



# St. Mary's Soil Conservation District

2015 Annual Report  
April 2016

Soil Stewardship Week  
April 24th - May 1st

## 2015 Cooperator of the Year Jimmy Combs & Charlene Pizzadili

Jimmy Combs and Charlene Pizzadili own and operate a beef cattle farm in Callaway, Maryland. The farm has been in Jimmy Comb's family for three generations and consists of three parcels totaling 74.4 acres. The farm was originally purchased on August 1, 1963 by James N. Combs and Shirley Marie Combs, Jimmy's parents. All of the cropland acres are in permanent cover as either pasture or hayland. Although they are not certified as organic, Jimmy and Charlene do not use any chemical fertilizer on their grasslands and rely solely on manure to meet their nutrient management requirements. They also do not fatten their cattle with grain and they market their beef as grass-fed.



Maryland Governor Larry Hogan presenting Governor's Citation to Charlene and Jimmy at the St. Mary's SCD 63rd Annual Cooperators Dinner

Jimmy's Soil Conservation and Water Quality Plan was last updated in 2013 to include multiple planned best management practices that were applied this past year and also planned for 2016. With the exception of a sediment control pond that was installed in 1995 through the Maryland Agriculture Cost Share Program, all other best management practices installed, or to be installed, are cost shared through the Natural Resources Conservation Service's Environmental Quality Incentive Program. Practices installed over the last three years include 1595 feet of interior divisional fencing for an intensive grazing rotation and to exclude cattle from a 0.8 acres tree and shrub planting; a 385 foot deep well for livestock watering; and 1900 linear feet of pipeline to feed two watering facilities. Practices planned for 2016 are 5 acres of pasture renovation, 2480 linear feet of additional pasture divisional fence and two additional watering facilities. In addition to the previously listed BMPs, Mr. Combs also took advantage of the EQIP local funding pool to sign up for 0.2 acres of pollinator habitat.

Scheduling of our Cooperators Dinner was done last November, and it happened to be perfect timing because it coincided with a planned trip to Southern Maryland by Governor Larry Hogan. A request to attend the dinner had been submitted to the Governor's Public Affairs Office, and approximately two weeks prior to the event, the District was contacted to make arrangements for his participation and presentation of a Governor's Citation to Jimmy and Charlene. Governor's Citations are rare, but to have one presented in person by the Governor is a first for a soil conservation function in Maryland.

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### Special points of interest:

- 2015 Cooperator of the Year
- Meet Nancy LaRochelle, St. Mary's SCD's newest employee
- Historic St. Mary's City and Church Point Living Shoreline Project Completed
- St. Mary's SCD Equipment Rental Program
- BEWARE of Acid Sulfate Soils



## District History and Background

The St. Mary's Soil Conservation District is a political subunit of state government which was created on November 14, 1941. The legal charter was issued by the state of Maryland on January 5, 1942.

The District is governed by a board of supervisors who are local county residents. Members are appointed to five (5) year terms by the State Soil Conservation Committee, with recommendations from the County Commissioners, Farm Bureau, and Cooperative Extension Service. There are five voting members, one non-voting member and one associate member. These supervisors regularly attend meetings to keep informed on local, state and national issues, which could have an impact on farmers, landowners and residents within our area. The District's technical staff is provided by the USDA, Natural Resources Conservation Service, the Maryland Department of Agriculture and from the District itself.



*Newly seeded 450' Diversion  
constructed adjacent to a 9 acre tobacco field.  
May 1961*

Each year the District prepares detailed budget requests for administrative and operating funds from MDA and St. Mary's County to meet its goals and objectives. In calendar year 2015 the District received operating funds of \$72,446 from the county and \$37,136 from MDA. Additional support provided by MDA and NRCS is in the form of staff (\$454,034) and cost share support for best management practices installed.

## 2015 District Highlights

- Held 12 monthly meetings, which were scheduled for the first Thursday of each month and are open to the public
- Reviewed Memorandums of Understanding between the District and cooperating agencies at regular Board Meetings
- Attended the Winter and Summer Maryland Association of Conservation Districts (MASCD) Meetings
- Attended quarterly MASCD Board of Directors Meetings
- Maintained membership in state and national soil conservation district associations
- Cooperate with Maryland Department of the Environment on the local sediment control program
- Supervisor Bobby Cooper and District Manager Bruce Young serve on the Southern Maryland RC&D Board
- Member of the county's Technical Evaluation Committee for site and subdivision approval
- Advisory member of St. Mary's County Agriculture, Seafood, & Forestry Board
- Tom Koviak, and Mike Russell are certified as Nutrient Management Consultants by the MDA
- Member of the local WIP II team
- Developed a workload analysis and a plan of operations for fiscal year 2015
- Maintained a list of contractors that do conservation work
- Assisted landowners in making determinations for acceptance into Agricultural Land Preservation Districts
- Attended Southern Maryland Dinner Meeting for Area 2 Soil Conservation Districts
- District staff are members of the State Envirothon Committee and Co-Chair for the 2017 North American Envirothon
- Bruce Young is a representative on the Maryland Cost Share Technical Advisory Committee
- Member of MASCD Endowment Committee
- Member of St. Mary's River Watershed Neighborhood Rewards Committee
- Held a Kick-Off Meeting with core factors to initiate local funding pool through NRCS EQIP Program.



## 2015 District Accomplishments

### Agricultural Accomplishments

Conservation Cover	23.8 ac
Conservation Crop Rotation	1936.8 ac
Residue and Tillage Management, No-Till	296.8 ac
Cover Crop	1333.1 ac
Critical Area Planting	0.4 ac
Residue Management, Seasonal	5.8 ac
Residue and Tillage Management, Mulch Till	1726.4 ac
Diversion	304 ft
Sediment Control Pond	1 no
Fencing (Division)	1881.0 Ft
Grassed Waterway	2.7 ac
Mulching	0.3 ac
Forage Harvest Management	20.4 ac
Forage and Biomass Planting	4.0 ac
Livestock Pipeline	2123.0 ft
Prescribed Grazing	102.6 ac
Shoreline Protection	615 ft
Nutrient Management	2290.3 ac
Integrated Pest Management	118.3 ac
Tree/Shrub Establishment	5.0 ac
Watering Facility	9.0 ac
Wetland Restoration	12.4 ac
Conservation Plans	72 at 5869 ac



### Urban Accomplishments

Approved Plans less than 1/2 ac	188
Approved Plans greater than 1/2 ac	252
TEC Reviews	67
Site Inspections	92
Forest Harvest E&S Plans	41
Pre-Construction Meetings	120



## Outreach & Education

- ◇ 253 people attended the annual cooperators' dinner meeting.
- ◇ Met with congressional delegates concerning legislation that would affect St. Mary's County



- ◇ Observed soil stewardship week by distributing 1500 Soil and Water Conservation Society's environmental activity books to public and parochial schools. Topic was "Local Heroes, Your Hard-working Pollinators"

- ◇ *Sponsored and coordinated the county envirothon program. Three (3) public high schools participated. County winner competed at the State Envirothon in St. Mary's County. Team placed 7th at MD Envirothon*

- ◇ Sponsor of the Southern Maryland Crops Conference
- ◇ Sponsored the St. Mary's County Science and Engineering Fair



- ◇ *Participated in Town of Leonardtown Earth Day activities*

- ◇ Participated in the STEM Bio-Blast Field Day
- ◇ Retain records of approved sewage sludge permits in the District office
- ◇ Published news articles in the local paper showcasing District programs and accomplishments
- ◇ Actively promoted and assisted landowners in applying for MACS, CBWI, and EQIP cost-share
- ◇ Participated in the Farm to School Day
- ◇ Participated in the MASCD Coloring & Poster Contest. Presented cash awards to the top three winners in each category

- ◇ Promoted the use of a manure spreader purchased with grant funds from the Chesapeake Bay Trust
- ◇ Participated in Quality Review of installed best management practices

- ◇ Cooperated with the Extension Service in the development of Nutrient Management Plans

- ◇ Sponsored University of Maryland Soil Judging Team

- ◇ Member of the Mentoring Program for high school students at the Forrest Career and Technology Center

- ◇ Co-Sponsored a Board of County Commissioners Agriculture Tour with Extension and DECD Ag & Seafood Council

- ◇ Member of the St. Mary's County Curriculum for Agricultural Science Education (CASE) program advisory team

- ◇ Hosted a meeting for Southern Maryland DNR and Private Foresters and SCD Staff to comment on the Draft Standards and Specifications for Forest Harvest Operations

- ◇ Attended Farm Bureau Legislation Dinner
- ◇ Member of the St. Mary's River Watershed Neighborhood Rewards Committee
- ◇ Held four (4) staff meetings throughout the year
- ◇ Promote conservation tillage through the lease of the District owned no-till drills
- ◇ Participated in the Easter Festival at Fairgrounds
- ◇ Participated in Town of Leonardtown Christmas Tree Lighting Activities



- ◇ *Had information booth at the St. Mary's County Fair in September*



## Maryland Association of Soil Conservation Districts Coloring & Poster Contests

Each year the St. Mary's Soil Conservation District sponsors a coloring contest for Kindergarten through fifth grade. The District awards cash prizes for first, second, and third place drawings in each of three classes.



The pictures are judged on neatness, attention to detail, and how well directions are followed. The first place winners in each class are then forwarded to the MASCD state contest to be judged against the winners from the other Maryland Districts.

### Coloring Contest

#### Class A (K – 1<sup>st</sup> Grades)

- 1<sup>st</sup> Place - Tatianna Faucette – Dynard Elementary
- 2<sup>nd</sup> Place - Madison Herron – Dynard Elementary
- 3<sup>rd</sup> Place - Kassidy Wade – Dynard Elementary

#### Class B (2<sup>nd</sup>-3<sup>rd</sup> Grades)

- 1<sup>st</sup> Place - Marissa Chandler – Dyanrd Elementary
- 2<sup>nd</sup> Place - Cassie Wolfe – Dyanrd Elementary
- 3<sup>rd</sup> Place - Skylar Comfort – Dynard Elementary

#### Class C (4<sup>th</sup>-5<sup>th</sup> Grades)

- 1<sup>st</sup> Place - Aniya Gross – White Marsh Elementary
- 2<sup>nd</sup> Place - Ashleigh Brown - White Marsh Elementary
- 3<sup>rd</sup> Place - Hunter Walton – White Marsh Elementary

## District Welcomes New Employee

My name is Nancy LaRochelle and I am very glad to be the newest employee at St. Mary's Soil Conservation District. I was hired in September of 2015 as a Conservation Technician funded by the Chesapeake Bay Trust Fund. I have been learning how to survey a site and then design Best Management Practices to help farmers improve water quality or decrease soil erosion. There has been a steep learning curve with the engineering principals and computer drafting with Auto-Cad but I'm up for the challenge. Mike Russell and Luke Mudd have helped me greatly to learn the ropes. It is rewarding to assist landowners in implementing conservation practices that help the environment and their operation. My favorite days at the office are those when we're out in the field seeing more of the county and promoting conservation.

I am originally from Pennsylvania and moved to St. Mary's just before I started this position. I grew up on my family farm in Gettysburg, Pennsylvania. My father and uncle are the 5<sup>th</sup> generation on our farm where they raise mostly corn, soybeans and timothy hay on 160 acres. In high school I was active in the Envirothon and my FFA Chapter. I received my American FFA Degree in 2014. For college I went to Penn State where I majored in Plant Sciences and had minors in Horticulture and Soil Science. I was part of the Penn State Soil Judging Team for 3 years and learned to characterize and describe soil in the field from a soil pit. In my junior year at Penn State I placed 3<sup>rd</sup> as an individual at the National Soil Judging competition and was invited to be part of the USA team at the International Soil Judging Competition held in Jeju, South Korea.

I graduated from Penn State after 4 years, in May of 2015. After graduation I got married and moved to St. Mary's because my husband works on the Pax River Naval Base. I saw the job announcement for this position shortly before I moved and thought it would be a perfect fit. I am thankful to have gotten this position and am thoroughly enjoying it. Thanks for being so welcoming St. Mary's, I'm glad to be here. – Nancy LaRochelle





## Church Point Living Shoreline Reconstruction Project

In 2014, St. Mary's SCD agreed to be the contracting officer for a living shoreline project at Trinity Episcopal Church in St. Mary's City. The project involved the reconstruction of approximately 435 linear feet of an existing living shoreline project at Church Point. The existing structure was built in 1990 as part of an extensive project at the adjacent Historic St. Mary's City property. Due to the long fetch (length of windblown wave action) all the way from the mouth of the St. Mary's River, the existing rock sill structure was failing.

The District provided the following services for Trinity Church:

- Surveying and engineering to design the new stabilization project.
- Prepared the joint permit application and submitted it to the Maryland Department of the Environment for the tidal wetlands license and Army Corps of Engineers permit.
- Prepared bid documents and solicited for an invitation to bid.
- Awarded the construction contract.
- Performed construction inspection and certified the project completed as designed through an "as-built" survey at the completion of the project.



The District completed quarterly documents for the Department of Natural Resources Atlantic and Coastal Bays Program and the Chesapeake Bay Trust as a requirement of the grant agreements. DNR and the Chesapeake Bay Trust provided all of the money to construct the shoreline stabilization project, which necessitated the District's involvement as the contracting office so that their funds could be utilized.

The design and permit process took over one year to complete and construction started in June of 2015. B&D Siteworks was the low bidder and was awarded the contract. To reduce costs on the project, and to involve the community, the marsh grass planting was done by volunteers. Students from the Environmental Science Class at the James A. Forrest Career and Technology Center, St. Mary's County Master Gardeners, DNR Staff, Trinity Church members, Historic St. Mary's City volunteers, St. Mary's College of Maryland students and SCD staff made up the over 150 volunteers that came out for planting day.

The redesigned project raised the height of the sill structure, reconfigured and closed down the sill openings and installed additional sand as the substrate for the marsh grass planting. The project was completed at the end of August and the District enjoyed working with Trinity Church, DNR and the Chesapeake Bay Trust. We also thank the Contractor and all of the volunteers that made this stabilization project a success.

## Equipment Rental Program

### Purpose of rental program

- ⇒ Promote the use of conservation tillage equipment
- ⇒ Economical approach for all producers to have access to equipment
- ⇒ Minimize sediment and nutrient transport



6 Ft Frontier Overseeder  
Purchased September 2010  
\$25/day \$10/ac SMADC



7 Ft Great Plains No-Till Drill  
Purchased September 2010  
\$25/day \$10/ac SMADC



10 Ft John Deere No-Till Drill  
Purchased December 2012  
\$25/day \$10/ac SMADC



12 ft Great Plans Turbo Till  
Purchased September 2010  
\$25/day \$10/ac SMADC



16Ft Gehl Manure Spreader  
Purchased December 2000  
\$25/day \$10/ac



Shaver Post Driver  
Purchased September 2010  
\$150/day SMADC

For rental information contact the District at 301-475-8402 ext 3 or visit our website at [www.stmarysscd.com](http://www.stmarysscd.com)



## Acid Sulfate Soils

By: Susan Davis, Resource Conservationist, NRCS

### Let's avoid the costly mess:

Exposing sulfidic soil materials and excavating acid sulfate soils can result in serious environmental problems and are costly to repair and remediate. The best tactic is to know how to identify sulfidic materials and then avoid exposing them to air.

### Know your enemy:

Sulfidic materials are common deep in the layers of sediments underlying St. Mary's County. As we develop sites and cut and dig deep in the ground we can encounter the materials. Preliminary soils investigations should always be done so that you know the nature of what you will encounter as you dig. Sulfidic materials are usually **dark gray or black**. Sulfidic materials can vary in texture from sandy to silty to clayey. Often the material that folks call "blue marl" has sulfides in it.



### What's the problem?



When sulfidic materials are exposed to air or to oxygenated water sulfuric acid is produced. Sulfidic materials might have a neutral pH of 7 when first brought out of the ground, but they can quickly drop in pH below 3.5. This is called ultra acid. It can take 25 tons or more of lime per acre to neutralize the acid produced by the materials in a year or two! Keep in mind that is 10 times higher than a very high rate of 2.5 tons of lime per acre that you might use on a crop field, lawn or garden with acidic soils (pH of 5).

Such acid soils, and the water that runs through them can dissolve concrete and corrode steel quickly. Sidewalks, curbs, gutters get stained with iron and the concrete dissolves away leading to early failure. Mortar or block foundations will dissolve, weakening structures. Pipes, culverts, drains and other pieces of infrastructure can fail in a few short years. Coating and sealing materials may slow acid attack, but the better and cheaper solution is to avoid placing structures into sulfidic materials.

### Dig it:

Investigate by digging to the deepest depth that the proposed project will go. Look closely at the colors of the soils. If it is dark gray or black, seriously consider changing your plans so that no structures are installed into these potentially problematic materials.

Ultra acid soils kill plants. Even the hardiest of plants such as deer tongue grass can only tolerate soil pH down to 4. Once sulfidic materials are exposed it is extremely costly and difficult to fix the problems and get vegetation to grow on the site. Water from runoff and percolation through ultra acid soils kills fish and other aquatic organisms. Once exposed, these materials can continue to produce acid for years even if treated. Avoid exposing sulfidic soil materials to air.

If you have questions or concerns with sulfidic materials or acid sulfate soils please contact the District. We can help identify the materials and suggest ways to avoid creating a costly problem. If you want to know more about the soils and geology we can help you find resources.



26737 Radio Station Way  
Suite B  
Leonardtown, MD 20650  
Phone: 301-475-8402 ext 3  
Fax: 301-475-8391

## Cover Crop Reminders

- ♦ Kill down can occur anytime after March 1st
- ♦ Must certify no later than June 1st
- ♦ Sign-Up Period for 2016/2017 Program is June 24 - July 15, 2016

# To:

*All NRCS and SCD programs and services are offered on a nondiscriminatory basis, without regard to race, color, national origin, religion, sex, age, marital status, or handicap.*

[www.stmarysscd.com](http://www.stmarysscd.com)

## Cooperating Agencies, Supervisors, & Staff

### STATE OF MARYLAND

Critical Area Commission  
State Highway Administration  
State Soil Conservation Committee  
Department of Agriculture  
Department of the Environment  
Department of Natural Resources  
University of Maryland Extension

### ST. MARY'S COUNTY

Board of County Commissioners  
Department of Health  
Board of Education  
Metropolitan Commission  
Dept. of Public Works & Transportation  
Dept. of Land Use & Growth Management  
Dept. of Recreation and Parks  
Dept. of Economic and Community Develop.

### United States Government

Army Corps of Engineers  
Natural Resources Conservation Service  
Farm Service Agency

### Others

Leonardtown Commissioners  
Historic St. Mary's City Commission  
MD Assoc. of Soil Conservation Districts  
Nat'l Assoc. of Conservation Districts  
Southern Maryland RC&D  
St. Mary's County Farm Bureau  
St. Mary's County Fair Board

### The St. Mary's SCD Board of Supervisors

Stanley Boothe - Chairman  
Alfred Knott - Vice-chairman  
Donald Ocker - Treasurer  
Luther Wolfe - Member  
Bobby Cooper - Member  
Ben Beale - Secretary  
Jeffrey Raley, Sr. - Associate

### St. Mary's Soil Conservation District Staff

Bruce Young - District Manager  
Haley Carter - Program Manager  
Jane Sanders - Erosion & Sediment Control Specialist  
Nancy LaRoche - Technician  
Glenn Gass - Contract Engineer

### Natural Resources Conservation Service Staff

Oliver Miranda - District Conservationist  
Susan Davis - Resource Conservationist  
Gail Myers - Civil Engineer

### Maryland Department of Agriculture Staff

Tom Koviak - Ag Resource Conservation Spec.  
George Beavan - Ag Resource Conservation Spec.  
Sara Lewis - Ag Resource Conservation Spec./Equine  
Mike Russell - Conservation Associate  
Luke Mudd - Conservation Associate  
Sara Burbage - Secretary