



Conservation Conversation

Pondering what to write for the front cover of our Annual Report is always hard. Do I write about how proud I am to be a part of this team, our knowledgeable hardworking staff, how our team has grown, great presenters who were invited to our workshops, the extensive field work that was completed, successful events, or projects we partnered on? There isn't enough room to cover it all!

Here are a few highlights of our greatest accomplishments for 2018:

- Continued partnership with the Department of Natural Resources and SW x SW Corner CISMA to host the invasive species program grant which promotes the education and management of invasive species
- Hired a new fulltime Recycling Coordinator, Emilly Hickmott
- Updated and published a new and improved Van Buren County Recycling Guide
- Purchased scales to lend out to local farmers to help calibrate their manure spreaders so applications are safe and correct
- Hired an MSU senior intern, Lucas Hartman, who completed survey and mapping for Phragmites and Japanese Knotweed on all roadways in Van Buren County
- Hit the largest number of free resident well screenings for nitrate and nitrites in our history
- Completed our fifth year of stream monitoring and insect collecting in local rivers and streams
- Submitted the first round of water samples to the dogs that sniff out human sewage, and started a plan for educating residents about septic maintenance
- Hosted our first Healthy Home Fair to help promote septic maintenance and other healthy practices
- Helped organize the, first in a decade, Envirothon Team from Van Buren County, who happen to win 1st place at regionals
- Supported three projects with mini-grant funding: pollinator habitat seeding at the Wolf Lake State Fish Hatchery, passenger tire collection for Village of Lawton residents, and an outdoor walking/running trail with educational stops about our natural resources in Hamilton Township

We continue to provide education and technical assistance, partner on programs, and help our residents conserve their lands and our environment throughout Van Buren County. We look forward to another successful year ahead.

Best regards,
AJ Brucks, Executive Director

VBCD Financials & Family

REVENUES

County Tax Millage Funds	\$ 304,630.71
Federal Grants	\$ 74,361.16
State Grants	\$ 283,926.37
Local Contributions & Grants	\$ 26,318.35
Charges for Services	\$ 67,139.90
Interest & Rentals	\$ 11,263.53
Other Revenues	\$ 86,465.76
Sale of Trees & Other Goods	\$ 19,885.72
Total Revenue & Other Sources	\$ 873,991.50

EXPENDITURES

281 Operations	\$ 294,022.83
280 Resource Recovery	\$ 50,281.14
282 MAEAP	\$ 77,703.90
284 Safe Food	\$ 40,397.33
285 Entergy	\$ 8,518.35
292.1 GLPF	\$ 2,058.31
292.2 VB County Drain Commission	\$ 2,250.00
293 CISMA—Invasive Species	\$ 165,825.14
294 Reforestation	\$ 14,409.68
298 Pine & Mill Creek Grant	\$ 74,361.16
299 Notre Dame Grant	\$ 51,509.46
Total Expenditures & Other Uses	\$ 781,337.30
Net Revenues (Expenditures)	\$ 92,654.20
Beginning Fund Balance	\$ 430,854.26
Ending Fund Balance	\$ 523,508.46

*Numbers represent an unaudited year

THANK YOU!!

To our volunteers that helped prepare thousands of tree seedlings and native plants, helped with stream monitoring, culvert inventories, and trash cleanups. We couldn't do what we do without volunteers!



Board Of Directors

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- Carl Druskovich, Treasurer
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- Kyle Mead, MAEAP Technician
- Colleen Forestieri, Conservation Technician
- Nor Serocki, CISMA Coordinator
- Emily Hickmott, Recycling Coordinator
- Kalli Sternaman, Intern
- Lucas Hartmann, Intern

Supporting Agencies and Organizations:



Natural Resources Promotion and Protection



Volunteer Stream Monitoring Program Insect Collection & Identification

This program continues to grow with new “citizen scientists” joining in on this hands-on experience. Macroinvertebrates (insects we can see) are collected in and alongside waterbodies and are indicators of water quality; the more variety and quantity of insects you find the better - in most cases.



This great educational program gets volunteers out to help do scientific research that will improve water quality and the environment in Van Buren County well into the future.

Data collected can be found at: micorps.net/about-data-exchange.

Envirothon

Envirothon is a nationwide program for high school students. Teams study topics and compete in a quiz bowl style program with and against other students at a regional, state, and national competition. We are working with the 4-H Voyagers to help organize and train students about these environmental subject areas, including: Agriculture, Aquatic Ecology, Energy, Forestry, Soils/Geology, and Wildlife. We were happy to have six



Van Buren County students join our, first in a decade, Envirothon Team. The “Van Buren Voyager” team placed 1st at the regional competition at Ft. Custer and did very well at the state competition for being new to Envirothon and such a young team. We expect great things out of these students in years to come!

Tree Seedling Sale Over 15,000 trees and shrubs were sold to be used in projects such as windbreaks, wildlife plantings, reforestation, stream stabilizations, landscaping and beautification. The Tree Seedling Sale is the VBCD’s biggest fundraiser and helps fund programming and education throughout Van Buren County.



Resident Well Water Testing

For one week in August the VBCD hosts a free drinking water well screening for residents of Van Buren County. Over two hundred samples from drinking water wells are screened for nitrates and nitrites which reach drinking water when nitrogen from the soil works its way deep into drinking water aquifers. The week was the busiest it has ever been due to the recent PFAS testing and reporting of sites throughout Michigan.

Lists of Resources

Some of the most popular questions residents stop in or call about revolve around plant identification, forest management, and tree disease.

We have updated lists of local arborists, foresters, and forestry programs listed on our website and available in the office.





Michigan Agriculture Environmental Assurance Program MAEAP

The goal of the MAEAP Program is to offer free, confidential, and non-regulatory farm assessments that assist farmers in complying with state and federal laws and Michigan Right to Farm Guidelines. Farm*A*Systs evaluate practices done at the Farm/Homestead such as fertilizer storage, fuel storage, pesticide storage, and well isolation. Crop*A*Systs work similarly to Farm*A*Systs, but additionally the Crop*A*Syst covers practices in the field such as pesticide, fertilizer, and irrigation utilization and recordkeeping. The program works as a “second set of eyes” on the overall production of the farm. Technicians like Kyle can pinpoint potential issues on the farm that, when changed, will protect the environment and can reduce input costs.

Total A*Systs completed in FY 2018

- Farm*A*Systs — 25
- Crop*A*Systs — 41
- Orchard*A*Systs — 36
- Livestock*A*Systs — 3
- Greenhouse*A*Systs — 2



Practices found with the potential to cause adverse environmental impacts are logged in the Farm*A*Syst or Crop*A*Syst as a “to-do list” for the producer and MAEAP Technician to complete. When a potential impact is reduced, it is known as a “Risk Reduction”. Risk Reductions can be the closing of an unused well, pouring a concrete pad for the transfer of fuels, or erecting a building designed specifically for fertilizer and pesticide storage.

Risk Reductions completed in FY 2018 — 174

Once a farm has completed a Farm*A*Syst or a Crop*A*Syst and evaluated and reduced all risks on their farm, they can then become MAEAP Verified by MDARD (Michigan Department of Agriculture and Rural Development). A MAEAP Verification is recognition from the State that all practices, procedures, and operations done on the farm are environmentally sound according to Michigan’s Generally Accepted Agricultural Practices (GAAMPS). Producers obtaining this Verification may choose to post a sign at their farm site to let friends, neighbors, and customers know that environmental stewardship is important to the farm owners and operators. A MAEAP Verification also comes with marketing opportunities as well as legal protections for MAEAP Farmers that maintain MAEAP Standards.

Total MAEAP Verifications completed in FY 2018

- Farmstead System Verifications — 8
- Cropping System Verifications — 8
- Livestock System Verification — 2



**Congratulations to the new
MAEAP Verified farms!**



Produce Safety Program Covering Southwest Michigan

Produce Safety Program

The Produce Safety Program is the newest addition to the assortment of programs offered by the Conservation District. This free statewide program is designed to help growers evaluate on-farm practices with their produce. Much like the MAEAP program, it is non-regulatory, voluntary, and confidential.



The program includes education on water tests, manure and compost, harvest, handling, and crop storage. Victoria Toney is our new technician working out of the Berrien Conservation District office. Victoria is covering Allegan, Berrien, Kalamazoo, and Van Buren County growers.

Why was this program developed?

The Food Safety Modernization Act (FSMA) was signed into action in 2011 and FSMA's Produce Safety Rule then took effect in 2015. This rule provided new safety guidelines for produce that is typically eaten raw, with a focus on the prevention of foodborne illness.

Because the rules can be quite technical, the State of Michigan decided to offer assistance to growers to better understand the requirements in a non-regulatory manner. In partnership with Conservation Districts, four technicians in areas of the state with the most produce farms are working to develop the Produce Safety Program.

Who is this program for?

- Small to mid sized operations
- Farms that need to comply with FSMA
- Farms that do not need to comply with FSMA but are interested in produce safety
- Farms considering other, more expensive audits in the future
- Any grower with produce safety questions

How does it work?

- Schedule farm visit with a local technician
- Work through the Produce Safety Risk Assessment questions with help from the technician
- Write a produce safety plan & implement changes to follow FSMA
- Receive certificate from Michigan Department of Agriculture and Rural Development



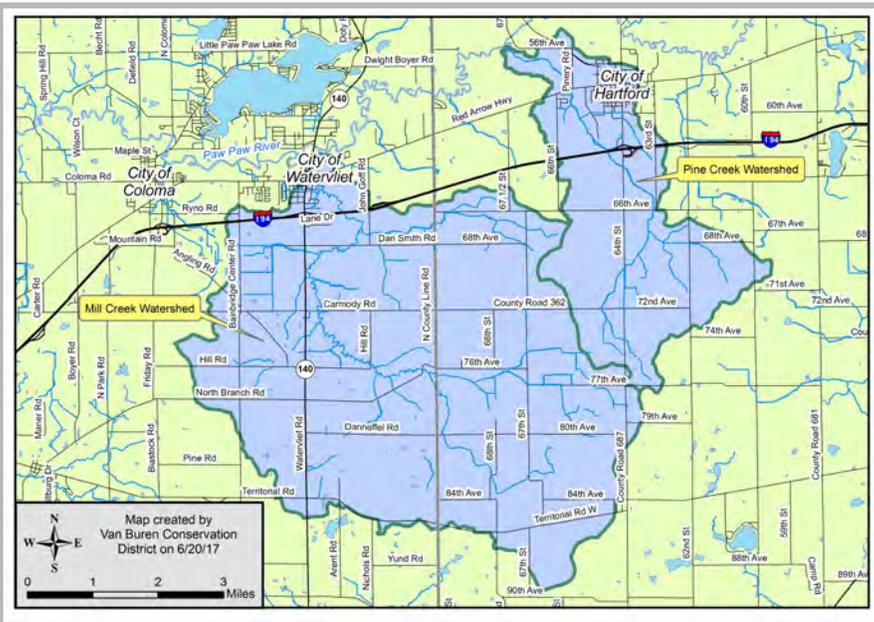
2018 Report

This year the program has focused on training a local technicians and introducing the program with outreach at local farmers' markets and events.

Polluted Runoff Reduction in the Paw Paw River Watershed: Pine and Mill Creek



In the fall of 2016, the Conservation District began working with partners on a project to **reduce bacteria, pathogens, sediment and nutrient runoff** in Pine and Mill Creeks in the Hartford and Watervliet area. Both creeks are listed by the State of Michigan as impaired by bacteria and pathogens like *E. coli*. Improvements will be accomplished with cost share and technical assistance for targeted agricultural Best Management Practices (BMPs), a septic system improvement strategy, and education campaigns for both farmers and residents. In addition, the Conservation District is conducting a research project on the effectiveness of agricultural drainage water management in reducing pollutant runoff.



Project Totals: Fall 2016 - Fall 2018

Sediment Reduction	200.6 tons
Phosphorus Reduction	178.2 lbs.
Nitrogen Reduction	358.8 lbs.
Acres of cover crops	1,444 acres
Acres of no-till	310 acres
Linear feet of riparian buffers	6,596 linear ft.

Partners

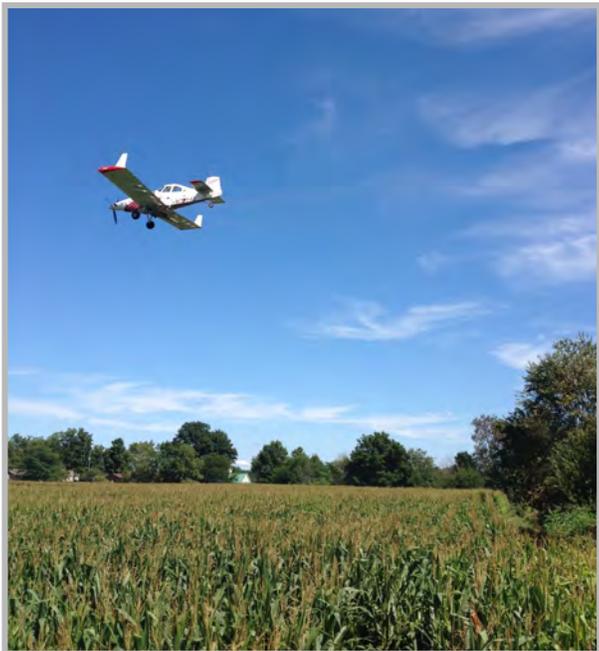
- Southwest Michigan Planning Commission
- Van Buren County Drain Commissioner
- Two Rivers Coalition
- Michigan Dept. of Environmental Quality
- Van Buren/Cass District Health Department
- Berrien County Health Department
- Van Buren County Farm Bureau
- Michigan State University
- Landowners



Great Lakes Restoration Initiative Project with the University of Notre Dame



The Conservation District began working with the University of Notre Dame in 2018 to cost-share cover crop installation in the Pine Creek Watershed in the Hartford area using funding from the Great Lakes Restoration Initiative. In addition, University of Notre Dame researchers will compare water quality differences between two small watersheds (Pine and Mill Creeks)—one with >60% coverage of cover crops on cropped acres and one with minimal cover crops. Conservation District staff have instituted an aerial cover crop seeding co-op to help keep costs low for growers. Technical assistance and research information will be provided to growers to help assess effectiveness of cover crops for water quality and agronomic benefits. The information we learn will help us improve our technical assistance to growers in the future.



Cover crop seed is applied via an airplane into standing corn to improve establishment (cover crops applied post-harvest may have a very short window to establish before a hard freeze).



University of Notre Dame researchers collect water samples to help assess the effectiveness of conservation practices.

Project Totals: Fall 2018

Sediment Reduction	250.9 tons
Phosphorus Reduction	230.7 lbs.
Nitrogen Reduction	461.4 lbs.
Acres of cover crops	1,101 acres



Agricultural Conservation Programs & Education



Forest, Wetland & Habitat Systems

MAEAP now provides landowners of all types of land with the tools and resources to sustainably manage properties and assess ecological conditions of lands not farmed. The Forest, Wetlands, and Habitat System, or FWH*A*Syst, works with upland/lowland forests, grasslands, savannas, marshes, bogs, and dunes. The first step is to have our MAEAP technician come out and complete an assessment. A plan is then developed for addressing all identified conservation opportunities and resource concerns, and any immediate risks of groundwater and surface water contamination must be mitigated. Once the plan is in place and all risks have been assessed, the landowner can receive a MAEAP Verification.

Breakfast on the Farm

Michigan State University Extension hosted a great farm field day at Hoods Family Farm in Paw Paw. Staff was able to set up a booth to discuss soil health, cover crops, MAEAP, and Conservation District programs.



On Farm Field Day

The Conservation District, in conjunction with the MAEAP Program, MSU Extension, and NRCS, held an On-Farm Field Day at Muvrin Farms of Paw Paw, Michigan. The Field Day highlighted soil health through cover crops which was illustrated with a rain simulation. The rain simulation 'rains' an inch of water over various types of cover and tillage practices while collecting the water that runs off the surface and soaks through the soil profile. It left many juice grape and fruit growers with opened eyes once they were shown how the rain may move through their soil possibly taking nutrients and pesticides with it. Along with growers from all over Van Buren County, farmers from Allegan, Ottawa, and Berrien counties also came to learn.

Farming for the Future

Farming for the Future was a success in March at the Van Buren Conference Center. Over one hundred farmers and residents attended to learn about 'The Fate of Phosphorous' and the '4-Rs of Nutrient Stewardship'. Keynote speaker Joe Nester spoke of the reasons why we have so much phosphorous leaving our farm fields and what practice can be implemented to keep P on the farm. We had many other topics including successional farming and other BMP technologies, soil food web in perennial crops, Farm safety and gypsum.





Southwest X Southwest Corner CISMA Covering Berrien, Cass, and Van Buren Counties

The SW x SW Corner Cooperative Invasive Species Management Area, or CISMA, is a Michigan Invasive Species Grant Program funded organization helping residents and stakeholders understand the threat of invasive species in Berrien, Cass, and Van Buren Counties. This year, the CISMA has expanded and:

- Increased availability of home visits to identify invasive species and provide management advice
- Hosted events with local lake associations, libraries, schools, and museums to increase awareness on specific topics, such as dune invaders and forest pests
- Identified, monitored, and tracked locations of invasives throughout the CISMA
- Hosted a photo contest on Facebook in conjunction with tree sale to get people looking for Asian Longhorn Beetle (*see right*)
- Discovered three populations of Kudzu, some of the first in the state
- Continued to monitor and manage Michigan's 2nd site of Japanese Stiltgrass (top)



Japanese Knotweed

What Is A CISMA?

CISMAs are groups of local, state, and non-profit partners that work together to manage invasive species on a large scale. CISMAs have been forming throughout the state to respond to new threats to Michigan's native ecosystems. Research has shown that larger, landscape scale working groups can better address the threats of invasive species, especially since these plants and animals can spread quickly without respect for property lines. The CISMA is able to work together with groups of landowners to create uniform management to work towards invasive species eradication.

Invasive species current watch list

- | | |
|-----------------------------|-----------------------------|
| • Phragmites | • Asian long-horned beetle |
| • Japanese & Giant knotweed | • Hemlock Woolly Adelgid |
| • Flowering rush | • Chinese Yam |
| • Black & Pale Swallowwort | • New - Kudzu |
| • European Frogbit | • New - Japanese Stiltgrass |

For photos, descriptions and treatment methods, visit misin.msu.edu



Kudzu



Resource Recovery & Recycling Program

Household Hazardous Chemical Waste, Paint, and Passenger Tire Collections

The 2018 collections were the largest collections in the history of Van Buren’s documented hazardous chemical waste collections, even surpassing the records set in 2017. Between the two recycling collections (Paw Paw and South Haven), residents responsibly recycled 22,252 pounds of paint and 11,194 pounds of household hazardous chemical waste. The South Haven collection served at least 205 households in only 240 minutes. The VBCD hosted six passenger tire collections filling semi-trailers with over 4,700 tires this year. This year’s collections were supported by millage funding from Van Buren County residents and municipal contributions, and a scrap tire grant from the Michigan Department of Environmental Quality.

Southwest Michigan Solid Waste Consortium Partnership

Van Buren County is a participating member of the SWMSWC, a consortium that focuses on regional education and efforts to properly divert waste from the landfills. Along with County Commissioners Godfrey and Schincariol, the VBCD sits on the technical advisory committee and acts as the secretary and treasurer. For the seventh year in a row, the Consortium was awarded a Scrap Tire Clean Up grant from the MDEQ. This year, regional partners collected over 20,000 passenger tires by utilizing grant funding and over 100 additional tires with other funding.



Electronic Recycling

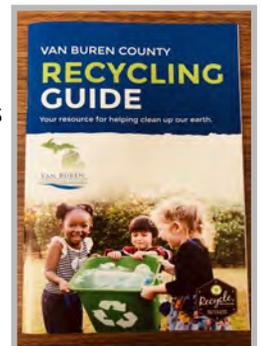
The Community Thrift Shop in Paw Paw continues to go above and beyond by hosting the electronic drop off location for Van Buren County residents. In 2018, over 27,000 pounds of e-waste was recycled properly. With the partnership between the VBCD, Green Earth Recycling, and the Community Thrift Shop, we have been able to help recycle almost over 150,000 pounds of electronics over the past four years.



Lakeview Foundation
Community Thrift Shop

Expanding Education Resources

With the hiring of a full-time Recycling Coordinator in May, the VBCD was able to expand and update educational resources for the benefit of county residents and business owners. The Recycling Program page on the website was updated with current “how-to’s” and “where-to’s” of recycling. Useful DEQ directories were added, along with a medication take-back map to help residents easily learn where they can take their unwanted medications. The Van Buren County Recycling Guide was updated with current “how-to’s” and “where-to’s” along with information about the cost of recycling, composting, and homemade cleaning products that are safer for our residents and for the environment.





Resident Resources



Equipment for Lending & Rental

The VBCD has several pieces of equipment and resources available to residents for free or for a small fee.

- John Deere No-Till Drill: used for small grain, soybeans and cover crops
- Truax Utility No-Till Drill: used for cool season grain and fluffy wildflower seed
- Irrigation Uniformity Equipment or catch cups: used to determine irrigation output on the soil and how uniform applications are across the field
- Wheel Scales: used to determine accurate manure application rates
- Soil Test Probe: used to easily gather soil plugs for soil testing
- Japanese Knotweed Injector: used to properly treat Knotweed into the stalk in an effective manner
- Books, Books, Books: there are several books available to borrow from gardening, animal identification, water quality and more



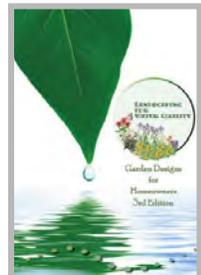
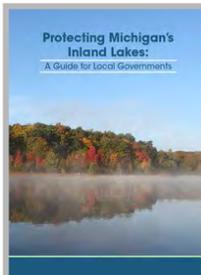
Farm Markets & Local Food and Farm Guides

The Local Food and Farm Guide reaches the hands of many of our county residents and visitors. We hope the guide increases business at our local farms and encourages healthy, fresh, and local food in our homes. This year, staff attended many of the local farm markets; Alma, Lawrence, Mattawan, Paw Paw, and South Haven. We met with vendors and shoppers, and visited about the programs and projects of the Conservation District. Look for us next summer too!



Inland Lake Protection

Natural shorelines, native plants, smart lawn maintenance, proper boat and bait cleaning, and invasive species education are all important topics the Conservation District promotes to help keep



our inland lakes water quality up to standards and a healthy, clean resource for Van Buren County.



Contact Us!

- www.VanBurenCD.org
- 269-657-4030x5
- www.facebook.com/VanBurenCD
- 1035 E. Michigan Ave. Paw Paw, MI



VAN BUREN
CONSERVATION DISTRICT



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