



Henry County Soil & Water Conservation District
709 S. Iris Street, Suite 101
Mt. Pleasant, Iowa 5264
319-385-2824, Ext 3

2017 Annual Report

January 1, 2016 to December 31, 2017



Soil & Water Conservation District Commissioners

Allan Barnes, Chairman;
Rick Mallams, Vice-Chairman;
Jeff Olson; Harlan Miller; Chuck Allen;
Ross Tweedy; Alan Miller

NRCS, IDALS-DSCWQ & SWCD Staff

Doug Ensminger, NRCS District Conservationist; Miranda Haes, Lower Skunk River WQI Watershed Coordinator; Caleb Waters, Lake Geode Watershed Coordinator; Michael Allen, State Technician; Aaron Musselman, NRCS Resource Conservationist; Josh Sieren, NRCS Soil Conservationist; Barb Shelman, State Conservation Assistant ; Dale Schmeiser, NRCS Soil Conservation Technician.

"Our mission is to provide leadership and administer programs to help people conserve, improve and sustain our natural resources and environment."

2017 SWCD Poster Contest Winners



Soil & Water Stewardship Materials were provided by the Henry County Soil and Water Conservation District to area schools to promote soil and water conservation to in their classrooms. Posters created for the 2017 Poster Contest featured the theme **“Healthy Soils Are Full of Life”**. Grinnell Mutual Reinsurance Company, Conservation Districts of Iowa, and the Henry County SWCD co-sponsor the SWCD contest.



(Right) Division K-1st Grade Poster Contest Winners: Waco 1st Grade Eldon Hanson, Noah Provino, Bradin Kaufman and Taelyn Egli. (Left) Taelyn was also selected as Region 9 Division 1 winner where she received a certificate and \$35 cash prize courtesy of Grinnell Mutual Reinsurance Company.



WACO first grade participated in this year's poster contest. Teachers Kathy Shelman and Audra Barnhart have promoted the poster contest in their classrooms for over 20 years.

SWCD AWARDS

2017 Iowa Farm Environmental Leader Awards



Iowa State Fair
Pennington Center
Wednesday, August 16, 2017
10:00 A.M.

2017 Iowa Farm Environmental Leader Award were presented to Mallams Inc. Steve & Ann Mallams, and Harlan Miller. Each received recognition at the Iowa State Fair, Pennington Center, August 16, 2017. The Iowa Farm Environmental Leader Award is a joint effort between the Governor, Lt. Governor, Iowa Department of Agriculture and Land Stewardship and Iowa Department of Natural Resources to recognize the efforts of Iowa's farmers as environmental leaders committed to healthy soils and improved water quality. This Award recognizes the exemplary voluntary actions of farmers that improve or protect the environment and natural resources of our state. It recognizes those that have taken steps in their farming operations to serve as leaders on their farms using best management practices. Presenting the awards were Governor Kim Reynolds, Lt. Governor Adam Gregg, Secretary of Agriculture Bill Northey, and DNR Director Chuck Gip.



Harlan & Peggy Miller

Steve & Ann Mallam's Family



**District Financial Report
of State Funds & Accomplishments:
July 1, 2016 to June 30, 2017**

**Budget-Operating Funds
Commissioner and Office Expenses**

Total Allocations	\$2,000.00
Commissioner Meeting Expense	\$ 843.54
Office Expenses	\$ 106.76
CDI & NACD Dues	\$ 850.00
Postage	\$ 200.00
Total Expenditures	\$2,000.30
Balance	\$ (0.30)

REAP

**Resource Enhancement And Protection
75% Cost-Share Funds**

**Cedar Creek & Fish Creek
Priority Watershed
Practices Fund**

13 Projects = Terraces 14,900 L.F.

2016 Projects Rolled Over	\$ 33,882.43
Allocations Received	\$+40,365.64
Total	\$ 74,248.07
Projects Complete & Paid	\$ -49,488.90
	\$ 24,759.17
Funds/Projects Rolled Over to 2018	\$- 24,759.17
Funds Recalled	\$ 0.00

Forestry/Grasses Fund

3 projects

**Timber Stand Improvement 44.6 ac.
Tree Planting 4.5 ac.**

2016 Projects Rolled Over	\$ 5,370.41
Allocations Received	\$+9,303.80
Total	\$14,674.21
Projects Complete & Paid	\$-7,377.00
	\$ 7,297.21
Funds/Projects Rolled Over to 2018	\$ 6,934.21
Funds Recalled	\$ 363.00

**Public Owned Lakes WPF & 319 Funds
Lake Geode--2 Projects
Cover Crops 33.57 ac., 1 Septic Systems**

Funds Paid in Henry County	\$5,339.25
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**State Cost-Share Funds
32 Projects**

Terraces 44,808 L.F. & 2 Basins

2017-Cost Share	
2016 Practices Rolled Over	\$ 52,657.70
Allocations Received	\$+108,056.00
Total	\$ 160,713.70
Projects Complete & Paid	\$-129,927.89
	\$ 30,785.81
Projects Rolled Over to 2018	\$ -27,610.96
Funds Recalled	\$ 3,174.83

**State-Wide Water Quality Initiative
& Lower Skunk River
Cover Crops, 5,272.37 Ac.
52 landowners,**

Total Allocations	\$106,292.02
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**State-Wide Buffer Initiative
CP42-Pollinator Habitat Incentive.
9 landowners, 239.03 Ac.**

Total Allocations	\$9,206.00
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**State Revolving Fund--No-Interest 0% Loans
3 Grade Stabilization Structures**

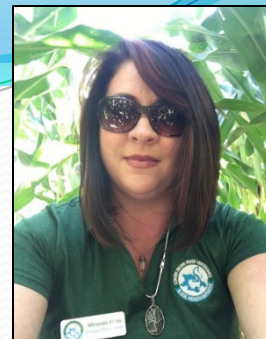
2016 Projects Rolled Over	\$ 95,000.00
Allocations Received	\$+95,000.00
Total	\$190,000.00
Projects Completed & Paid	\$- 39,188.13
	\$150,811.87
Funds/Projects Rolled Over to 2018	\$-110,000.00
Funds Cancelled or Recalled	\$ 40,811.87

Our partners:



Financial Accounts	
Checking #3321	
Balance as of 12-31-2016	\$ 8,112.92
Income/Deposits:	
Interest & Dividends Received	\$ 52.05
State Comm/Office Expenses	\$ 2,000.00
State Lower Skunk River	\$56,020.82
State Intern	\$ 4,277.25
Total Income	\$62,350.12
Expenses:	
Postage	\$ 168.00
Office Expenses	\$ 106.76
Commissioner Travel	\$ 960.76
Dues—CDI & NACD	\$ 850.00
Employee Payroll /Wages	\$26,813.36
Employee Taxes	\$15,635.58
Lower Skunk River Expense	\$21,109.53
Total Expenses	\$65,643.99
Balance as of 12-31-2017	\$ 4,819.05
Savings Account on Checking #3321	\$ 572.86

Financial Accounts	
Checking #180	
Balance as of 12-31-2016	\$ 10,238.28
Income/Deposits:	
Interest & Dividends Received	\$ 21.84
LSR Field Day	\$ 1,000.00
Total Income	\$ 1,021.84
Expenses:	
Poster Contest Awards	\$ 50.00
LSR Field Day	\$ 98.48
Trailways Bus-Field Day	\$ 875.50
Total Expenses	\$ 1,033.48
Balance as of 12-31-2017	\$10,226.64
Savings Account on Checking #180	\$ 1,313.36
Certificate of Deposit	\$ 5,500.00



New Lower Skunk River Water Quality & Soil Health Initiative

Watershed Coordinator—Miranda Haes

Miranda Haes was hired as the Lower Skunk River Watershed Coordinator which includes Henry, Jefferson, Lee and Van Buren County SWCD's in November, 2017. She is located in the Mt. Pleasant Field Office. Miranda lives in New London, Iowa with her husband John and children, Zoie 17 and Wyatt 15. She enjoys spending time outdoors hiking, kayaking, and camping as well as reading and being with family. She graduated from University of Iowa with a Bachelors in Environmental Studies – Geographical and Sustainability Sciences. She has a great passion for our water resources, soil health and conservation!

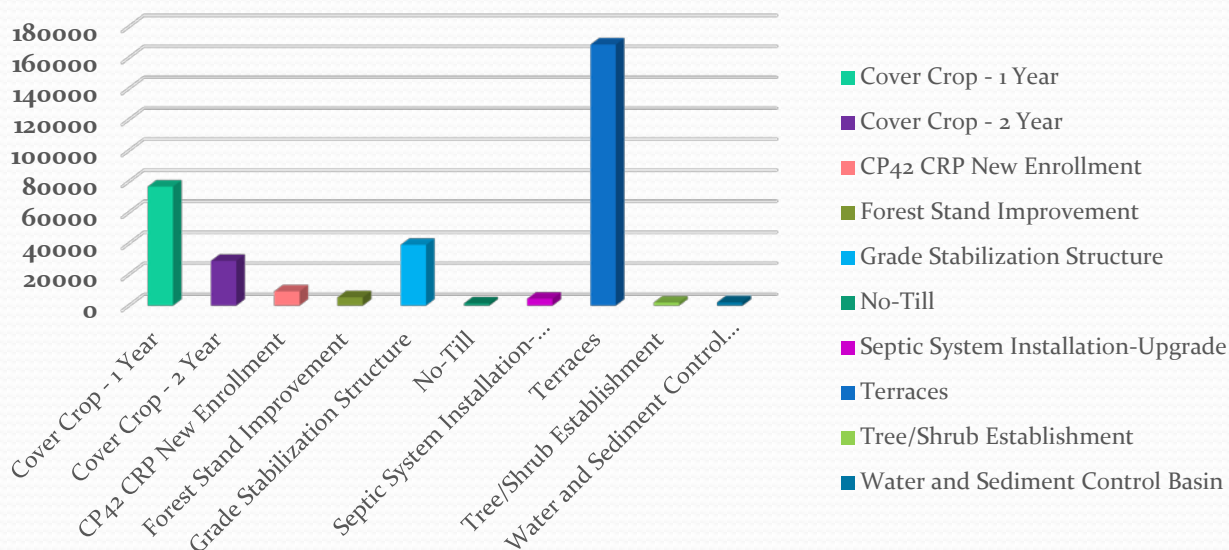
The LSR project demonstrates and accelerates the adoption of conservation practices that have been proven to be most effective in reducing nitrate-N and phosphorus-P in streams. The project provides cost share assistance to implement practices such as cover crops, bioreactors, alternative outlets, and terraces implemented with an alternative outlet. Education efforts include field days, newsletters, and informational meetings as well as the use of social networks.



All services and programs are offered on a non-discriminatory basis.

FY17 HENRY SWCD COST SHARE FUNDS SPENT & PRACTICES INSTALLED

7-1-2016 to 6-30-2017



DSCWQ Director's Thoughts by James Gillespie

A lot of Soil and Water Conservation Districts are celebrating their 75th Anniversaries around the state. What great accomplishments they have to share with the farmers and landowners in their counties. It is definitely something they should be proud of and take time to reflect on what has been done. It is a time to think back to when the district was organized and why. We were just coming out of a serious economic depression and were in the midst of World War II. The Iowa Experiment Station, now Iowa State University Extension had done a study that showed that we had eroded 25% of our top soil on average across the state. Something needed to be done to stop this erosion and start improving our agriculture management in order to reverse this unsustainable degradation. Iowa has been blessed with some of the richest soils in the world and they have been very productive. Along came the Soil and Water Conservation Districts that started organizing in 1940 and the last district organized in 1952. The leadership of those first commissioners that set the stage for how the districts could help farmers, landowners, and everyone in the county and the state took off. If you fly over the state on a clear day, look out the window of the plane or as you drive around the state you will see the practices (marks on the land) that the districts have helped those farmers, landowners and others install to protect and improve all of our natural resources. Isn't it a beautiful tapestry to behold? That leadership by the districts and the commissioners and field office staff continue to this day and I believe our forefathers and mothers would be proud of what has been done.

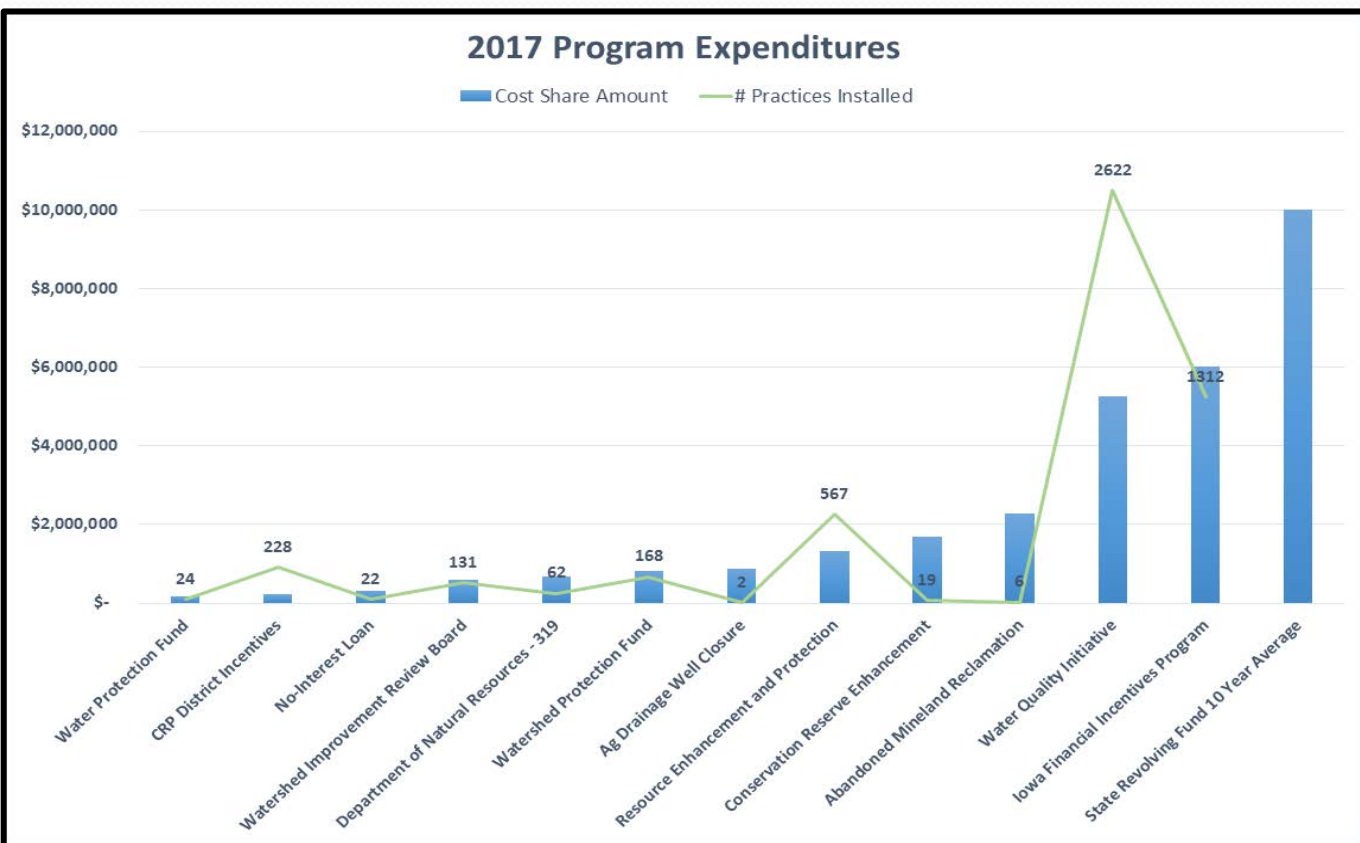
Is our job done? I don't think so. We continue to utilize and need those precious resources every day and will into the future. We should be of a mindset that we are going to be in an ever improving process for those resources. More than just protecting them but making them better.

Yours and my challenges are what can we do every day to improve our soil health and water quality? So what are we (there is no "I" in team) going to do to take care of the resources we have been blessed with and how are we going to make them better for those who will follow us, like those who organized the Soil and Water Conservation Districts years ago? I believe they were thinking about us and this great state when they organized the districts. We can't let them down!



State Fiscal Year 2017 by Vince Sitzmann, Bureau Chief

State Fiscal Year 2017 was another successful year for getting conservation on the ground. Staff was able to complete lots of plans, surveys, and designs and Mother Nature chipped in which made for productive spring and fall construction seasons. Each year, when the state fiscal year wraps up, we evaluate our programs and find out what kind of a year it's been; and each year, when the evaluation is complete, I'm always surprised at how much money is spent on conservation. I'm not just talking about how much money the state contributes through our programs, I'm talking about your investment in conservation. Even when margins are as tight as they are today, the demand for conservation outweighs supply.



The dollars reflected above represent the state's contribution to our programs only, not the landowners share. Keep in mind that these figures only represent a small portion of the overall investment in conservation across the state. The graph does not take into account any federal programs such as CRP or EQIP, nor does it take into account the work that is done by private landowners without state or federal assistance.

I want to take a moment to highlight the State Revolving Fund (SRF) in the bar chart above as it is our most popular program in terms of funding utilized by landowners. SRF is a loan program that can fund 100% of a practice or can be used in conjunction with other state or federal programs. Farmers are borrowing an average of \$10 million annually to install conservation practices on their farms. These low-interest loans can be used for a number of different conservation practices; however our most common include terraces, ponds and livestock facilities. Loan amounts can range from \$5,000 to \$500,000 and must be paid back over a 10-year period.

If you have been thinking about installing a practice on your farm I would encourage you to stop into your local Soil and Water Conservation District office and talk to the staff. As always, thank you for your conservation and land stewardship efforts.

Don't Treat Your Soil Like Dirt: Take the 1% Challenge

by Kurt Simon NRCS State Conservationist

Many of the benefits from improving soil health don't happen overnight. They build over time, as farmers consistently implement soil health practices like no-till, cover crops and crop rotations. But there is a way to monitor your progress: measuring the amount of organic matter in your soil.

First conceived by the late District Conservationist Brad Harrison from Adel, **The 1% Challenge** encourages farmers to commit to a long-term plan to increase their soil's organic matter by 1 percent. Soil organic matter is decomposed plant and animal material in your soil. This material gives your soil good tilth, a dark color, better water holding capacity, improved water infiltration rates, and it contributes to your overall soil fertility. And it happens to be a very good indicator of improved soil health.

How much will it take to increase my soil organic matter by 1%?

Soil organic matter is increased through substantial increases in organic materials, like roots, residue, compost and manure in the soil. Only 10% of the organic material added each year actually remains in the soil. Because of this, building a 1% organic matter increase will require 200,000 pounds of material, or the equivalent of 167 round bales of cornstalks per acre.

Sound impossible? It's not!

Depending on your original organic matter levels, soil types and crop rotations, it is possible to increase organic matter at an average rate of 0.1% per acre per year through no-till farming and planting a mixed cover crop each fall. After 10 years, that's a 1% increase.

Why is it worth it?

While each operation's expenses are unique, we've put together these estimates to illustrate the economic impact of improving soil organic matter:

Each year, 1% of soil organic matter per acre releases \$15.70 worth of nutrients. Eliminating tillage will save approximately \$3.50 in fuel costs per acre per year. Utilizing cover crops may reduce the need for herbicides by about \$16.20 per acre per year. An average increase of 5 bu./ac. in soybean yields following cover crops can earn an additional \$50 per acre per year.

Based on these calculations, in an average year of a corn/soybean rotation, your bottom line could improve by more than \$60 per acre. PLUS, this significant increase in organic matter can hold 9/10" of plant-available water, reducing the potential for erosion due to runoff by 15%.

So, how do you get started?

Establish a baseline by completing a routine soil test with an organic matter calculation. In addition, conduct a soil health assessment in your field by recording soil temperatures, counting earthworms, calculating water infiltration rates, and testing for compaction. We also recommend having a certified lab conduct a soil health analysis, such as the Haney test or the Cornell Soil Health Test.

The next step is to develop a soil health management plan, and that's where NRCS can help. After discussing your goals and evaluating your current operation plan, we can recommend the types of practices and changes in management that will help you improve soil health and build organic matter.

And finally, monitor and document your progress each year. Items to record include crops planted, fertilizer and pesticides applied, weed pressure, yield and soil health assessments results (temperature, earthworm counts, infiltration rates, etc.). Then in year four or five, conduct another soil test battery. Did your soil organic matter increase by a half percent? If so, you are on the right track. If not, take time to evaluate your management (NRCS can help) and make adjustments if necessary.

Interested in taking **The 1% Challenge**? You can find more resources, fact sheets and soil assessment worksheets on the Iowa NRCS website at www.ia.nrcs.usda.gov.

