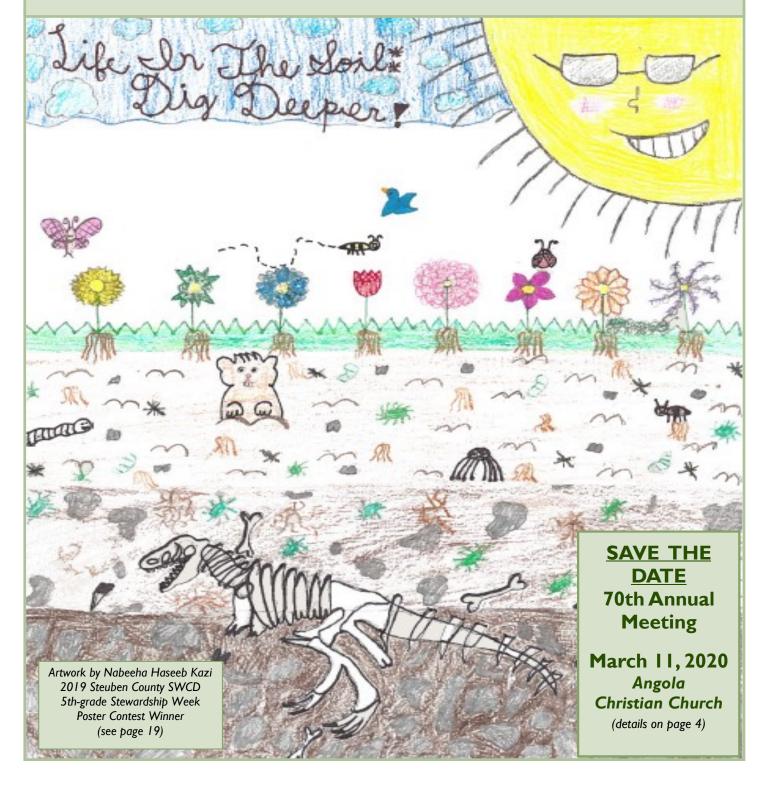


# 2019 Winter 2020 ANNUAL REPORT



#### **MISSION**

It is the mission of the Steuben County Soil and Water Conservation District (SWCD) to provide leadership and assistance in the proper use and management of soil, water, and related natural resources in Steuben County.

#### **CORE VALUES**

We desire to accomplish our mission through providing excellent personal service and facilitating voluntary participation by our residents/land users to put conservation practices on the land.

#### **HISTORY**

Across the United States, nearly 3,000 conservation districts - almost one in every county - are helping people conserve land, water, forests, wildlife and related natural resources. Conservation Districts serve as the local hub for connecting land users to direct sources of educational, financial, and technical assistance for applying conservation practices and best management technologies on the land to address soil and water quality problems.

The Steuben County SWCD was organized by Steuben County landowners in 1948. It is a legal subdivision of the State of Indiana, established by the Indiana Soil Conservation Act of 1937. The District is managed by a board of five local supervisors, who are Steuben County residents familiar with the conservation needs and opportunities in the county. Three are elected by Steuben County landowners, and two are appointed by the Indiana State Soil Conservation Board based on a recommendation from current Supervisors. Associate Supervisors are appointed annually, by the SWCD Board, to assist in activities and programs sponsored by the SWCD. Both Board and Associate Supervisors serve the Steuben community on a volunteer basis. Steuben County Government funds the two full-time staff positions.

## Steuben County Soil and Water Conservation District

Staff

Janel S. Meyer, Administrative Coordinator Tara M. Lee, Resource Conservationist

### Natural Resource Conservation Service

Staff

Arthur Franke, District Conservationist

#### 2019 Board of Supervisors

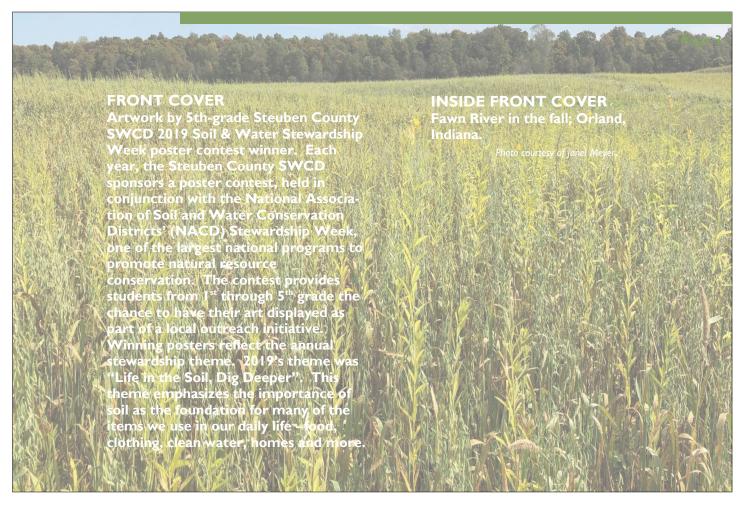
Craig Holman, Chairman Chuck Howard, Vice Chairman Gene A. Diehl Kayleen Hart David Perkins

#### **2019 Associate Supervisors**

Tim Groosbeck Daniel Oberst

If you have an interest in assisting us with accomplishing our mission, consider joining our team as an Associate Supervisor. Contact the office for additional details.

A special thanks to Tom Green for his devotion and leadership these past 20 years. Tom retired from the Board in March 2019. He was first appointed as a Supervisor in October 1999.



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#### **ABOVE**

Cover crops on prevented plant field in Steuben County. Heavy rainfall and flooding prevented many producers from planting corn and soybeans within the county. In 2019, Steuben County was among 74 Indiana counties designated a natural disaster area by the U.S. Department of Agriculture (USDA). USDA and the Steuben County SWCD offered programs to help with cover crop plantings on fields where farmers were not able to plant because of their benefits in preventing soil erosion, protecting water quality and boosting soil health.

Photo courtesy of Arthur Franke

"America's conservation districts are helping to bring conservation practices to landowners quicker, in greater volume, and on more diverse landscapes than ever before. The impacts are both immediate and long-lasting".

> - National Association of <u>Conservation Districts</u> (NACD)

#### **ANNUAL MEETING**

# SAVE THE DATE MARCH 11, 2020

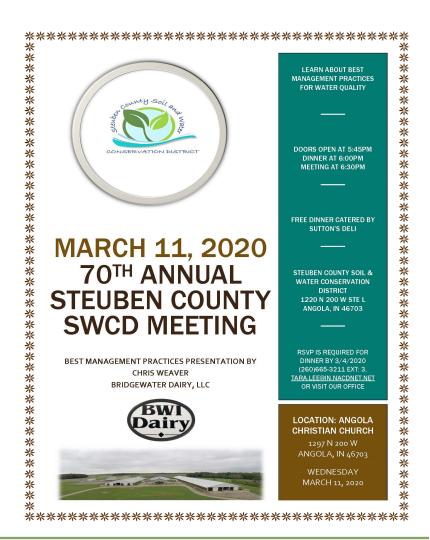
Steuben County SWCD 70th Annual Meeting

The Steuben County SWCD will hold it's annual meeting on March 11, 2020 at 6:30 p.m. It will be held at the Angola Christian Church, 1297 N 200 W, in Angola.

The meeting will be preceded by dinner, beginning at 6:00 p.m. Doors will open at 5:45 p.m. The meal and annual meeting are offered free of charge. An RSVP is requested by March 4, to assist with meal planning.

Chris Weaver of Bridgewater Dairy Group, based in Montpelier, OH will present "Responsible Farm Management Practices".







#### **AROVE**

Jerry Perkins of KPS Farms receiving the 2018 River Friendly Farmer Award at the Steuben County SWCD March 13, 2019 annual meeting. From left to right, SWCD Board Supervisor Craig Holman, Jerry Perkins, & SWCD Board Supervisor Chuck Howard. Photo courtesy of Tara Lee The 2019 SWCD annual meeting was held on March 13, 2019. Stephanie McLain, Indiana NRCS State Soil Health Specialist, gave a presentation on the importance of soil health. Stephanie discussed the importance of managing soils so they are sustainable for future generations.

Hudson farmer David Perkins was elected to the Board of Supervisors. David replaced Zachary Martin.

KPS Farms was honored as Steuben County's 2018 River Friendly Farmer. KPS was nominated by the SWCD for practices used on land they farm to protect Indiana's natural resources. Jerry Perkins spoke on behalf of KPS, stating, "We are the stewards of God's creation and we try to do it the best we can; do it as he designed it".

We were honored that Mary Martin (Regional Director to U.S. Senator Mike Braun) and Steuben County Commissioner Ron Smith joined us.

#### 2019 STEUBEN COUNTY SWCD HIGHLIGHTS

#### **2019 Agriculture Conservation Practices**

Listed below are the acres, feet, and/or number of conservation practices installed during the 2019 fiscal year and why they are important for conservation.

#### **CROP PRODUCTION / SOIL HEALTH**

#### 5,396 Acres of Cover Crops

- · Reduce wind and water erosion.
- Maintain or improve soil health & organic matter.
- Reduce water quality degradation by utilizing excessive soil nutrients.
- Improve soil moisture use efficiency.
- Minimize soil compaction.
- Supply nutrients.
- Break pest cycles.
- Suppress excessive weed pressure.
- Provide food and escape cover for wildlife.

#### 62.8 Acres of Forage-Biomass Plantings

- · Reduce wind and water erosion.
- Maintain or improve soil health & organic matter.
- Reduce water quality degradation by utilizing excessive soil nutrients.
- Improve soil moisture use efficiency.
- Minimize soil compaction.
- Supply nutrients.
- · Break pest cycles.
- Improve or maintain livestock nutrition and/ or health.
- · Provide food and escape cover for wildlife.

#### **FORESTRY**

#### 14.2 Acres of Tree Establishment

- Provide long-term erosion control & improvement of water quality.
- Provide forest products such as timber.
- Provide wildlife habitat.
- Store carbon in biomass.
- Reduce energy use.
- Improve or restore natural diversity.
- Enhance aesthetics & improve air quality.

#### 164.8 Acres of Brush Management

- Restore or release desired vegetative cover to protect soils, control erosion, reduce sediment, improve water quality, or enhance hydrology.
- Maintain, modify, or enhance fish and wildlife habitat.
- Improve forage accessibility, quality, and quantity for wildlife.
- Pervasive plant species are controlled to a desired level of treatment that will ultimately contribute to the creation or maintenance of a natural area.
- Create the desired plant community consistent with the ecological site.



#### WILDLIFE HABITAT

#### 83.8 Acres of Conservation Cover

- Reduce sheet, rill, and wind erosion and sedimentation.
- Reduce ground and surface water quality degradation by nutrients and surface water quality degradation by sediment.
- Improve soil health.
- Enhance or develop wildlife, pollinator and beneficial organism habitat.

#### OTHER

#### 7,928 Feet of Fencing

- Improve erosion control & water quality.
- Regulate livestock access to areas.
- Permit proper grazing distribution.

#### 2,644 Ft.<sup>2</sup> Heavy Use Area Protection

- Protect & improve water quality.
- Provide a stable, non-eroding surface for areas frequently used by animals.





#### 18 Forest Management Plans (717.5 acres)

- Provide detailed information about species composition, potential harmful pests and other ecosystem components of the property and surrounding landscape; a "road map" to assist landowners with achieving their conservation goals in a cost-effective & strategic way.
- Protect & enhance wildlife habitat and other forest resources.



#### 2019 STEUBEN COUNTY SWCD HIGHLIGHTS

#### **2019 Urban Conservation Practices**

Below is a summary of conservation practices installed during the 2019 fiscal year and why they are important for conservation.

#### **NATIVE-PLANTING / WATER-EDGE ENHANCEMENT**

488 Ft.<sup>2</sup> (212.6 Feet of Shoreline) Native-Planting/Water-edge Enhancement (filter strip)

- Reduce suspended solids and associated contaminants in runoff and excessive sediment in surface waters.
- Reduce dissolved contaminant loadings in runoff.
- Attract native animals such as butterflies and birds by providing food sources and valuable habitat.
- Enhance the beauty of yards and neighborhoods.
- Enhance shoreline protection.
- Help fight invasive plants.
- Reduce the need for pesticides.
- Reduce energy consumption and pollution (limited need for mowing).
- Improve and protect biodiversity.



**ABOVE**Monarch Butterfly photo courtesy of Bill Schmidt.

#### **Urban Conservation Grant Program**

Why practice urban conservation?

The everyday decisions we make at home greatly affect our environment. Increased urbanization means more impervious surfaces and runoff, along with less wildlife habitat. Our water, soil, air, and wildlife depend on us for their protection. Adopting conservation practices is one important way in which we can help our environment. The Steuben County SWCD has an urban conservation grant program to assist landowners with the implementation of conservation best management practices, including native-scaping (planting using native & non-invasive adopted plants), rain gardens, tree & shrub plantings and water-edge enhancements (filter strips).

In 2019, the SWCD and the City of Angola partnered on a water-edge enhancement/filter strip project through this urban program. The project goal is to reduce sediment and nutrients entering Steuben County waterbodies. This past fall, Phase I of the project was completed, which included site preparation and planting a cover crop to help reduce soil erosion. Phase II of the project will be completed this spring, with the planting of native warm season grasses (NWSG). NWSG grow deep root systems, which allows them to reach more water and nutrients, decrease compaction of the soil, increase water infiltration, and prevent soil erosion. NWSG spend most of their energy the first year developing a root system. We don't expect to see a full ground cover the first year, but once established, a single plant may be one to two feet in diameter when mature. Additional information about this exciting project will be shared once Phase II has been completed.

#### 2019 STEUBEN COUNTY SWCD HIGHLIGHTS



#### LEFT

Would you like to see more Ring-necked Pheasants on your property? Do you want to hear the calls of songbirds in your area? Are you concerned about water quality and pollinators?

If so, consider joining the Grasslands for Gamebirds and Songbirds Initiative (GGS). This program provides technical and financial assistance to improve or develop grassland and pollinator-friendly habitats in DeKalb, LaGrange, Noble, and Steuben counties in NE Indiana.

Photo courtesy of USDA NRCS

#### **Grasslands for Gamebirds & Songbirds Initiative**

By the Indiana Department of Natural Resources, Division of Fish & Wildlife

When settlers first arrived in Indiana 300 years ago, they found more than just trees. Large areas of the state were once covered by rolling grasslands and sprawling oak savannas. Grasslands have declined throughout the nation and across Indiana, with less than 1% of the state's original prairies and savannas remaining. The Indiana State Wildlife Action Plan identifies loss of grasslands as the single greatest threat to wildlife species in Indiana.

There probably isn't a single wildlife species that doesn't benefit from grasslands in one way or another. Grasslands provide wildlife with food in the form of seeds, attract insects which are a food source high in protein, and are hunting grounds for small carnivores and birds of prey. They also provide important cover from harsh weather in addition to places to nest for a variety of species. Healthy grasslands rich in native wildflowers and grasses can provide mutually beneficial habitat for pollinators, songbirds, gamebirds and many other wildlife species. The nectar, pollen and leaves of native plants are the primary food source for most pollinators such as bees and butterflies.

The Grasslands for Gamebirds and Songbirds (GGS) Initiative is working to increase much needed grassland habitat for birds, wildlife and pollinators on private lands across Indiana. Grasslands have many benefits, but one primary benefit of the habitat produced by this program is improving water quality and soil health. Grassland and pollinator plants act as a filter to water run-off and groundwater resulting in better water quality. The plants also restore organic material to the top soil that may have

been lost due to disturbance, and minimize soil erosion due to their extensive root system. Grassland plants also play an important role reducing the amount of  $CO_2$  in the atmosphere, improving air quality.

The Grasslands for Gamebirds and Songbirds program provides technical and financial assistance to improve or develop grassland and pollinator-friendly habitat in selected regions of Indiana. The main goal of the program is to develop or enhance 3,250 acres of beneficial grassland habitat on private lands. This program is available in NE Indiana to landowners that live within DeKalb, LaGrange, Noble or Steuben Counties. DNR biologists can meet with landowners to develop a habitat plan that achieves landowner's goals and assists with potential funding opportunities. The DNR also has habitat teams that may be available to help landowners complete projects who may not have the equipment, time, or experience to do the work.

#### 2019 GGS program highlights:

- \$2 Million for Conservation
- 3 New Grassland Biologists
- 2 New Habitat Teams to Assist Landowners
- Outreach to 850,000 Citizens
- 138 GGS Habitat Projects across the State; Steuben County = 12 contracts covering 83.8 acres
- I,820 Acres of Enhanced Habitat Establishing Native Grass, Wildflowers, & Shrub Species.

Want more information? Visit: Wildlife.IN.gov/9467.htm

#### **EDUCATION**

The SWCD continues our commitment to inform communities about our natural resources and how to conserve them. Through a variety of adult and youth education programs, we are able to reach thousands of people every year. Conservation education helps people of all ages understand and appreciate our country's natural resources. Through educational experiences and activities targeted to varying age groups and populations, conservation education enables everyone to realize how natural resources and ecosystems affect each other and how resources can be used wisely. People can develop critical thinking skills needed to understand complex ecological problems. Conservation education encourages both youth and adults to use natural resources in a responsible manner by making informed decisions.

The Steuben SWCD works with a variety of conservation partners, landowners, businesses, agencies, and organizations on several of our adult and youth education programs. We would like to thank everyone for their assistance and support with this critical endeavor. We recognize them below.

We also recognize the many Affiliate Members - individuals, groups and organizations who choose to financially support the work of the district. Donations received from Affiliate Memberships are used to help support our adult and youth information and education programs. Our 2019 Affiliate Members can be found on page 13.

#### The Steuben County SWCD thanks:

- The **Steuben County Lakes Council** for sponsoring educational activity booklets for local 1<sup>st</sup>, 2<sup>nd</sup> & 4<sup>th</sup> grade students within the county for Stewardship Week and our 4<sup>th</sup>-Grade Youth Field Day Education program, and **Bill Schmidt, Bob Glick** and **Steve McElhoe** for assistance with the Steuben County Life Program.
- **City of Angola/Trine University MS4** for sponsoring educational storm water activity booklets as part of our 4<sup>th</sup>-Grade Youth Field Day Education program.
- The **Ralph E. Taylor Grant** fund for sponsoring educational storm water and soil activity booklets and other materials, as part of our 4<sup>th</sup>-Grade Youth Field Day Education program.
- The **Steuben County Community Foundation Spirit of Community Grant** to help fund a 3D Interactive Augmented Reality Sandbox (ARS) Unit.

Angola Christian Church, Angola Parks Department, Cahoots Coffee Café, Camp Whitley, Carpers Farm Supply, City of Angola Fire Department, City of Angola Police Department, DeKalb County Parks and Recreation Department, Indiana Freemasons Ashley Local Lodge 614, Lake Bethel Church, Par Gil Learning Center, Marcia & Dewey Powers, Peabody Public Library, Pokagon State Park/Trine State Recreation Area, PADNOS Plastic Solutions, Potawatomi Inn, Steuben County Government, Steuben County YMCA, Sutton's Deli, The Andersons Inc., Timbers Restaurant, Trine University, Waterloo Water Pollution Control Department and Wild Winds Buffalo Preserve for providing workshop facilities.

All of the presenters that assisted with the SWCD's 2019 youth and adult education programs.







#### **EDUCATION**

#### 2019 Youth Programs

- ♦ Duck Days
- Conservation Camps in LaGrange, Steuben & Whitley Counties
- ♦ Earth Day Programs
- ♦ FFA Convention Judging
- ♦ Pollinator Programs
- ♦ Regional Envirothon
- ♦ School Community Outreach Programs
  Angola Middle School
  Fremont High School
  Hamilton Community School
- Soil and Water Stewardship Week Stewardship Week Materials Stewardship Week Poster Contest Stewardship Week Presentations
- Steuben County 4-H Fair
- Steuben County Fishing Workshop
- ♦ Tri-State/Trine Regional Science Fair
- ♦ Youth Conservation Field Day

#### 2019 Adult Programs

- ♦ Ag Safety Day
- ♦ Agronomy Field Day
- ♦ Contractor Workshop
- ♦ Cover Crop Discussion Group
- ♦ Earth Fest
- ♦ Spring Garden Series
- ♦ Steuben County SWCD 69th Annual Meeting
- ♦ Steuben County Life Series

Other Activities: Annual Tree Program •
Wildlife Food Plot Seed • Tillage Transect Surveys
(spring and fall) • Legislative Tours •
Hoosier Riverwatch Water Monitoring Kits

"You cannot get through a single day without having an impact on the world around you. What you do makes a difference, and you have to decide what kind of difference you want to make."

- Jane Goodall

### **2019 Tri-State Regional Science Fair Soil and Water Conservation Award Winners**

First Place

Isaac Warner (Soil Erosion Mitigation); Saint Mary Elementary School.

o Second Place

Atticus Reffner (The Effects of Direct Composting on Sweet Corn); DeKalb High School.

o Third Place

Mara Keyes (Talk of the Lake); James R. Watson Elementary School

Since 2010, the NE Indiana Conservation Districts of DeKalb, LaGrange, and Steuben counties have sponsored special Conservation Awards at the Tri-State Regional Science Fair. Students are recognized for their outstanding science fair projects that recognize the importance of conservation and stewardship of natural resources such as soil, air, water and energy. Awards consist of a certificate of recognition, and a \$75 award for the first-place project, a \$50 award for the second-place project, and a \$25 award for third place. Each winner is also presented with a conservation book.

We recognize and congratulate our 2019 Tri-State Regional Science Fair Soil and Water Conservation Award winners Isaac Warner, Atticus Reffner and Mara Keyes.

#### Projects:

First Place - Isaac Warner, seventh-grader from Saint Mary Elementary School, for his project entitled "Soil Erosion Mitigation". His project investigated four different soil erosion control methods and how well each prevented soil erosion.

Second Place - Atticus Reffner, sophomore from DeKalb High School, for his project entitled "The Effects of Direct Composting on Sweet Corn". This project focused on the importance of composting, not only to reduce food waste, but also to improve soil health.

Third Place - Mara Keyes, fourth-grader from James R. Watson Elementary School, for her project "Talk of the Lake". Mara compared the pH and turbidity of three northern Indiana lakes to determine which one had the best water quality, based upon the data she collected.

Providing conservation awards has given the DeKalb, LaGrange, and Steuben County SWCD's the opportunity to reward local deserving students for work in natural resources conservation. It has also allowed the districts to present a conservation message to the larger group, both young people and their parents, that assemble every year for the awards ceremony.















#### **ABOVE**

A picture collage of various educational events conducted in 2019. Through educational experiences and activities targeted to varying age groups and populations, conservation education enables everyone to realize how natural resources and ecosystems affect each other and how resources can be used wisely .

\*\*Photos courtesy of Tara Lee\*\*

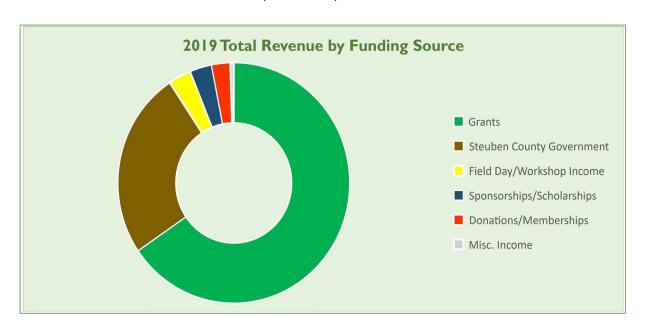
"Learning is a treasure that will follow its owner everywhere."

#### **2019 FINANCIAL REPORT**

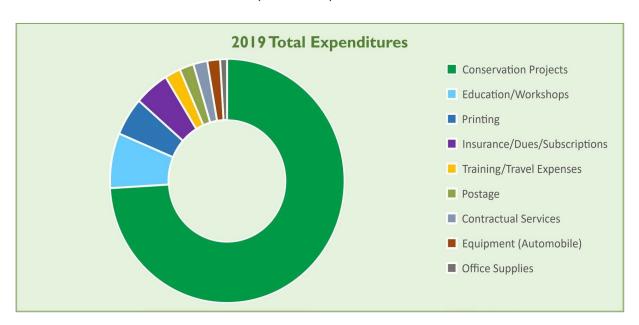
Receipts	
State—Clean Water Indiana (CWI) Matching Grant for District Operation	\$10,000.00
All other CWI Grant Funds	\$10,220.80
County for District Operation*	\$16,000.00
Federal Funds—Great Lakes Sediment and Nutrient Reduction Grant for Pigeon Creek	\$1,432.20
State Funds—Lake and River Enhancement (LARE) Watershed Land Treatment Grant	\$17,862.67
Non-Government Grants (Steuben Co. Community Foundation & City of Angola, ARS Education Grants)	\$2,000.00
Workshop/Field Day Income—Steuben County Life and Conservation Camp	\$1,790.00
Donations & Memberships	\$1,664.00
Annual Meeting Income	\$224.00
Reimbursements/Refunds/Sponsorships	\$1,908.75
Sales Income—Flags & Rain Barrels	\$160.00
Interest on Savings Account	\$146.15
Total Income	\$63,408.57
Balance brought forward from 2018	\$60,732.77
TOTAL RECEIPTS	\$124,141.34
Disbursements	
Annual Meeting Expense	\$1,080.73
Clean Water Indiana Projects	\$11,242.69
Conservation Education Programs	\$3,670.62
Contractual Services	\$1,558.00
Cost-Share Projects—SWCD Funded	\$7,381.87
Cost-Share Projects—Federally Funded	\$28,178.75
Cost-Share Projects—State Funded (LARE)	\$17,477.67
Dues and Subscriptions	\$3,364.00
Office Supplies	\$840.88
Postage	\$1,739.23
Printing/Copying Expense	\$4,505.20
Sales Tax on Flag Sales	\$10.44
Travel/Lodging/Mileage/Registration/Meals	\$1,925.41
Workshop/Field Day Expense—Steuben County Life	\$1,714.95
District Vehicle - Fuel, Repairs, and Maintenance	\$1,575.22
Computer Expenses (Web Hosting)	\$159.00
Insurance	\$877.00
Other Disbursements: Ralph E. Taylor Grant & Community Foundation ARS Education Grant	\$1,436.75
TOTAL DISBURSEMENTS	\$88,738.41
Balance in Checking at December 31, 2019	\$35,256.78
Petty Cash	\$100.00
Savings Account	\$41,830.76
* In addition to the grant for District Operation, the County directly paid the salary of the two District sta	aff amployees

#### **2019 FINANCIAL REPORT**

**2019 Total Revenue by Funding Source** (\$63,408.57)



# **2019 Total Expenditures** (\$88,738.41)



#### **AFFILIATE MEMBERS**

Affiliate members are individuals, groups or organizations who choose to financially support the work of the Steuben County SWCD. Donations received from Affiliate Members are used to help support District information and education programs for youth and adults.

# THANK YOU TO ALL OF OUR 2019 AFFILIATE MEMBERS

Angola American Legion
Angola Seed & Supply, LLC
Aquatic Enhancement & Survey, Inc.
Carper Farm Supply, Inc.
City of Angola/Trine University MS4
Clear Lake Township Land Conservancy
Bill & Diana Clingan (Hudson, IN)
Daft Erosion Control LLC
Tom & Marilyn DeWeese (Angola, IN)
Edon Farmers Co-Op
Farm Credit Mid-America

Franklin Paul Group LLC
Hoham Feed & Seed
Kevin Northup Excavating
Lake George Conservancy Inc.
Lake James Association Inc.
Peter Mountz (Garrett, IN)
Sue A. Myers (Angola, IN)
Sheets LP Gas, L.P.
Steuben County Lakes Council
Stroh Farm Supply
John Williamson (Angola, IN)

The District Board gratefully acknowledges our 2019 Affiliate Members. If you would like to support conservation in Steuben County, please complete the 2020 Affiliate Membership Form on the back page and mail it with your check or money order to:

Steuben County SWCD 1220 N 200 W, Suite L Angola, IN 46703



#### **CONSERVATION PARTNERS**

The Steuben County SWCD is proud to work in partnership with a diversity of federal, state, city, and local community agencies and organizations to promote and implement conservation.

We are an active partner in the Indiana Conservation Partnership (ICP), which is comprised of 8 Indiana agencies who share a common goal of providing technical, financial and educational assistance needed to implement economically and environmentally compatible land and water stewardship decisions, practices and technologies. The Steuben County SWCD is an active partner, alongside:

- Indiana Association of Soil & Water Conservation Districts, and their 92 SWCDs
- Indiana Department of Environmental Management
- Indiana Department of Natural Resources
- ISDA Division of Soil Conservation
- Purdue Cooperative Extension Service
- State Soil Conservation Board
- USDA Farm Service Agency
- USDA Natural Resources Conservation Service



There are many other agencies and organizations working to improve the health and ecology of our community. The Steuben County SWCD has worked alongside many agencies and organizations in order to accomplish large scale, mutual goals. We recognize these partners here, with enormous appreciation for the results we are achieving together.

- Blue Heron Ministries
- City of Angola/Trine University MS 4 Stormwater Management Program
- Clear Lake Township Land Conservancy
- Crowe Forest Management LLC
- Friends of the St. Joseph River
- Pheasants Forever
- St. Joseph River Basin Commission
- Steuben County Government
- Steuben County Lakes Council
- The Herald Republican
- WLKI



#### **AROVE**

Conservation in action. A grassed waterway was established with vegetation to convey surface water into a water and sediment control basin or WASCOB. This practice was applied as part of a resource management system to reduce water and gully erosion, trap sediment and reduce and manage onsite runoff.

Photo courtesy of Janel Meyer











Crowe Forest Management









# SPOTLIGHT ON CONSERVATION Soil Health



#### **AROVE**

Earthworm activity increases soil health. When they move through the soil eating, earthworms form tubular channels or burrows. These burrows can persist for a long time in the soil. Earthworm burrows increase soil porosity which increases soil aeration and infiltration. Earthworms also increase soil structure, nutrient cycling, water movement, and plant growth.

Photo courtesy of Janel Meyer



#### **ABOVE**

Soybeans growing in a field of corn residues from the previous year. The soybeans were planted with a no-till method where no tillage was done prior to planting, to save soil, energy, time, and money.

Photo courtesy of USDA NRCS

#### Soil Health

Soil health, also referred to as soil quality, is defined as the continued capacity of soil to function as a vital, living ecosystem that sustains plants, animals, and humans. This definition speaks to the importance of managing soils so they are sustainable. To do this, we need to remember that soil contains living organisms that when provided the basic necessities of life - food, shelter, and water - perform functions required to produce food and fiber.

The soil health system is founded on 4 core principles, which motivate specific conservation practices. The principles create a recipe for regenerating soil health. Keep in mind, all 4 principles work together as a system. Maximum health benefits can be achieved when all 4 are in practice. The following 4 Soil Health

Principles apply to all land uses:

- ⇒ MINIMIZE Disturbance
- **⇒ MAXIMIZE Soil Cover**
- **⇒ MAXIMIZE Living Roots**
- ⇒ MAXIMIZE Biodiversity

NRCS and the Steuben County SWCD work with producers to help them implement a systems approach, adopting a suite of practices to improve the health of their soils. Practices can include cover crop integration, quality no-till or reduced-till, crop rotations, adaptive nutrient management, integrated weed & pest management and precision farming technology.

Soil is essential for life. Without soil, we can't grow crops. Soil health is not just a trending topic, it is a critical part of farming and our future.

#### **Opinion-Editorial: Stop Soil Erosion, Save our Future**

# SPOTLIGHT ON CONSERVATION



#### **ABOVE**

Wind erosion from a field located in Steuben County. Wind erosion damages land by removing soil from one place and depositing it in another. It causes soil loss, dryness and deterioration of soil structure and nutrient and productivity losses.

Photo courtesy of Janel Meyer

Want to learn more about improving the health of your soil? Stop by the Angola USDA Service Center and talk to a District Conservationist or SWCD staff.



Jerry Raynor
Indiana NRCS State Conservationist
12/4/2019

According to the United Nations, every five seconds, the equivalent of one soccer field of soil is eroded. Stop and think about that for five seconds. Did you stop and think? Those five seconds cost us nearly 1.6 acres of land – more than 27,600 acres per day. If you're doing the math, that's over 10 million acres

per year. As the earth's population continues to grow and the demands on our soil increases, we need to continue raising awareness about the importance of healthy soil and advocate for the sustainable management of one of our most precious resources.

With the increased demand for food production to feed our growing population, a decrease in available land, and the United States and the world becoming more dependent on finite resources just to keep up with demand, healthy soil matters to all of us. Helping to keep the soil from eroding off of our farmlands is of utmost importance.

Managing for soil health is one of the most effective ways for farmers to increase crop productivity and profitability while simultaneously reducing the effects of soil erosion on their fields. But soil health isn't achieved overnight. It takes patience, fortitude and a system of practices working together to produce healthy, fully -functioning soils.

USDA's Natural Resources Conservation Service is excited to work hand-in-hand with Indiana farmers to find the best combination of conservation practices to manage their land for optimal soil heath and minimal soil erosion. The excitement is building as farmers are seeing incredible success when groups of practices such as no-till, cover crops, advanced nutrient and pest management, and buffers are implemented together as a "system."

Implementing a soil health management system can lead to greater water absorption and retention, making soil less susceptible to runoff and erosion. Soil that is covered year-round with crops, crop residue, grass or cover crops is much less susceptible to erosion from wind and water. Cropping systems that utilize practices like no-till keep soil undisturbed from harvest to planting while reducing the likelihood of erosion.

As we face the need to produce more food and fiber and are faced with climate and sustainability challenges, I believe there is no better time to work hand-in-hand with Hoosier farmers to improve the health of this critical living resource.

#### **UPCOMING EVENTS**

#### 2020 Spring Garden Series

Tuesday evenings this May.
6:00 - 7:00 p.m.

For more information contact:
Purdue Extension
(260) 668-1000 ext. 1400
or
Steuben County SWCD

(260) 665-3211 ext. 3





The Steuben and LaGrange County Soil & Water Conservation Districts are pleased to present a Forestry Field Day on **Saturday, May 9, 2020**. This is a free event.

This workshop is the second of a three-part series, which will provide information about timber stand improvement (TSI) and long-term effects of logging. It will be held at Rolling Acres Farm, located at 5768 W Lake Valley Road, Pleasant Lake, IN.

The workshop is scheduled from 9 - 12:00 p.m. Registration begins at 8:45 a.m. Lunch will follow the workshop, beginning around noon.

If you are interested in attending this **free event**, please **RSVP** to the Steuben County SWCD at (260) 665-3211, ext. 3, **by May 6, 2020**.

Timber stand improvement (TSI) is implemented to improve forest stands for a specific purpose. Most often, the objective is to improve timber, forest health and/or wildlife habitat. Forest health also benefits from these treatments as poor formed, unhealthy or diseased trees are culled to give additional growing space to the healthy trees. Treatments also allow landowners to maintain important tree species that might otherwise be lost without management.

The last workshop will be scheduled approximately I-year after tree removal.

#### **UPCOMING EVENTS**

#### **2020 STEWARDSHIP WEEK**

April 26 - May 3, 2020



In 1955, the National Association of Conservation Districts (NACD) began a national program to encourage Americans to focus on stewardship. This national program is known as Stewardship Week. Stewardship Week is officially celebrated from the last Sunday in April to the first Sunday in May. It is one of the world's largest conservation-related observances.

NACD recognizes education as a critical element of the conservation effort at local, state and national levels. The Steuben County SWCD also recognizes the importance of education. We work to promote and share information about stewardship and conservation by holding field days, educational programming and work-shops to educate youth and adults about the importance of caring for our natural resources to improve our community. The SWCD provides information to youth and adults, so they can gain a better understanding and appreciation of our natural world. It's never too early, or too late, to begin a conversation about conservation.

Each year, the NACD Stewardship and Education Committee develops a different theme. This year's topic is pollinators. Pollinators form the foundations of a healthy and sustainable future for food and the environment. However, in recent years, they have shown concerning signs of decline. Stewardship Week is a great reminder that we have the power to work together to help pollinators prosper. How? Simply enhance native pollinator habitats where you live. Add native species, or plants that naturally occur in northeast Indiana, and remove invasive plant species.

Invasive plants tend to be aggressive and out-compete other plants for resources, negatively impacting the ecosystem.

Need ideas for plants for your yard? Check out the Indiana Native Plant Society website for additional information.

www.indiananativeplants.org

#### RIGHT

Your yard can provide essential habitat for pollinators like butterflies hummingbirds, bees and other beneficial insects.

Photo courtesy of Janel Meyer



You might think that your property doesn't have much impact on the bigger picture, but it's possible for our decisions to reach past our boundary lines.

#### 2019 STEWARDSHIP WEEK POSTER CONTEST WINNERS

During Stewardship Week, the Steuben County SWCD provides educational activity booklets for the MSD of Steuben County and Fremont Elementary Schools. We also sponsor a poster contest. The contest provides students from I<sup>st</sup> through 5<sup>th</sup> grade the chance to have their art displayed as part of a local conservation outreach initiative. Each year, the winning posters reflect the National Association of Conservation Districts (NACD) annual Stewardship theme and highlight the work of conservation districts, auxiliaries and agencies to protect and enhance natural resources. Below, we recognize our 2019 Stewardship Week poster contest winners. The 2019 theme: "Life in the Soil: Dig Deeper"



#### **ABOVE**

Bottom row, left to right (1<sup>st</sup> Grade Category): Peter Smith, 1<sup>st</sup> Place, Ryan Park Elementary (*Mrs. Mills*) Lily Miklaszewicz, 2<sup>nd</sup> place, Ryan Park Elementary (*Mrs. Mills*) Veyda Ruckel, 3<sup>rd</sup> Place, Ryan Park Elementary (*Mrs. Mills*)

Top row, left to right (2<sup>nd</sup>/3<sup>rd</sup> Grade Category): Kaylene Hart, 1<sup>st</sup> Place, Pleasant Lake Elementary (*Ms. Clary*) Avery Judson, 2<sup>nd</sup> Place, Ryan Park Elementary (*Mrs. Clary*) Lucy Smith, 3<sup>rd</sup> Place, Ryan Park Elementary (*Mrs. Clary*)

Right side, middle (5<sup>th</sup> Grade Category): Nabeeha Haseeb Kazi, 1<sup>st</sup> Place, Carlin Park Elementary *(Mrs. Buchs)* 

#### RIGHT

1st Place Classroom Poster: Mrs. Christina Minick's 1<sup>st</sup> Grade Class, Ryan Park Elementary





Peachtree Plaza 200 1220 N 200 W, Suite L Angola, IN 46703 260-665-3211, ext. 3

Conserving the Natural Resources of Steuben County for Future Generations!

All programs and activities of the Steuben County Soil and Water Conservation District and its Partnership Agencies are offered on a non-discriminatory basis, without regard to race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or part of an individual's income is derived from any public assistance program.

#### 2020 Affiliate Membership Form

Yes, I am interested in being an Affiliate Member of the Steuben County Soil and Water Conservation District for calendar year 2020 It is my understanding that the donations received from Affiliate Memberships are used to supplement the District's Information and Education programs for youth and adults, and that the District will publish a list of Affiliate Members in its annual report and newsletters throughout the year (circulation - over 1,600 people).

Personal or Business Name:	
Address:	
City/State/Zip:	
Membership Levels	
\$25.00 - Bronze Level	
\$50.00 - Silver Level	
\$75.00 - Gold Level	
\$100.00 and above - Platinum Level	
Signature:	Date:

Please return this form with your donation made payable to: Steuben County Soil and Water Conservation District
A receipt will be forwarded to you to acknowledge your donation
THANK YOU FOR YOUR SUPPORT!

Steuben County SWCD • 1220 North 200 West, Suite L - Peachtree Plaza 200 • Angola, IN 46703