

**Leave a lasting legacy  
Gifts of Retirement Funds,  
Life Insurance,  
and Bank Accounts**

Naming this Scholarship as a beneficiary of your retirement plan, IRA, life insurance policy, or bank or brokerage account is a generous way to make a legacy gift 'outside' a will. Like a bequest, these gifts help ensure the future of this scholarship and its contribution to a sustainable future food and fiber supply.

Beneficiary designations are easy to implement, and giving retirement funds is tax-wise strategy for many donors.

For retirement and life insurance accounts, you will need to request a change of beneficiary form from your plan or policy administrator.

For bank or brokerage accounts, you will need to fill out the appropriate form.

The following information will help you in completing the beneficiary forms:

**Legal Name:**  
Rochester Area Foundation  
Attn: Sustainable  
Agriculture & Forestry Fund

**Address:**  
12 Elton Hills Drive NW  
Rochester, MN 55901

**Telephone:** 507-282-0203

**Tax ID:** 41-6017740

**EPA Intercedes in  
SE MN Drinking Water Problems**

Here is the Nov. 3, 2023 response from the USEPA to the request for action on SE MN drinking water pollution problems:

"In April 2023, EPA received a Safe Drinking Water Act section 1431 emergency petition regarding Southeast Karst Region ("Karst Region") of Minnesota, which encompasses roughly eight counties (Dodge, Fillmore, Goodhue, Houston, Mower, Olmsted, Wabasha, and Winona). The Minnesota Center for Environmental Advocacy and several other community organizations claim that nitrate contamination in public water systems and underground sources of drinking water (i.e., private wells) is causing an imminent and substantial endangerment to public health. EPA began reviewing the petition immediately and collecting information, including data, from the Minnesota agencies regarding

actions they have been taking to investigate and address the nitrate situation.

"On November 3, 2023, EPA determined that further action is needed to protect public health. EPA requested that Minnesota develop a plan and provide education and outreach as well as alternative drinking water to residents with water above the maximum contaminant level (MCL) for nitrate. EPA is requesting a response from the State within 30 days of our request with a timeframe for the work plan and other actions outlined in the letter. The work plan will address how the state will identify, contact, test drinking water, and offer alternative water to all impacted persons in the Karst Region."

*(The above text from the USEPA website.)*

**If you too** are concerned about the indiscriminate use of chemicals which are killing our pollinators, polluting our water, and negatively effecting our food supply, then **JOIN US** by donating today. Contributions to the Fund are fully tax deductible.\*

100%  
of your  
donation  
goes to  
build this  
endowment  
fund!\*

**The purpose of this scholarship** is to provide financial aid to individuals growing up in southeast Minnesota who are committed to sustainability in the fields of agriculture and forestry, have demonstrated leadership and communication skills, and are interested in pursuing a career in fields related to and advancing practices of sustainable agriculture and/or forestry. Sustainable practices ensure clean water, healthy regenerative soils, and vibrant rural communities for future generations.

The scholarship fund seeks to find the next generation of professionals who will learn how to manage our environment on a completely sustainable basis, provide food, fiber and shelter for people, and in the process protect our precious natural resources for our children and those yet to come.

**Methods of contributions are numerous:**

- ★ A check or credit card\* is wonderful.
- ★ Matching funds from your employer.
- ★ Direct tax-free transfers from an IRA.<sup>1</sup>
- ★ Endowments through your Estate Plan, wills or life insurance policies.<sup>1</sup>

<sup>1)</sup> See website for method and be sure to contact your financial advisor, accountant or lawyer for advise.

The Scholarship Endowment Fund is structured such that only earnings from the invested capital are used to pay for scholarship(s) and Fund operating expenses. This rule assures that the Fund will operate in perpetuity. The Rochester Area Foundation (RAF) is the steward of the Fund. RAF's administrative fees are 1.25% of the annual fund balance and are amply covered by RAF's investment performance. Neither scholarships nor fees are reducing the endowment equity!

\* There is a cost for credit card donations.



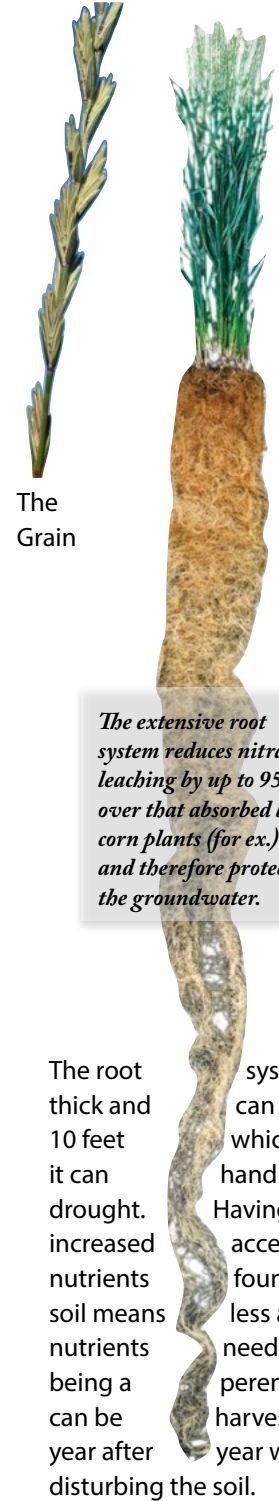
To access the website with all its references, current and past newsletters, scholarship information, donor list and more, use your smart phone to scan the QR code.

For more details and references related to articles in this newsletter, visit our website:  
**www.protectourresources.org**

Printed on 100% post consumer recycled paper.  
Forest Stewardship and Rainforest Alliance Certified.  
Envelope made from 100% recycled fibers.  
Note that the postage stamp on the envelope contributes to saving vanishing species.



**Kernza®, a Perennial Grain,  
is Changing Agriculture Around the World**



The Grain

*The extensive root system reduces nitrate leaching by up to 95% over that absorbed by corn plants (for ex.) and therefore protects the groundwater.*

The root system is thick and can go down 10 feet which means it can handle drought. Having access to increased nutrients found in the soil means less added nutrients needed, and being a perennial, it can be harvested year after year without disturbing the soil.

**Perennial Agriculture** is the solution to many challenges we face from grain production today. Perennials are plants that can be left in the field to return for several years without the annual tilling that kills topsoil and leads to erosion and nutrient losses. Perennials develop a deep root system that helps sequester carbon, filter water, and keep continuous living cover on the land. Their ecosystem services offer contrast to the greenhouse gas-intensive practices of modern annual agriculture. They produce nutritious food crops while protecting natural resources, a win-win for farmers, farming communities, food companies, and home cooks. Additionally, the Kernza® crop can be grazed spring and fall in addition to being harvested for grain and stalk mid summer.

**Your help is needed.** While it took 10,000+ years to develop the annual grains we have now, and it took 80+ years to develop soy beans to its current status, Kernza® needs a market and higher yields. Work is continuously done by the University of Minnesota and other organizations around the world to bring Kernza® up to be a financial success. You can help by buying and using Kernza® grains in your family.



**High in fiber, protein and antioxidants**

	Wheat	Kernza®
Grain type	Annual	Perennial
Protein	10.8 g/100g	18 g/100g
Fiber	9.2 g/100g	19.2 g/100g
Antioxidants	Low	High
Insoluble fibers	x	8x
Gluten	Yes	Less than wheat

Because of its ability to take up nitrogen Kernza® is recommended as a crop on municipal water source areas in order to reduce/eliminate nitrate pollution.

Read interview with the inventor at <https://modernfarmer.com/2017/03/wes-jackson-the-land-institute-kernza/>

**The 9th Year of the Sustainable  
Agriculture & Forestry  
Scholarship:  
Application Portal  
Opens on January 15, 2024.**

Feel free to send us contacts to whom we can send information. The scholarship is for \$5,000 and recipients are free to apply again in following years. The purpose of this scholarship is to provide financial aid to individuals growing up in southeast Minnesota who are committed to sustainability in the fields of agriculture and forestry, and have demonstrated leadership and communication skills. Details are available on our website: [www.protectourresources.org](http://www.protectourresources.org)



# Water Issues Are National AND Local

## “America Is Using Up Its Groundwater Like There’s No Tomorrow”

### Minnesota has Drinking Water Problems

Newspaper Headlines tell the story:

*“State finds 56% of Minnesota’s lakes and streams are ‘impaired’”*

*Little action so far on plan to enlist farmers to clean up polluted groundwater in Minnesota*

Nothing is more vital to our health than the safety of the food and water we put into our bodies

Groundwater loss is hurting breadbasket states like Kansas, where the major aquifer beneath 2.6 million acres of land can no longer support industrial-scale agriculture. Corn yields have plummeted. If that decline were to spread, it could threaten America’s status as a food superpower.

A naturally occurring, cancer-causing heavy metal, arsenic is often trapped in clay, a common soil type. But it can be released into drinking water supplies when aquifers are over pumped.

In general, as people drill deeper wells, the likelihood of arsenic contamination increases. And as shallower groundwater supplies are depleted, he said, more people are drilling deeper wells.

In late 1990s, Wichita County farmers produced 165 to 175 bushels of corn per acre. But it came at a cost, in order to irrigate their crops farmers drained the aquifer. The area gets less than 20 inches of rain a year, on average, about one-third less than the continental United States as a whole — not nearly enough to replace the water being pumped from the ground. That change is reflected in corn yields. Last year, corn growers nationwide produced an average of 173 bushels per acre. But for Wichita County, the yield was just 70.6 bushels, the lowest in more than six decades.

### Southeast Minnesota’s Serious Drinking Water Problems

Another Newspaper Headline tells the story:

*Nitrate levels in 8 southeast Minnesota counties near crisis point*

*From a report by the Minnesota Center for Environmental Advocacy:*

*Nitrate pollution and the public health crisis in SE Minnesota*

**Contaminated drinking water is linked to cancer, birth defects and pregnancy complications**

1. Over 500,000 Minnesotans face a drinking water crisis fueled largely by agricultural nitrate pollution from fertilizer and manure seeping into surface and groundwater sources.
2. The problem has reached crisis proportions in Southeastern Minnesota, where industrial agricultural practices like Concentrated Animal Feedlot Operations (CAFOs) combined with the region’s porous geography leave water supplies particularly vulnerable to nitrate pollution.
3. Consuming nitrate-contaminated drinking water is linked to a host of concerning health harms, including some cancers, birth defects and pregnancy complications.

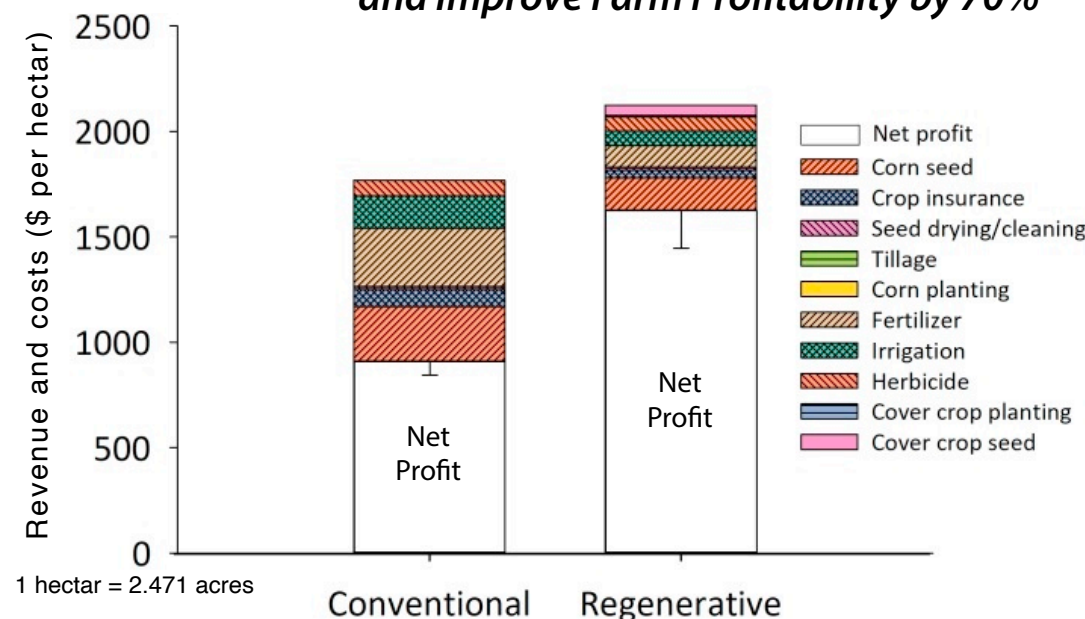
**See last page for latest news from US Environmental Protection Agency**

*In 2016, the US Environmental Protection Agency (EPA) identified phosphorus and nitrogen discharges from U.S. farmland as “the single greatest challenge to our nation’s water quality.”*

## Regenerative Farming is the Solution to Nitrate Pollution:

*The 6-step Regenerative Farming Process Conserves Soil and Water Resources, Improves Soil Health, Minimizes Pollution, and Displaces Input-Intensive Agricultural Practices, all While Enhancing Farm Profitability.*

### Research Shows Regenerative Practices Solve Environmental Problems and Improve Farm Profitability by 70%



1 hectare = 2.471 acres

**Regenerative corn fields generated nearly twice the profit of conventionally managed corn fields.** The heights of the bars represent average gross profits across all 40 fields [studied] (in each treatment). Profit was calculated using direct costs and revenues for each field and excludes any overhead and indirect expenses. Regenerative cornfields implemented three or more practices such as planting a multi species cover mix, eliminating pesticide use, abandoning tillage, and

integrating livestock onto the crop ground. Conventional cornfields used fewer than two of these practices. The regenerative systems had 70% higher profit than conventional cornfields ( $\alpha = 0.05$ ;  $n = 36$  fields in each system). Seed drying, corn planting, and cover crop planting are present on the graphs, but were negligible costs.

*Source: Regenerative agriculture: merging farming and natural resource conservation profitably by Claire E. LaCanne1 and Jonathan G. Lundgren.*

### Case Studies Show that Regenerative Farm Practices Solve Financial, Social and Environmental Problems

**Example 1:** Rick Clark farms 7,000 acres organically in Indiana as reported in *The Furrow* Sept/Oct 2023. And he is profitable while farming without dependence on tilling, applied fertilizer, herbicides, nitrogen, lime, insecticides, fungicides, crop insurance nor other subsidies.

**Example 2:** Gabe Brown farms 5,000+ acres in North Dakota. In his book, *Dirt to Soil, One Family’s Journey into Regenerative Agriculture*, he describes how farming without dependence on farm chemicals, operating without tilling the soil, and

incorporating multi species cover crops has become a profitable venture. He describes how conversion to regenerative practices after four straight years of crop failures under the “conventional” farming practices saved his farm. And this without dependence on crop insurance and federal programs. Living in an area with limited rain he experienced a more than three fold increase in soil organic matter and a resultant increase from 40,000 to 100,000 gallons of water storage capacity per acre. Droughts are not a problem for his operation any more—even in an area with very low precipitation.

**Example 3:** The Stoney Creek Farm in Redwood Falls, MN: “The financial performance and position of Stoney Creek

Farm has been strengthening since they began the transition to regenerative agriculture.” Their story is a worthwhile and interesting read. Find it at <https://soilhealthacademy.org/case-study/stoney-creek-farm/>

**Examples 4 – 32:** Sustainable Farming Association has so far published three volumes of case studies covering 28 farmers practicing regenerative practices and experiencing improved financial and environmental results. <https://sfa-mn.org/resource-library/> Volume III is specific to Southeast Minnesota.

References to sources can be found on the web site: [www.protectourresources.org](http://www.protectourresources.org)