SPRING 2014

# PRINCE GEORGE'S SOILCONSERVATION DISTRICT2013 ANNUAL REPORT

#### FROM CHAIRMAN R. CALVERT STEUART

The past year presented many challenges for the District with the retirement of three senior level staff, their combined experience exceeding 91 years of service. Steve Darcey assumed the role of District Manager succeeding David Bourdon who retired after 34 years of service. Robert Yates Clagett, Jr. succeeds Steve to lead the Agricultural section overseeing farm planning and conservation implementation activities. Terry Hampton became the District's new Office Manager replacing Teresia Arnold who retired after 25 years of service. John Tarr recently joined the District to replace Lance Gardner as District Engineer. John is a registered professional engineer (Water Resources and Land Development) and comes to the District with over a decade of experience in the land development arena both in the private sector and local government. His role will be to oversee the District's urban review program.

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2013 saw the long awaited implementation of Maryland Department of the Environment's 2011 Storm Water Management regulations, and Erosion and Sediment Control standards. The new regulations have a significant impact on the review and approval of sediment and erosion control plans. Central to the new stormwater management regulations is the use of "Environmental Site Design (ESD) practices to the Maximum Extent Practicable (MEP)" to address site requirements. Environmental Site Design utilizes small scale practices that attempt to control stormwater runoff at the point of production. In response to the new State guidelines, the District overhauled its Soil Erosion and Sediment Control - (Small) Pond Safety Reference Manual. The updated manual provides guidance to the engineering community and our clients on all the required components needed to develop an erosion and sediment control plan pursuant to the new regulations. As of July 2013, all plans submitted for review and approval must follow this updated manual.

The District received a \$1 million Rural Legacy grant to preserve a beautiful 260 acre farm along the Patuxent River. To date, The District has preserved 4,350 acres in Prince George's County through various preservation programs.

District staff and supervisors are involved in a variety of conservation related ventures that broaden the scope of our organization. These are leadership oriented roles in organizations such as the National Envirothon, Maryland Farm Bureau, National Association of Soil Conservation Districts, Patuxent River Commission, Maryland State Soil Conservation Committee and the Soil and Water Conservation Society.

The District remains committed to staying involved and making a difference in local, state and national topics that impact our natural resources and to the citizens of Prince George's County. We take pride knowing we offer quality programs to our clients.

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## **Urban Conservation Accomplishments – 2013**

#### <u>Urban Statistics</u>

#### BY SUPREET REKHI

Soil Erosion and		Acres Protected
Sediment Control	Plans	with BMPs
Residential Sites	245	19644.3
Commercial Sites	146	7494.3
Governmental Projects	116	1,622.0
Standard Plan Sites	16	16.0
Forest Harvest Sites	8	138.5
Mining and Fill Sites	10	1,992.0
Rough Grading Permits	9	1,554.1
Green Stamp Plans	25	-
Waiver Letters	11	-
Subdivision Plans	8	-
Pond Plans	221	-
Pond As-Builts	6	-
Exempt Pond Plans	82	-
*Concept Plans	11	-
*Environmental Site Dev. Plans	29	-
*Final Plans	29	
Total Plans	972	Acres 32,461.2
Total Number of Plan Reviews		1,379.0
Average Review Time in Days		2.0
*3 review process instituted in May 201	3	

#### A LABOR OF LOVE

#### BY: BRENDA SANFORD

Please welcome our new addition....the arrival of the long awaited PGSCD Soil Erosion & Sediment Control Pond Safety Reference Manual July 2013. Many hours of deliberation by the Erosion & Sediment Control Environmental Site Design Committee have resulted in a current reference manual for engineers, developers, reviewers and inspectors involved in the design and implementation of erosion and sediment control practices.

The manual incorporates the coordinated review process for sediment control and stormwater management (SWM) plans for three phases of development: Concept, Site Development and Final Plan approval. As a service to our customers, we have consolidated various resource documents and updated required information for plan submission including transmittals, fees and site analyses. Additionally, the manual includes guidelines for Forest Harvest, Standard Plans and Dam Safety Pond Plans.

We thank you for your patience as we collectively embark upon the next stage of improving Erosion and Sediment Control and overall environmental quality in Prince George's County.

#### A SLICE OF DPIE BY SUPREET REKHI



Prince George's DEPARTMEN County has made goals

to provide a convenient, efficient, and customerfriendly environment for applicants and property owners seeking permits and licenses with the opening of their new Department of Permitting, Inspections, & Enforcement (DPIE) in Largo. The use of technology will enable a streamlined process that aims to be more consistent, timely, and reliable.

In the spirit of supporting the new DPIE office, the Prince George's Soil Conservation District plans to open a full service office in the near future that will be co-located with DPIE. This office will house sufficient plan reviewers and administrative staff in order to provide the highest level of service in conjunction with the District Headquarters located in Upper Marlboro. It will also allow PGSCD to fully serve the needs of the development community and County residents from both office locations. As always, PGSCD is committed to helping the County and its residents.

#### NRCS Soils Health Training

On December 19, 2013, urban and agricultural staff from our District as well as others participated in a day-long training session that focused on soil health. Presenters **David Lamm**, National Soil Health and Sustainability Team Leader from NRCS's East National Technology Support Center, and **Ray Covina**, District Conservationist from Connecticut, led a lively and in-depth exploration of what NRCS identifies as a priority for 2014.



The presentations highlighted the often troublesome distinction between conservation and the "appearance of conservation" which result from a misunderstanding of soil function. Mr. Lamm detailed the impacts of tilling on soil, namely the breakdown of natural soil structure and loss of organic matter over time, and its ramifications for conservation professionals. Without proper structure and the associated loss of natural fungal habitat, a degraded soil allows for less infiltration, leading to increased runoff and erosion as a result.



Accordingly, as Mr. Covina convincingly demonstrated, a more thoughtful and scientific approach to cover crops can allow us to "manage more by disturbing soil less." He described what constitutes a fundamental shift in the philosophy of soil management that NRCS hopes will be widely embraced. Concentrating attention on the root zone processes, from earthworm activity to microbial habitats, leads to better choices in fertilizer application. When the goal is the production of healthy soil, we produce more "windows for management" which in turn benefits the soil. A positive feedback results. Increasing the diversity of crops in rotation and planting combinations of grasses and legumes, for example, produces greater biomass, rejuvenating soils and enhancing erosion and sediment control in the process.

Unfortunately a major obstacle to the protection of our soils is a farming culture which is understandably reluctant to change time-

honored practices of tilling and fertilizer usage, despite data pointing toward practices that are far more effective and efficient. There is hope, as the presenters showed, in the form of progressive farmers who have

embraced the new approach and shown others that nutrient cycling by this method is not only viable but can be more profitable once put into practice.



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## MASCD 2012 MidAtlantic Award

In July of 2013, the Prince George's Soil Conservation Distict was awarded the MASCD MidAtlantic Award for 2012.



Vice Chair James Edelen, Supervisor James Parreco, Chairman R. Calvert Steuart, Treasurer Raymond Watson and ?????



**Cliff & Sue Jenkins** 

2012 Cooperator of the Year

## <u>CLIFF JENKINS - PRINCE GEORGE'S SOIL CONSERVATION DISTRICT'S</u> 2012 COOPERATOR OF THE YEAR

Cliff Jenkins has a long heritage of farming. His ancestors began farming in Prince George's County in 1648 and Cliff is a 12<sup>th</sup> generation farmer. His great great great- grandfather owned a 54 acre farm in the District of Columbia. The area was known as Jenkins Hill. It is the present site of the US Capitol Building.

Cliff's wife, Sue, also has a long history of farming in Prince George's County. Her family's farm is located in Baden and has been in the Wilson family since 1739. It is listed on both the National and State Bicentennial Farm Registrations.

Cliff grew up on the family farm that was located in Suitland. His father had worked for a local German farmer where he learned how to grow flowers. Cliff's father brought that knowledge back to the family farm and Jenkins Florist was born.

In 1963, the Jenkins Florist operation was relocated to Mitchellville (along Excalibur Lane where the Walmart is currently located on Rt 301). This is where Cliff first began working with the Prince George's Soil Conservation District. The year was 1963. The District assisted with the design and construction of a pond to provide irrigation water. The flower production facility, plastic and glass covered green houses, spread over 50,000 square feet of land.

Following his retirement in 1985, Cliff and Sue moved to the Wilson Family Farm in Baden. Cliff continued his conservation efforts. He has installed many acres of grassed filter strips, 2 drop pipe structures, grassed waterways, diversions and farm access roads with the assistance of Prince George's Soil Conservation District. The second pipe drop structure that Cliff installed was made entirely of high density polyethylene plastic pipe. This was the first "all plastic" structure in the County.

All farming operations are performed by his neighbor and lifelong Brandywine farmer, Jimmy Edelen. Corn, soybeans and small grains are planted by no till methods across the slope to minimize any potential soil erosion. Nutrients are all applied according to an approved nutrient management plan.

Cliff has been a cooperator for 50 plus years and takes great pride in the fact that he has probably worked with more Soil Conservation technicians and planners from more conservation agencies than any other farmer in the area.

In 2011, Cliff and Sue succeeded in preserving their farm through the Rural Legacy Program. This will effectively save their productive conservation farm for many generations to follow.

Because of his exemplary leadership in applying best management practices and his continued efforts in preservation of the County's natural resources, Cliff Jenkins has been named:

#### PRINCE GEORGE'S SOIL CONSERVATION DISTRICT'S 2012 COOPERATOR OF THE YEAR



Oxon Hill High School won the 2013 County Envirothon.

#### EDUCATION BY DEBBIE SANDLIN

The District and the Prince George's County Public Schools co-sponsor the annual Prince George's County Envirothon. This high school level event combines "hands on" experiences, testing and teamwork on environmental issues. The local event, held annually at the William Schmidt Outdoor Education

Center in Brandywine, Maryland, was held April 24, 2013. The winning team from Oxon Hill High School represented Prince George's County at the state competition held at the Garrett County 4-H Camp in Bittinger, Maryland, June 19-20. Teams from across the state participated, and the top team from Carroll County advanced to the national competition. The event was held at Montana State University, Bozeman, Montana in August. At this level, the top ten teams earn scholarships. Each year we are challenged with reaching more students than in past years. If you wish to participate in this program, please contact our office at 301-574-5162 x3.

Compost Tour - Fort Myers at Arlington National Cemetery

Staff from Howard, Montgomery, Anne Arundel and Prince George's Soil Conservation Districts, as well as staff from Maryland Environmental Services (MES) were hosted by representatives of Green Mountain Technologies.

The "In-Vessel" Compost system is being used at Joint Base Myer—Henderson in Arlington, VA. The base houses 60



horses that are used to pull the funeral caisson burial procession at Arlington National Cemetery. The Army is looking for a system that is compact, economical and mobile to compost the horse manure and also food waste. This type of system could be easily setup on forward operating bases (FOBs) throughout the world. The system requires a small area to setup, electricity to operate the motors and water to hydrate the product.

Through the research conducted by the company, they have discovered that not only does the system produce a fine particle compost material when used with horse manure, but it also produces a reusable bedding material for the stable when shavings are used as the primary bedding source.

This system has potential for composting and recycling of bedding materials on small horse farms throughout the Mid-Atlantic region.

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#### LAND PRESERVATION

#### BY JEANINE NUTTER

As of December 31, 2013 a total of 43 properties for approximately 4,251 acres have been permanently preserved under the District's administration. At this time we have approximately 22 properties totaling 1,595 acres that have applied to sell an easement. Of those 22 properties, 7 properties totaling 855 acres have received an offer and expect to settle this year. The District received a one million dollar grant from the Rural Legacy Program to purchase a conservation easement located on the Patuxent River. By purchasing this easement it will not only preserve farmland but it will also help protect the Chesapeake Bay by preserving environmentally sensitive areas. The District will continue to apply for grant funding so that

Program	Number of Easements Purchased	Preserved Acres	Number of Pending Applications	Acres Awaiting Preservation
HARPP	27	2,737	18	1,062
MALPF	15	1,379	3	273
Rural Legacy	1	135	1	260
Total	43	4,251	22	1,595

#### RENTAL EQUIPMENT PROGRAM

- •6' Great Plains No Till Drill \$6.00/Acre and \$25.00/ Day
- •10' Great Plains No Till Drill \$6.00/Acre and \$25.00/ Day
- •Lime spreader \$6.00/Acre and \$25.00/ Day
- •Wheathart Post Pounder \$100.00 1<sup>st</sup> Day and \$50.00/ Day each additional day
- •3 point Vicon Pendulum fertilizer spreader \$50/day
- •Single shank Subsoiler \$50/day
- •Aer-Way Pasture and Hayland Renovator \$6.00/Acre and \$25.00/ Day
- •Manure Spreader
- \$ ??????

Contact Jim Cary at james.cary48@gmail.com

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#### <u>New Drill</u> by jim cary

The Prince George's Soil Conservation District has added a new 10' Great Plains No-Till drill to the existing equipment program inventory.

The new drill will be fitted with an agitator (to alleviate seed tunneling), small seed box (for the application of clovers, radishes and other small seeds and an acreage meter.

The new drill will be primarily utilized on pastures and hay ground. The older 10' drill will be used primarily for cover crops and larger seed crops such as soybeans. This is great news to those customers planting pastures and hay fields.

Requirements for the drill are 55 horse power and rear mounted dual hydraulics.



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United States Department of Agriculture Natural Resources Conservation Service

## Farming in the 21st Century

a practical approach to improve

## Soil Health

## What is Soil Health? Why Should I Care?

A simple definition of soil health is *the capacity of a soil to function*. How well is your soil functioning to infiltrate water and cycle nutrients to support growing plants?

Soil works for you, if you work for the soil. Management practices that improve soil health increase productivity and profitability immediately and into the future. A fully functioning soil produces the maximum amount of products at the least cost. Maximizing soil health is essential to maximizing profitability. Soil will not work for you if you abuse it.

Soil is a living factory of macroscopic and microscopic workers who need food to eat and places to live to do their work. Amazingly, there are more individual organisms in a teaspoon of soil than there are people on earth; thus, the soil and its processes are controlled by these organisms. The living 'soil factory' is powered primarily by sunlight.

Farms and ranches are provided with soil, water, and sunlight. The challenge is to feed the soil, harvest sunlight and farm sustainably to make a living now and in the future. Tillage, fertilizer, livestock, pesticides, and other management tools can be used to improve soil health, or they can significantly damage soil health if not applied correctly.

Managing for soil health (improved soil function) is mostly a matter of maintaining suitable habitat for the myriad of creatures that comprise the soil food web. This can be accomplished by disturbing the soil as little as possible, growing as many different species of plants as practical, keeping living plants in the soil as often as possible, and keeping the soil covered all the time.

For more information, go to www.NRCS.USDA.gov.

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### AGRICULTURAL CONSERVATION ACCOMPLISHMENTS January 1-December 31, 2013

PLANNING ACTIVITIES	CONSERVATION APPLICATION	
New Cooperators (14) 425 ac	Farmers Applying BMPs 86 ea	
New Farm Plans (27) 965 ac	BMPs Installed on Farms 202 ea	
Revised Farm Plans (35) 2370 ac	Acres Receiving Treatment 2670 ac	
Total Plans (76) 3760 ac	Estimated Tons of Soil Saved 1612 tons	

	FUNDING SOURCE	BMPS INSTALLED
BMP Funding	MACS Capital Projects (1 Agreement)	1
Sources	MACS Cover Crop (28 Farmers)	2635 ac
	USDA-EQIP (7 Contracts)	15
	USDA-CBWI (2 Contracts)	3
	USDA-CSP (3 contracts)	3
	Farmer/landowner funded	110
	TOTAL BMPs Applied	202

#### **Equipment Rental** EQUIPMENT TYPE FARMERS ACRES Program No-till Drill (10') 10 451 No-till Drill (6') 10 136 2 23 **Pasture Aerator** 1 4 5 ton Lime Spreader 30 (2152 posts) Post Pounder (acres fenced) 7 25 3 Manure Spreader **Best Management** 1 1 Sub-soiler **Practices Applied** 3.5 Vicon Fertilizer Spreader 1

PRACTICE	AMT APPLIED	PRACTICE	AMT APPLIED
Winter Cover Crop	1930 ac	Conservation Cover	28.2
Heavy Use Are Protection	0.4 ac	Filter Strips	23.9 ac
Nutrient Management	114.2 ac	Seasonal High Tunnel	3 no.
Pasture/Hay Land Planting	227.6 ac	Field Border	1.0
Waste Recycling (manure app.)	25 ac	Forage Management	10 ac
Conservation Crop Rotation	20.4 ac	Upland wildlife habitat	9.3 ac
Residue & Tillage Management	1065.2 ac	Ponds (rebuild)	1 ea
Grass Buffer	2.3 ac	Watering facility	7 ea
Fence	930 ft	Pipeline	3112 lf
Brush management	0.2 ac	Roof Runoff Management	3 ea
Riparian Forest Buffer	22.3		



### Soil Conservation District Recycle Update

In 2013 we recycled 6,600 lbs. of paper and nearly 113.4 cubic feet of plastic. Without recycling efforts, this would have been sent to the County landfill.



## <u>Welcome</u>

John Tarr comes to us with over a decade of professional experience in the Land Development Industry. He worked formerly at Ben Dyer Associates, Inc. (Mitchellville, MD) as a Staff Project Engineer in Storm Drain/ Stormwater Management/ Erosion and Sediment Control and Mining and Reclamation. He joined the Prince George's County Department of Public Works and Transportation (DPW&T) - Office of Engineering and Inspection Services Division, as Senior Engineer in 2012. He was subsequently transferred to the Department of Permitting, Inspections and Enforcement (DPIE) prior to accept-

ing the District Engineer's position at the District. John recently served on the Technical Review Panel for our Pond Safety Reference Manual (PGSCD 2013 ed.). He is a licensed professional engineer (Water Resources and Land Development) in the State of Maryland, and the District of Columbia. Welcome Aboard John!"



Please visit our website; www.pgscd.org. Please provide feedback.

In an effort to better serve you, please provide your current email address to Prince George's Soil Conservation District either by calling 301-574-5162 X 3 or by emailing Terry Hampton at TAHampton@co.pg.md.us.

Our Annual Cooperator of the Year Dinner will be held Thursday April 17, 2014 at the Baden Volunteer Fire Department Hall. For more information contact our office.

#### DISTRICT STAFF

Steven E. Darcey, District Manager Joseph Haamid, NRCS, District Conservationist John Tarr, District Engineer Brenda Sanford, Urban Engineer Supreet Rekhi, Urban Engineer Eugene Whitehead, Urban Engineer Julie Miller, Urban Engineer Robert Yates Clagett Jr., Conservation Engineer Jeanine Nutter, District Planner Debra Sandlin, Admin. Assistant/Program Coordinator/Editor Rita Jones, Administrative Aide Terry Hampton, Administrative Aide/Office Manager Diana Lagunes, MDA Planner Eileen Beard, MDA Planner/Regional Equine Outreach Specialist Joseph Kontgias, MDA Associate Jim Cary, Technician, MDA Grant Technician



Check out our website at: www.pgscd.org

Prince George's Soil Conservation District 5301 Marlboro Race Track Road Upper Marlboro, MD 20772

#### **BOARD OF SUPERVISORS**

R. Calvert Steuart, Chairman James Edelen, Vice Chairman Raymond Watson, Treasurer James "Pete" Parreco, Supervisor Reverend Robert Slade, Supervisor



In an effort to conserve paper, our future annual report and newsletters will be distributed electronically. Please provide your updated email address to our office by calling 301-574-5162 X 3 or emailing tahampton@pg.co.md.us. On behalf of the District, thank you for assisting us with our conservation efforts.