any permits or other legal requirements applicable to the work.
- 8. <u>Notices.</u> Any notice or demand, authorized or required under this Agreement shall be in writing and shall be addressed to the other party as follows:

To LMRWD:

Administrator Lower Minnesota River Watershed District 112 East Fifth Street, Suite 102 Chaska, MN 55318

To Applicant:

Delina Sarazine 11451 Landing Road Eden Prairie, MN 55347

The parties being in agreement to be signed as follows:

APPLICANT:
River Watershed District

By: Delina Javafine 5/24/2021 By: Jon Salamus

Linda Loomis,

Administrator

Date:

Date:

6/3/2021



Executive Summary for Action

Lower Minnesota River Watershed District Board of Managers Meeting Wednesday, April 21, 2021

Agenda Item

Item 5. B. - Authorize 2021 Cost Share Project for 11451 Landing Road, Eden Prairie

Prepared By

Linda Loomis, Administrator

Summary

The LMRWD received an application for a cost share project at 11451 Landing Road in Eden Prairie. The homeowner plans to clear a large portion of the property of buckthorn, honeysuckle, garlic mustard and other invasive species and plant native understory trees. This property is steeply sloped and topography maps have been included.

The home has several roof drains that have caused erosion of the slope at the outfalls of the drains. In addition, much of the slope is vegetated with buckthorn and honeysuckle (also an invasive). The previous homeowner used wood mulch in these areas, which has been washing away down the slope. The areas where the roof drains outfall receives enough sunlight to allow for deep-rooted plants to be planted. The homeowner has worked with a landscaper, Ed's Buckthorn Control, to plan for these areas to be planted with native species that will attract pollinators. This property is adjacent to the Minnesota River floodplain.

This project will diffuse water coming from the roof drains by planting deep-rooted native species in the roof drain outfall areas. It will remove invasive species on the steep slope and establish native understory trees and shrubs to reduce erosion

There is a wetland at the bottom of the steep slope and a city trail is adjacent to the property. The homeowner has approved placement of signage acknowledging the LMRWD.

Attachments

Proof of ownership/location map
2021 Cost Share Application
Quote from Ed's Buckthorn Control
2021 Cost Share worksheet
Wildflower planting plan
2 maps of property with 2' contour lines
Overhead of home with roof square footage
Overhead planting plan
City of Eden Prairie permit application (includes overhead showing project area and seed mix lists)

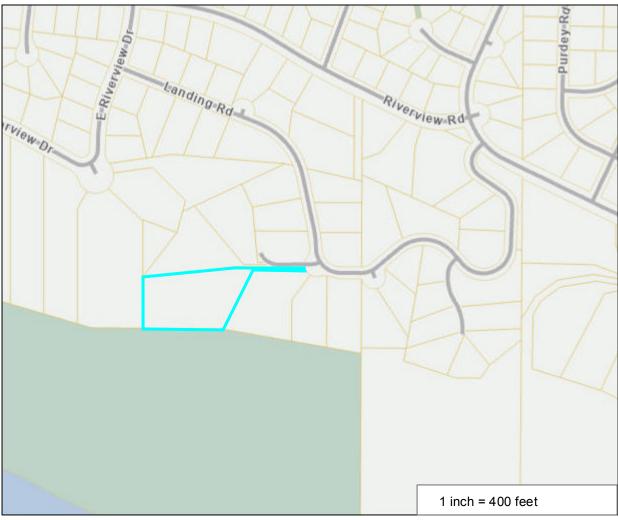
Recommended Action

Motion to authorize 2021 Cost Share Incentive and Water Quality Restoration Program application for 11451 Landing Road, Eden Prairie.



Hennepin County Property Map

Date: 4/16/2021



PARCEL ID: 3511622410019

OWNER NAME: M R Sarazine & D Sarazine

PARCEL ADDRESS: 11451 Landing Rd, Eden Prairie MN 55347

PARCEL AREA: 2.23 acres, 97,096 sq ft

A-T-B: Torrens

SALE PRICE: \$920,000

SALE DATA: 03/2017

SALE CODE: Warranty Deed

ASSESSED 2020, PAYABLE 2021 PROPERTY TYPE: Residential HOMESTEAD: Homestead MARKET VALUE: \$968,400 TAX TOTAL: \$12,864.94

ASSESSED 2021, PAYABLE 2022 PROPERTY TYPE: Residential HOMESTEAD: Homestead MARKET VALUE: \$997,500

Comments:

This data (i) is furnished 'ASIS' with no representation as to completeness or accuracy; (ii) is furnished with no warranty of any kind; and (iii) is notsuitable for legal, engineering or surveying purposes. Hennepin County shall not be liable for any damage, injury or loss resulting from this data.

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Cost share grant application 2021

Application type (check one) X Homeowner
Non-profit - 501(c)(3)
School
Business or corporation Public agency or local government unit
Project type (check all that apply) Raingarden
Vegetated Swale
Infiltration Basin
Wetland restoration
Lake/creek/wetland buffer
Conservation practice
XShoreline/bank stabilization Pervious hard surfaceXOther:_Terrestrial invasive plant removal both upland and wetland border, native habitat reconstruction
Applicant Information
Name of Organization or Individual Applying for Grant (to be named as Grantee):
Delina Sarazine
Address (street, city and ZIP code): 11451 Landing Rd Eden Prairie, MN 55347
Phone: 651-295-4936 Email address: delina216@hotmail.com
Islian addressdeiliaz ro@notmail.com
Primary Contact (if different from above)
Name of Organization or Individual Applying for Grant (to be named as Grantee):
Address (street, city and ZIP code):
Phone:_ Email address:_
Project location
Address (street, city and ZIP code):
1451 Landing Rd Eden Prairie, MN 55347
Property Identification Number (PID) 511622410019

Property Owners:
Delina & Michael Sarazine
Project Summary Title Sarazine Habitat Restoration amount requested \$2,500 (or higher if allowed) ASAP) Estimated completion date Fall 2021 remains on site Yes, indirectly X Yes, directly adjacent Total Project Cost \$6,357.04 Grant Estimated start date Spring 2021 (orIs project tributary to a water body?_No, water
Project description:
Our land is directly adjacent to the Minnesota River's floodplain, and has several problems which contribute to low quality of the River: erosion on steep sandy slopes, invasive plant species (upland and wetland edge), and lack of native understory and groundcover plants due to buckthorn's bullying traits. We propose to improve the quality of the Minnesota River by: 1. stabilizing the slopes with "wind rows" of brush in order to cause water runoff to slow down, spread out, and sink in 2. removing invasive plants such as garlic mustard and common & glossy buckthorn, to allow a diverse native plant community (especially groundcover species) to reestablish where there is currently bare soil 3. Install native plant plugs, seeds, shrubs, and trees to provide habitat for our pollinators and promote a cohesive ecosystem. 4. Maintain plantings, manage new invasive species that come up from seed, replace plants that fail, and maintain slope stabilization.
Is this work required as part of a permit? X No Yes (If yes; describe how the project provides water quality treatment beyond permit requirement on a separate page.)
Project Details
Checklist To be considered complete the following must be included with the application.
X location map X project timeline
X site plan & design schematic X proof of property ownership
X itemized budget or contractor bid X plant list &planting plan (if project includes
plants)
Description Describe the current site conditions, as well as site history, and past management

Currently, the parcel consists of a pond, which flows to the proposed work area via a culvert. After leaving the culvert, water has eroded trenches on its way to the MN River. By viewing past maps, we can see that the area was previously a transition between prairie and Oak woodland/savannah. After nearby settlement and fire suppression, new species were able to establish and change the ecosystem. After development, invasive species moved in, and have been ousting the native plants and severely decreasing diversity, and runoff from impervious surfaces has been funneled, which erodes trenches of soil. Furthermore, buckthorn is known to create bare soil, which accelerated erosion. Last year, we removed invasive species and installed native seed around the pond, so this project is the logical next step, working downstream.

What are the project objectives and expected outcomes? Give any additional project details.

If the invasive plants are allowed to keep going unchecked, there will not be any new native trees to take the place of their parents when they eventually fall. Monocultures of buckthorn create bare soil, which causes erosion to

quicken. Runoff from the house travels down the steep slope full of buckthorn, and into the drainage wetland before flowing directly into the Minnesota River.

Our goals are to remove invasive species, introduce native species that will not only reduce erosion and improve habitat for pollinators and birds, but also fend off invasive seedlings and future invasions. Diversity is key to holding soil on slopes, so we will plant and seed diverse native species with diverse root system types to prevent future erosion. The slope along the drainage wetland edge will be planted with willows and dogwoods to further bolster the soil and provide habitat for pollinators and birds.

Roof runoff will be managed with a pseudo-rain garden. Most of the roof runoff is combined via French drain to one pipe, so there is a lot of water moving in a concentrated area. The slope is too steep for a rain garden basin unless a retaining wall is installed, so we will plant plugs on the slope in the same design arrangement as a rain garden with tiers like stairs to help make the water slow down, spread out, and sink in, rather than run off and cause erosion.

List other key participants and their roles (provide contact information for each partner and his/her expected contribution to the project)

Ed's Buckthorn Control is hired for design, implementation, and some early maintenance.

Which cost share goals does the project support? (check all that apply)

- X increase awareness of the vulnerability of watershed resources
- X increase familiarity with and acceptance of solutions to improve

waters How does the project support the goals you checked?

The project will improve water contributing to the Minnesota River by reducing erosion, sediment and filtering roof runoff. The project will also serve as an example to my community (there is a city owned path frequented by residents that cuts through our property to access the preserve area of Minnesota River and also is used by many within our association). Our direct neighbors are eager to promote healthier landscapes within their own yards and many others in our association that have property adjacent to the preserve area. I am part of a MN Gardener's group on Facebook and also a member of our associations' Facebook group, I already have discussed previous experiences in promoting other areas of our properties with these groups. I will be taking before and after photos of this project and plan to share its progress, our experiences with our community and what we have learned to continue to encourage residents to foster water resource stewardships as well.

Project Details (continued)

Benefits Estimate the project benefits in terms of restoration and/or **annual** pollution reduction. If you are working with a designer or contractor, they can provide these numbers. If you need help contact the district Administrator.

Our roof is about 3900 square feet and the land to be restored in this project is around 7500 square feet where buckthorn will be removed and replaced with native plants. This project will provide a more natural landscape to collect rainwater, diffuse it and allow for infiltration where it falls. *Per discussion with administrator it is

appropriate to leave fields in table below blank since statement above provides square footage and therefore should be sufficient.

Benefit	Amount
Water captures	gal/year
Water infiltrated	gal/year
Phosphorus removed	lbs/year
Sediment removed	lbs/year
Land restored	7,500 sq. ft.

How will you share the project results with your community?

As mentioned in the project goals section, I plan to share the project before and after results with my association and fellow gardener community via groups I am part of on Facebook. Our property is frequented by many within our city/association due to a public path that cuts through our property. The path will direct this 'traffic' right by our project area and I am very excited for these members of our community to see the results first hand over time as the native seeds/plants continue to outcompete the invasive plants that have bombarded this area prior to us living in our home.

Are there other projects that could be initiated as a result of this one?

Yes, The next area to remediate is the dry prairie uphill of the driveway. It has struggled because of the invasion of red cedar, and has invasive species. Ed's Buckthorn Control will be observing this year to determine impairment and goals.

Evaluation

How will the project be monitored and evaluated?

Ed's Buckthorn Control will monitor the project for invasive species, success of plantings, plant cages, and slope stabilization, and water flow. I will also observe water movement from the pipes to make sure these interventions remain in place and maintain their functionality. If these interventions become compromised, I will report to Ed's buckthorn control to fix (or have them give me instruction on how to fix myself if applicable). I will also take photos monthly during the growing season from the same perspectives, to show progress of the project, and follow the reporting guidelines outlined by the LMRWD.

Maintenance agreement

I acknowledge that receipt of a grant is contingent upon agreeing to maintain the project for the number of years outlined in the cost share guidelines. X Yes

Authorization

Name of landowner or responsible party_

Type or handwrite your answers on this form. Attached additional pages as needed

(For questions, contact Linda Loomis at Naiad Consulting@gmail.com or call 763-545-4659.) Mail the completed application to: or Email to:

Lower Minnesota River Watershed District Linda Loomis,

Administrator Linda c/o Administrator naiadconsulting@gmail.com 112 E. Fifth St., Suite 102

Loomis,

Chaska, MN 55318



RECIPIENT:

Delina Sarazine

11451 Landing Road Eden Prairie, Minnesota 55347

Quote #64	
Sent on	Aug 20, 2020
Total	\$5,980.70

SERVICE ADDRESS:

11451 Landing Road Eden Prairie, Minnesota 55347

PRODUCT / SERVICE	DESCRIPTION	QTY.	UNIT COST	TOTAL
Buckthorn Control	Spring 2021: Cut and stump treat buckthorn greater than 3 feet tall. Use some to stabilize slopes. Haul rest of brush to curb for removal.	1	\$1,600.00	\$1,600.00
Brush Removal	Spring 2021: Haul away brush for responsible disposal, usually either burned by the power plant for electricity or burned by a local greenhouse for heat!	1	\$500.00	\$500.00
Spot Spray Weeds	Spring 2021: Spot spray for garlic mustard, motherwort, burdock, and other invasive/pesky weeds. Backpack sprayer with wand for precise application. Wetland-approved herbicide included. Workers are experts at identifying our target species and licensed herbicide applicators.	1	\$350.00	\$350.00
Planting Shrubs/Trees	Spring/Fall 2021: Labor cost for design, species selection, layout, installation, guarding, labeling, and watering. Price per 20 shrubs/trees	1	\$500.00	\$500.00 *
Shrubs/Trees #2 Pot Pot Size. Priced per 20.	Spring/Fall 2021: Native flowering shrubs/trees, #2 pot size. Price per 20 shrubs	1	\$500.00	\$500.00 *
Wire Fencing	Spring/Fall 2021: 4 foot tall welded wire fencing to deter rodents and deer from destroying planted shrubs/trees. Shipping and stakes included. Price per 20 shrubs' worth = 200 feet.	1	\$300.00	\$300.00 *
Bare root Shrub/Tree seedlings	Spring/Fall 2021: Bare root seedlings/live stakes per 20	1	\$100.00	\$100.00 *
Seeding Labor	Spring/Fall 2021: Labor for site prep to maximize seed to soil contact and germination, seed dispersal, and application of seed blankets. Price per ~5,000 square feet	1	\$500.00	\$500.00 *
Seed - Native Pollinator Mix	Spring/Fall 2021: Native pollinator-friendly wildflower seed mix with grasses. near the hot tub and screened porch. Local genotype for best possible outcome. Price per 150 square feet.	1	\$50.00	\$50.00 *





PRODUCT / SERVICE	DESCRIPTION	QTY.	UNIT COST	TOTAL
Seed - Woodland Mix	Spring/Fall 2021: Shady woodland native plant mix - about 20 wildflowers, plus grasses and sedges. price per 5,000 square feet.	1	\$460.00	\$460.00 *
Plugs	Spring/Fall 2021: Native plant plugs - per tray of 36. Delivery included.	6	\$60.00	\$360.00 *
Plant plugs	Spring/Fall 2021: Layout and planting labor.	1	\$200.00	\$200.00 *
Buckthorn Maintenance - Foliar Herbicide Application	Late Fall 2021: Once native plants are dormant, apply herbicide to control smallest buckthorn, and garlic mustard, along with other noxious invasive plants that are still susceptible to herbicide this time of year. Backpack sprayer with wand for precise application. Wetland-approved herbicide included. Workers are experts at identifying our target species and licensed herbicide applicators.	1	\$350.00	\$350.00

	Subtotal	\$5,770.00
* Non-taxable	Minnesota, 80004	\$14.00
Delina,	District (0.5%)	
We guarantee no buckthorn will re-sprout from the stumps we cut and treat with our wick dauber method, or we will treat them again for no additional cost.	Minnesota, Hennepin County (0.15%)	\$4.20
Please share your thoughts and questions as they arise. Thanks! Ed	Minnesota State (6.875%)	\$192.50

This quote is valid for the next 30 days, after which values may be subject to change.





Total

\$5,980.70

Labor Costs (Contractors, Consultants, In-Kind Labor)

				Requested		
				Funds from	Matching/In-	
Service Provider	Task	# Hours	Rate/Hour	LMRWD	Kind Funds	Total
Ed's Buckthorn Control	Buckthorn control			\$ 800.00	\$ 800.00	\$ 1,600.00
	Brush removal			\$ 250.00	\$ 250.00	\$ 500.00
	Spot spray weeds			\$ 175.00	\$ 175.00	\$ 350.00
	Planting shrubs/trees			\$ 250.00	\$ 250.00	\$ 500.00
	Seeding labor			\$ 250.00	\$ 250.00	\$ 500.00
	Buckthorn maintenance			\$ -	\$ 350.00	\$ 350.00
	•	-	Total:	\$ 1,725.00	\$ 2,075.00	\$ 3,800.00

Project Materials

Jeet Waterials					
			Requested		
			funds from	Matching/In-	
Material description	Unit Cost	Total # of Units	LMRWD	Kind Funds	Total
Shrubs/trees #2 pots			\$ 250.00	\$ 250.00	\$ 500.00
Wire fencing (to protect trees, shrubs and seedlings from deer)			\$ 40.00	\$ 260.00	\$ 300.00
Bare root shrub/tree seedlings			\$ 50.00	\$ 50.00	\$ 100.00
Seed - Native pollinator mix			\$ 25.00	\$ 25.00	\$ 50.00
Seed - Woodland mix			\$ 230.00	\$ 230.00	\$ 460.00
Plugs			\$ 180.00	\$ 180.00	\$ 360.00
Plant plugs			\$ -	\$ 200.00	\$ 200.00
Sales taxes				\$ 210.70	\$ 210.70
		Total:	\$ 775.00	\$ 1,405.70	\$ 2,180.70

Total Requested Funds from LMRWD*: \$ 2,500.00 (A)

Total Matchin/In-Kind Funds: \$ 3,480.70 (B)

Project Total: \$ 5,980.70 (C)

^{*}Please note: total requested funds (A) cannot be more than 50% of the Project Total (C)

SARAZINE



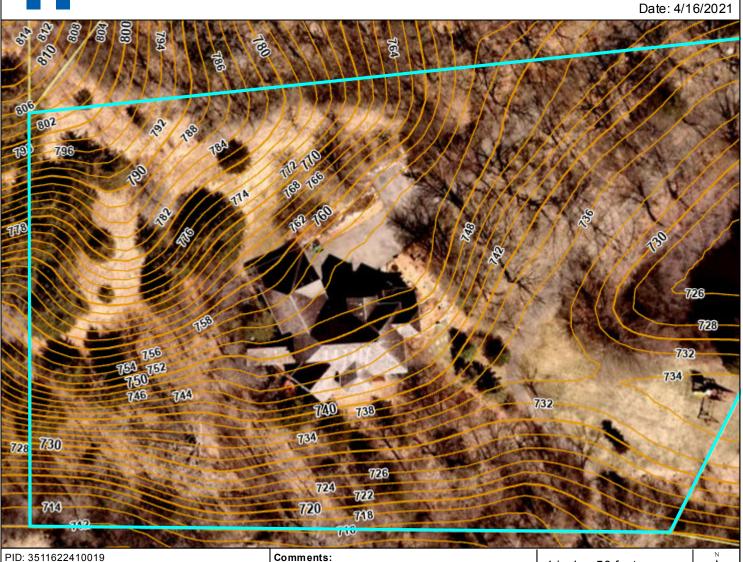
Hennepin County Natural Resources Map

Legend

2 Foot Elevation Contours

Index

Intermediate



PID: 3511622410019 Address: 11451 LANDING RD,

EDEN PRAIRIE

Owner Name: M R SARAZINE

& D SARAZINE Acres: 2.23

1 inch = 50 feet



This data (i) is furnished 'AS IS' with no representation as to completeness or accuracy; (ii) is furnished with no warranty of any kind; and (iii) is notsuitable for legal, engineering or surveying purposes. Hennepin County shall not be liable for any damage, injury or loss resulting from this data.

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Hennepin County Natural Resources Map

Legend

2 Foot Elevation Contours

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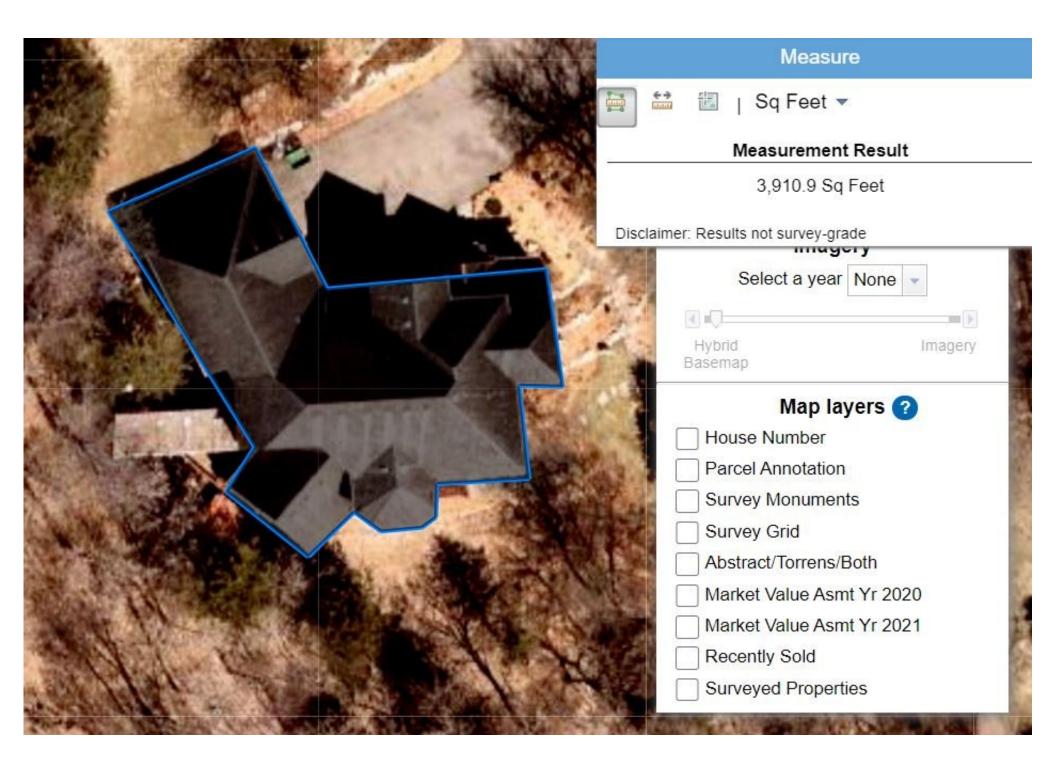
& D SARAZINE Acres: 2.23 Comments:

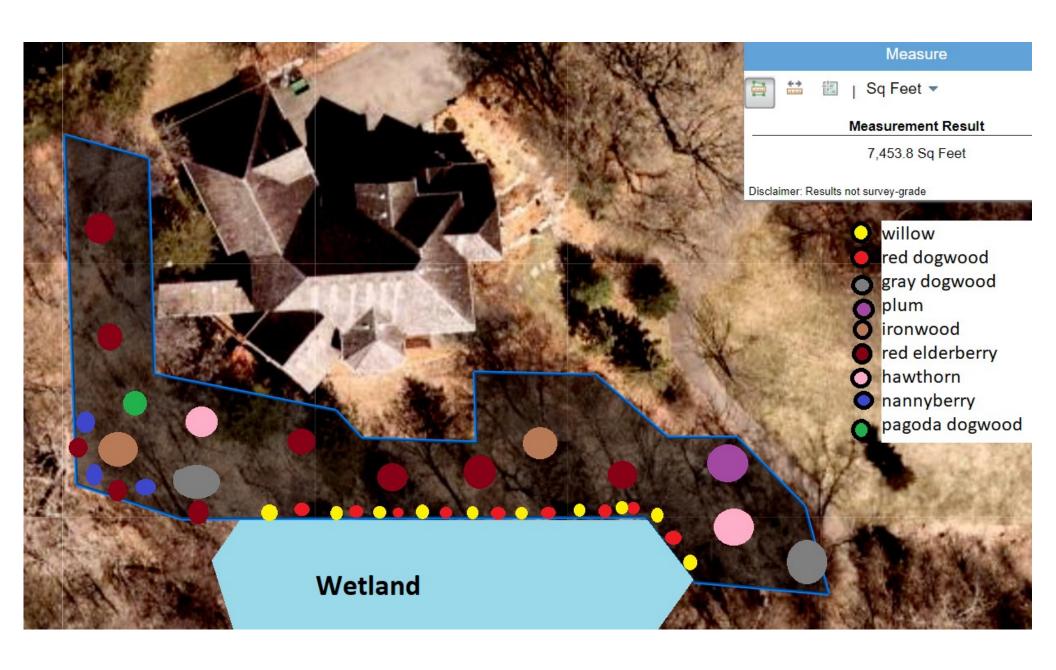
1 inch = 200 feet



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APPLICATION FOR PERMIT

Vegetation Management Plan Application

Send Completed Application To:

Leslie Stovring, Water Resources Coordinator

8080 Mitchell Road Eden Prairie, MN 55344

Phone: 952-949-8327 / Fax: 952-949-8326

Email: lstovring@edenprairie.org

FOR OFFICE USE ONLY

Approval: 245

Date: __March 3, 2021

Revised 4/2/2021

Expiration Date: __

December 31, 2021



Project Location / Address:		
11451 Landing Road E	Eden Prairie MN 55	347
Property Owner: Michael & Delina Sarcatine	Tel. No. / Email Address Co51-295-493 Co delina 2162 hotmail.	Address 1145/ Landing Road Eden Prairie MN SS347
Applicant (if not the same):	Tel. No. / Email Address	Address
Delina Saratine	(/	"
Association Contact (if applicable):	Tel. No. / Email Address	Address
Contractor / Person Performing	Tel. No. / Email Address	Address
Work: Ed's Buckthom Control	(612) 564-5771	14702 Excelsion Blvd #1245 minnetonka MN 55345
attached trosectiffe	a wagnam out in	Stump freat all Bucktham thin Project Area (See din Blue)
Species to be Removed (including annro	ox. number of each): C (344 144 ct.	a Duck thouse (2)H
Tatarian foneysvekly	(30), Colossy Buck	thom (30), garlic Mustard
Due to proximity to water, a wat	ter-safe approved herbicide is re	equired, such as Rodeo
Type of Herbicide(s) proposed (if applic	cable) including Application Metho	ods, Rates and Locations: er 22.2% Triclopyr 3a
Workers are Licenser	d Herbicido Apo	licators
WY That H . The American		
All Employees are t	tighty Trained	to Identify ? Remove
Only Target Species	Whale Being Crew	to Identify: Remove He to Native Species XRI Flags USE
Species to be Seeded and/or Planted:	1 7 especial in with	n Native Plant Seeding
distributed three	oughout the Project	are (see attached seed mix
Property Restrictions Present (conserva	tion easement, drainage easement,	shoreland zone, steep slopes, etc.):
City Property /	Steep Slopes - Okay to cross or	nto city property for buckthorn removal
Proposed Start Date: Late march Exact Date Cost Shad Gare		etion Date: May June 2021 f Invance species (Phase 2)

PERMIT REQUIREMENTS

- Evaluate City Codes Sections 9.01 (Storage, Deposit and Collection of Refuse, Yard Waste, Recyclable Waste and Solid Waste) and 9.71 (Maintenance of Vegetation), prior to authorization of the proposed activities.
- Submit a Vegetation Management Plan (Plan) for review and approval with this Application. The Plan must include a property survey or diagram showing the location of vegetation to be removed, vegetation to be planted, and temporary storage areas. Conservation easements, city property or shoreland protection areas must be included on the diagram. Photographs of the project area must be provided with the Plan. Projects that go beyond one year in length must include a Plan prepared by a professional landscape firm that provides all required information.
- <u>Include</u> planting and/or seeding methods; schedule; types and sizes of replacement plants; seed mix proposed for disturbed areas; watering plan; types and methods of application for herbicide; marking plan for indicating unwanted plants to be removed; method of disposal for vegetation removed; and any other information required by the City to determine that all project needs are met.
- Contact the city after the marking is complete and before work begins to ensure all marking is accurate and meets the requirements of work in protected areas.
- Schedule an onsite evaluation with the City Forester prior to starting work. A qualified arborist or native plant specialist must identify and mark vegetation proposed for removal prior to the final City inspection.
- Keep a copy of the approved Plan on the job site at all times. The approved permit must be exhibited upon request.
- Protect all existing utility installations.
- Notify the City that the work is completed and ready for final inspection within 24 hours of completion of the work authorized in this permit.
- Keep public streets, trails or sidewalks free of mud, dirt, dust, yard waste, debris, etc.
- No power equipment use allowed on City property, including chain saws, string trimmers, lawn mowers, etc. without prior written approval from the City. A "Volunteer Waiver" will also be required.
- The information on this Application may be distributed to neighboring property owners by the City for comment prior to approval of the Application.

As owner(s) and/or applicant(s) at the above address we hereby request to alter the plant composition at the location listed above. As owner(s) and/or applicant(s) with a shoreland protection area, conservation easement, wetland and/or public water we understand the area abutting a natural area may be regulated by City Code and/or a conservation easement. Vegetation cutting, removal or addition is limited. It is expressly understood that this permit is conditioned on replacement or restoration of the work site to its original or better conditions. The Application must be approved by the City prior to commencing work.

I, We, the undersigned hereby accept the terms and conditions and regulations as set forth and agree to fully comply therewith to the City of Eden Prairie, Minnesota. Furthermore, the applicant or his agents or contractor shall assume all liability for, and save the City, its agents and employees, harmless from any and all claims for damages, actions or causes of action arising out of the work to be done herein and the continuing usage, constructing, reconstructing, maintaining and using of said obstruction under this application and/or permit.

Date: 3/2/2021 Owner/Applicant Name: Deliver Saratine
Owner/Applicant Signature:
AUTHORIZATION OF PERMIT
In consideration of the agreement to comply in all respects with regulations of the City of Eden Prairie, MN covering such work, permission is hereby granted for the work to be done as described in the above application, said work to be done in accordance with special precautions as stated in City Code, including Sections 9.01, 9.06, 11.50 and 11.51.
Date: March 3, 2021 City (Signature): Like Strong
Title: Water Resources Coordinator





MNL Buckthorn Replacement Mix

8740 77th Street NE Otsego, MN 55362

Plant after buckthorn removal to restore native grasses and provide fuel for a prescribed burn. Height 2-4'

	Scientific Name	Common Name	% of Mix	Seeds/ Sq Ft	PLS lbs/ac	Bloom Season
Grasses:	Bouteloua curtipendula	Side-Oats Grama	7.50	2.47	0.68	
	Bromus pubescens	Hairy Wood Chess	8.00	2.01	0.72	
	Elymus canadensis	Canada Wild Rye	6.00	1.03	0.54	
	Elymus hystrix	Bottlebrush Grass	15.00	3.77	1.35	
	Elymus villosus	Silky Wild Rye	20.00	3.64	1.80	
	Elymus virginicus	Virginia Wild Rye	25.00	3.47	2.25	
	Panicum virgatum	Switchgrass	4.00	1.85	0.36	
	Schizachyrium scoparium	Little Bluestem	7.50	3.72	0.68	
Sedges:	Carex sprengelii	Long-Beaked Sedge	7.00	2.31	0.63	
	·		100.00	24 27	9.00	

Seeds/sq ft:24.00Grass Species:8Sedge Species:1



MNL Savanna Mix Shortgrass

8740 77th Street NE Otsego, MN 55362

Great mix for part-sun oak savanna and woodland edge sites with 25-50% tree cover. Grass height 2-3'

			% of	Seeds/	PLS	Bloom
	Scientific Name	Common Name	Mix	Sq Ft	lbs/ac	Season
Grasses:	Bouteloua curtipendula	Side-Oats Grama	18.00	7.89	2.16	
	Bromus kalmii	Prairie Brome	4.00	1.41	0.48	
	Elymus villosus	Silky Wild Rye	9.00	2.18	1.08	
	Elymus virginicus	Virginia Wild Rye	15.00	2.78	1.80	
	Koeleria macrantha	Junegrass	0.25	1.93	0.03	
	Schizachyrium scoparium	Little Bluestem	17.00	11.24	2.04	
Sedges/Rushes:	Carex bicknellii	Bicknell's Sedge	2.75	2.06	0.33	
	Carex normalis	Greater Straw Sedge	5.00	5.51	0.60	
	Carex radiata	Eastern Star Sedge	3.00	5.42	0.36	
	Carex sprengelii	Long-Beaked Sedge	6.00	2.64	0.72	
Forbs:	Achillea millefolium	Yarrow	0.15	1.16	0.02	Summer
	Agastache foeniculum	Fragrant Giant Hyssop	0.35	1.39	0.04	Summer
	Amorpha canescens	Leadplant	0.50	0.35	0.06	Summer
	Anemone canadensis	Canada Anemone	0.25	0.09	0.03	Spring
	Antennaria neglecta	Field Pussytoes	0.15	2.73	0.02	Spring
	Aquilegia canadensis	Columbine	0.20	0.33	0.02	Spring
	Asclepias syriaca	Common Milkweed	1.25	0.22	0.15	Summer
	Ceanothus americanus	New Jersey Tea	0.50	0.17	0.06	Summer
	Chamerion angustifolium	Fireweed	0.10	2.20	0.01	Summer
	Dalea purpurea	Purple Prairie Clover	5.00	3.31	0.60	Summer
	Desmodium canadense	Canada Tick Trefoil	2.75	0.67	0.33	Summer
	Lespedeza capitata	Round-headed Bushclover	1.00	0.35	0.12	Summer
	Liatris aspera	Rough Blazing Star	0.20	0.14	0.02	Summer
	Lupinus perennis	Wild Lupine	0.50	0.02	0.06	Spring
	Monarda fistulosa	Wild Bergamot	0.60	1.85	0.07	Summer
	Oenothera biennis	Common Evening Primrose	0.70	2.78	0.08	Fall
	Rosa arkansana	Prairie Rose	0.25	0.01	0.03	Summer
	Rudbeckia hirta	Black Eyed Susan	1.25	5.07	0.15	Summer
	Rudbeckia triloba	Brown-Eyed Susan	1.00	1.50	0.12	Summer
	Solidago nemoralis	Gray Goldenrod	0.25	3.31	0.03	Fall
	Solidago rigida	Stiff Goldenrod	1.00	1.81	0.12	Fall
	Symphyotrichum lateriflorum	Calico Aster	0.30	3.31	0.04	Fall
	Symphyotrichum oolentangiense	Sky Blue Aster	0.35	1.23	0.04	Fall
	Verbena stricta	Hoary Vervain	0.75	0.93	0.09	Summer
	Veronicastrum virginicum	Culver's Root	0.15	5.29	0.02	Summer
	Zizia aurea	Golden Alexanders	0.50	0.24	0.06	Spring
0 1/ 6			100.00	83.51	12.00	

Seeds/sq ft: 84.00
Grass Species: 6

Sedge/Rush Species: 4
Forb Species: 26



MNL Pollinator Mix Dry to Mesic Soils

8740 77th Street NE Otsego, MN 55362

Mix approved by the Xerces Society for Pollinator habitat enhancement and restoration. For dry and well-drained to mesic soils. Height 2-3'

			% of	Seeds/	PLS	Bloom
	Scientific Name	Common Name	Mix	Sq Ft	lbs/ac	Season
Grasses:	Bouteloua curtipendula	Side-Oats Grama	16.75	6.12	1.68	
	Bouteloua gracilis	Blue Grama	4.00	5.88	0.40	
	Bromus kalmii	Prairie Brome	3.00	0.88	0.30	
	Elymus trachycaulus	Slender Wheat Grass	2.00	0.51	0.20	
	Koeleria macrantha	Junegrass	0.25	1.61	0.03	
	Schizachyrium scoparium	Little Bluestem	16.00	8.82	1.60	
	Sporobolus heterolepis	Prairie Dropseed	2.00	1.18	0.20	
Sedges/Rushes:	Carex bicknellii	Bicknell's Sedge	1.00	0.62	0.10	
Forbs:	Achillea millefolium	Yarrow	0.20	1.29	0.02	Summer
	Agastache foeniculum	Fragrant Giant Hyssop	0.60	1.98	0.06	Summer
	Allium stellatum	Prairie Onion	0.60	0.24	0.06	Summer
	Amorpha canescens	Leadplant	3.00	1.76	0.30	Summer
	Anemone canadensis	Canada Anemone	0.75	0.22	0.08	Spring
	Asclepias speciosa	Showy Milkweed	0.50	0.08	0.05	Summer
	Asclepias syriaca	Common Milkweed	1.75	0.26	0.18	Summer
	Asclepias tuberosa	Butterfly Milkweed	1.50	0.24	0.15	Summer
	Astragalus canadensis	Canada Milk Vetch	2.00	1.25	0.20	Summer
	Chamaecrista fasciculata	Partridge Pea	7.00	0.69	0.70	Fall
	Coreopsis palmata	Prairie Coreopsis	0.25	0.09	0.03	Summer
	Dalea candida	White Prairie Clover	5.00	3.49	0.50	Summer
	Dalea purpurea	Purple Prairie Clover	7.50	4.13	0.75	Summer
	Desmodium canadense	Canada Tick Trefoil	4.25	0.86	0.43	Summer
	Echinacea angustifolia	Narrow-leaved Coneflower	1.50	0.39	0.15	Summer
	Heliopsis helianthoides	Common Ox-Eye	4.00	0.93	0.40	Summer
	Helianthus pauciflorus	Stiff Sunflower	0.25	0.04	0.03	Fall
	Lespedeza capitata	Round-headed Bushclover	1.25	0.37	0.13	Summer
	Liatris aspera	Rough Blazing Star	0.50	0.29	0.05	Summer
	Liatris punctata	Dotted Blazing Star	1.00	0.26	0.10	Summer
	Lupinus perennis	Wild Lupine	0.75	0.03	0.08	Spring
	Monarda fistulosa	Wild Bergamot	0.60	1.54	0.06	Summer
	Monarda punctata	Spotted Bee Balm	0.15	0.50	0.02	Summer
	Penstemon gracilis	Slender Beardtongue	0.15	3.31	0.02	Spring
	Penstemon grandiflorus	Showy Penstemon	0.75	0.39	0.08	Spring
	Phlox pilosa	Prairie Phlox	0.10	0.07	0.01	Spring
	Pycnanthemum virginianum	Mountain Mint	0.20	1.62	0.02	Summer
	Ratibida columnifera	Long-Headed Coneflower	1.25	1.93	0.13	Summer
	Rudbeckia hirta	Black Eyed Susan	1.80	6.08	0.18	Summer
	Solidago nemoralis	Gray Goldenrod	0.15	1.65	0.02	Fall
	Solidago speciosa	Showy Goldenrod	0.25	0.87	0.03	Fall
	Symphyotrichum laeve	Smooth Blue Aster	1.00	2.02	0.10	Fall
	Symphyotrichum oolentangiense	Sky Blue Aster	1.55	4.55	0.16	Fall
	Tradescantia bracteata	Prairie Spiderwort	0.50	0.18	0.05	Spring
	Verbena stricta	Hoary Vervain	1.50	1.54	0.15	Summer
	Zizia aptera	Heart-leaf Golden Alexanders	0.20	0.09	0.02	Spring
	Zizia aurea	Golden Alexanders	0.70	0.28	0.07	Spring
			400.00	74.40	40.00	

 Seeds/sq ft:
 71.00

 Grass Species:
 7

 Sedges/Rush Sp:
 1

 Forb Species:
 37

100.00 71.12 10.00