

THREE RIVERS SOIL & WATER CONSERVATION DISTRICT

ANNUAL REPORT

JULY 1, 2020 - JUNE 30, 2021





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Vision: The Three Rivers Soil & Water Conservation District envisions engaged communities working together to protect water quality and restore natural resources.

ABOUT US

The Three Rivers Soil & Water Conservation District's mission is to be a partner in conservation for landowners in the counties of Essex, King William and King & Queen. The District is charged with the responsibility of promoting soil and water conservation and establishing conservation programs, which is done through cooperation of other agencies and local government. Support for the District comes through the Commonwealth of Virginia, state and federal grants, contributions from each locality, private grants, and donations. Our District is governed by locally elected Directors, who serve without pay.

In Virginia, Soil and Water Conservation Districts (SWCD's) are authorized through the Code of VA 10.1, Chapter 5. SWCDs are locally controlled, special purpose governmental subdivisions of the State of Virginia comprised of one or more localities. There are over 3,000 SWCD's in the U.S. covering about 98% of the country's land area.

Three Rivers Soil & Water Conservation District
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visit: www.trswcd.org



CHAIRMAN'S STATEMENT

On behalf of Three Rivers SWCD, I am glad to share our FY21 Annual Report. It has been an honor to serve as Chairman for the District this past year. Due to the COVID-19 pandemic, the District has quickly adapted our programming and made sure our partners, local government and citizens knew we were available and we're continuing to be the local leader in conservation.

In an effort to increase public awareness and participation in natural resource conservation, we launched our new website www.trswcd.org to house educational resources and information for teachers, students, landowners and producers. We also continued the pilot grant, Whole Farm Approach (WFA-1), providing cost share to local producers for implementing bundled best management practices.

These were just a couple of the highlights you will find in our report.

While we are proud of the work we did in FY21, we are determined to continue carrying the momentum into FY22 to accomplish even more.

I look forward to helping advance Three Rivers SWCD goals as we continue to look to the future.

Lloyd Mundie

LLOYD MUNDIE

Chairman

Board of Directors

Lloyd Mundie, Chair
Essex Co.

Robert T. Bland, IV, Vice Chair,
King & Queen Co.

Langdon Townsend, Secretary,
King William Co.

Keith Balderson, Treasurer,
Essex Co.

Troy Johnson, King William Co.

Bruce Taylor, King & Queen Co.

Robbie Longest, VCE, Essex Co.

Benjamin Ellis Jr., Essex Co.

Associate Directors

Thomas Fox, Associate,
King William Co.

Todd Henley, Associate,
King & Queen Co.

Staff

Michelle Carter,
District Operations Manager

Danny Withers,

District Technical Manager

Anne Davis,

Administrative Coordinator

Waring Baylor,

Outreach Education Coord.

Sarah Cole,

Conservation Specialist

FISCAL OPERATIONS

Personnel

The major goals of the District are achieved by the employees through planning, budgeting, and the provision of technical assistance. The District has five employees. In order to provide the highest quality service and up-to-date information, District employees regularly attended training workshops and seminars throughout the year to improve their skills. DCR and NRCS provided most of the training. Annual personnel reviews were conducted by the Personnel Committee Chair & Board of Directors to evaluate the progress of employees and to ensure the orderly day to day operations of the District. The Annual Plan of Work and Long Term Strategic Plan were reviewed and updated to ensure the goals and objectives of the District were met.

District Operations

The District Finance Committee oversees the operating budget. The District receives financial and administrative support from King William, King & Queen and Essex counties, the Commonwealth of Virginia, the Virginia Department of Conservation & Recreation, the District equipment rental program and private grants. The District is audited every two years to ensure the proper use of funds. The District was audited in February of 2020 by Clifton, Larson, Allen LLP, our audit is scheduled for Fall of 2021.

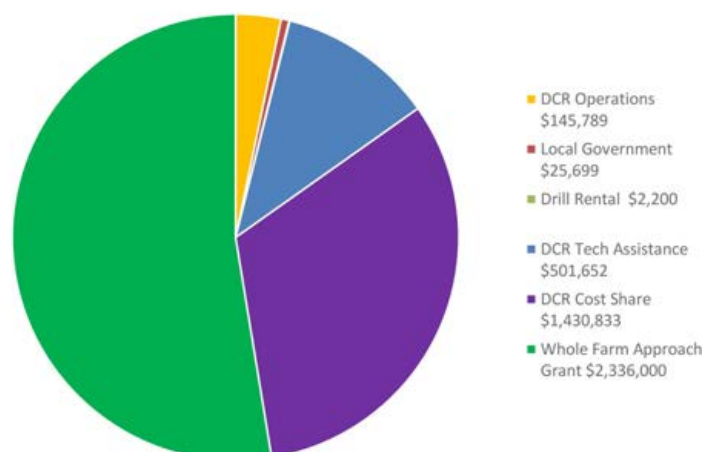
Board Meetings

The District conducts monthly board meetings to work with conservation issues and landowners concerns within Essex, King William and King & Queen counties. The public, as well as cooperating agencies, are invited to attend the District Meetings to provide input. Unless otherwise noted, meetings are held on the third Tuesday of each month. Notification of Board Meetings are published in the newspapers at the beginning of the fiscal year. Minutes and the agenda are mailed out a week prior to Directors and cooperating agency representatives. Although parliamentary procedures are followed, the atmosphere is warm and welcoming.

How We Operate

The FY21 (July 1, 2020–June 30, 2021) operating and cost share budget for the District was \$4,440,073.00.

District Income



FY21 SNAPSHOT



Whole Farm
Approach & VA Ag BMP
Cost Share Program
funding provided for
on-the-ground Best
Management Practices

\$4,044,542.40

Youth & Adult
reached through social
media, newsletters,
farmers markets,
contests, teacher grants,
scholarships & outreach
programs

5,791

Continuing
Education Trainings,
Webinars, and
Certification Courses

122 hours

Resource Management
Plans reviewed and
inspected

2063 Acres

RMP-2 Cost Share Funding
Disbursed

\$15,782.75-3,156.55 ac.

Nutrient
Management Plans
NM-1A Cost Share or
written by DCR planner
for our District

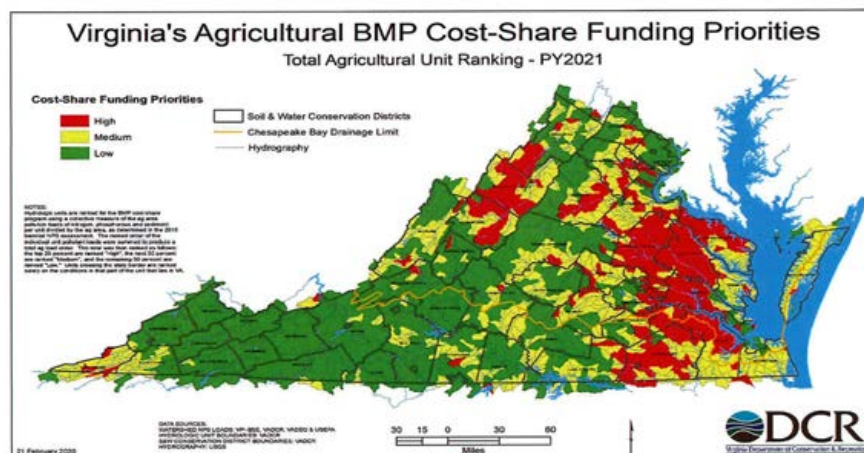
89,357.3 acres

CHESAPEAKE BAY TMDL


..... Targeted Counties

Essex
King William
King & Queen
Culpeper
Greene
Madison
Orange
Rappahannock
Accomack
Northampton
Hanover
Caroline
Augusta
Clarke
Frederick
Shenandoah
Warren
Lancaster
Northumberland
Richmond
Westmoreland
Amherst
Appomattox
Campbell
Page
Rockingham
Albemarle
Fluvanna
Louisa
Nelson
City of Harrisonburg
City of Lynchburg
City of Staunton
City of Waynesboro
City of Winchester
City of Charlottesville

In 2010, the EPA established the Chesapeake Total Maximum Daily Load (TMDL) a comprehensive “pollution diet” to restore the health of the Bay and its local streams, creeks and rivers. The Chesapeake Bay TMDL-the largest such cleanup plan ever developed by the EPA-set limits on nitrogen, phosphorus and sediment pollution necessary to meet water quality standards in the Bay and its tidal rivers. As a watershed jurisdiction within the Chesapeake Bay, the Commonwealth of Virginia has created a Watershed Implementation Plan (WIP) that documents how the state will achieve and maintain water quality standards. (Chesapeake Bay Program, 2020) Stakeholders from across Virginia including the Department of Environmental Quality (DEQ), the Department of Conservation and Recreation (DCR), Planning District Commissions (PDCs) and local SWCD’s among others, developed and submitted Phase I and Phase II WIPs to the EPA in 2010 and 2012. Virginia’s final phase III WIP was released in August of 2019 and provides a midpoint assessment of the state’s progress through 2017. As with Phase I and Phase II, this third and final phase will provide a roadmap for specific actions the state intends to implement to meet restoration goals by 2025. Reaching these goals relies heavily on private landowners and businesses agreeing to install Best Management Practices (BMPs) on their properties in order to reduce the amount of nutrients and sediment that reach local waterways. The Three Rivers SWCD, along with nine other SWCDs with Bay drainage have been designated as “critical” to the success of the statewide agriculture sector meeting nutrient reduction targets. With this designation, the District has been targeted for accelerated state funding to ensure continual installation of agriculture BMPs in crucial areas across its four counties.



CONTINUING EDUCATION

 As operations slowly returned to a (new) normal and with COVID protocols still limiting in-person delivery of programs, the District operational and technical staff focused on continuing education through virtual trainings provided by the Virginia Association of Soil and Water Conservation Districts and Department of Conservation & Recreation. Listed below are trainings attended in FY21.

Diversity, Equity, Inclusion
Agricultural Waste Management
Pasture Condition Scoring
COVID 19 Programming Shifts & Success Stories
Water Conservation & Literature
Personnel
York River & Small Coastal Basin Roundtable
The Local Choice Healthcare Conference
Erosion Fundamentals
Assessing Sheet & Rill Erosion
Grazing Plan Development
Legacy Planning for Farm & Forest Landowners
VASWCD Area III
Solar Power Watering Systems
VA Rare, Threatened & Endangered Species Pt 1 & 2
VASWCD Education, Marketing & Administrative Operations Committees
VA Cultural & Historic Resources
VA Conservation Assistance Program
VASWCD Board of Directors Meeting
VACDE Association Meeting
Freedom of Information Act
Mock Envirothon & Drop Box
VASWCD Legislative
Chesapeake Bay Survey Overview
Winter Forage Conference
Ag BMP Loan Program
VA Dare SWCD Tire Amnesty Program
Cover Crop
Video Creation Workshop Pt. 1,2,3
Computer Security Awareness
Nutrient Management Precision Ag
VA Ag BMP Cost Share
Partner Agency Panel Updates



AWARDS

Three Rivers SWCD Honors Local Producers and Scholarship Recipients

The District hosted our Annual Awards Banquet at Nick's Spaghetti and Steak House in Shackelfords, Virginia. Three Rivers Directors presented MTG Partners LLC (David Taliaferro & Bill Henley), Brandon Farms (Rob & Bob Waring), and Benjamin Ellis, Inc. with Partnership Awards to recognize their help in promoting adult education through on-farm research, such as choosing various cover crop species and documenting how those cover species affect crop yields on their farms.

Left to right:
Bill Henley, MTG Partners LLC
Benjamin Ellis, Benjamin Ellis, Inc.
TRSWCD Director - Bruce Taylor,
Bob Waring, Brandon Farms
TRSWCD Director - Robbie Longest



David Johnson with Old Place Farm was recognized for the 2019 Clean Water Farm Award and Robert T. Bland, Inc. was awarded the 2020 Clean Water Farm Award. Both Clean Water Farm recipients are recognized for their dedication to conserving natural resources and implementing no-till grain production, incorporating cover crops, and installing precision nutrient management applications to improve water quality and soil health.



Left to Right: Old Place Farm - Owen, David, Mary Ann, Philip and Henry Johnson



Left to right: Lloyd Mundie - Chairman, Michele, Robert, Sarah, and Kathryn Bland

AWARDS

Three Rivers 2021 scholarship recipients were also recognized at the banquet. The John F. Townsend Sr. recipient was Addie Johnson, a King William High School graduate, who plans to prepare herself for an occupational therapy career at East Carolina University.

The Earl H. and Anna K. Longest Memorial recipient was Kathryn Bland, a Christopher Newport University student, who is working towards a career in elementary education.

The J. Franklin “Frankie” Townsend Jr. recipient was Ashley Upshaw, a King William High School graduate who plans to study Agribusiness at Virginia Tech.

Three Rivers also helps promote the Larkin Hundley Memorial Endowment, which is administered by Colonial Farm Credit. This year Larkin’s granddaughter, Arria Gross, was the recipient. Arria is attending the University of Maryland Eastern Shore.



*Left to Right: Kathryn Bland, Ashley Upshaw,
Arria Gross, Addie Johnson, and
Langdon Townsend – Three Rivers SWCD Director*



EDUCATION

Education & Outreach for youth and adults in our community is a key initiative for Three Rivers SWCD. A variety of natural resource related educational services are geared to school aged children. Some of our outreach efforts for youth include camp scholarships, photo contests, interactive displays, SOL learning capsules, and academic scholarships.

Adult outreach consists of exhibits at public events such as Farmers' Markets, rental of the no-till drill, conservation signage highlighting best management practices, newspaper and radio releases, quarterly newsletters, and social media platforms.

District Support

The District partners and/or supports financially many workshops, field days, 4-H activities and the VA Association of Conservation Districts Educational Foundation events. Below are activities supported by the District in FY20-21.

- Eastern VA Forage & Grazing Field Day
- King William 4-H Natural Resources Kits
- VASWCD Educational Foundation Golf Tournaments for Scholarships
- VCE Eastern VA Crops Conference
- Fredericksburg 4-H Livestock Show & Sale - Essex County 4-H
- VA Farm Bureau "Ag in the Classroom"
- Virginia Women in Agriculture Conference



EDUCATION

Area III Envirothon Competition

Three Rivers Soil & Water Conservation District hosted the Area III Virginia Dominion Energy Envirothon on Saturday, April 17th. Envirothon is a natural resource-based competition for high schoolers where they are tested on subjects including soils, aquatics, forestry, wildlife, and a current environmental issue. This year the current issue was Water Resources Management: Local Control and Local Solutions. This year's Envirothon competition was completely virtual due to the Covid-19 pandemic.

Special thanks to Keith Balderson, Three Rivers SWCD Director, for serving as the soils station judge who conducted a great Power Point that was done in a recorded format and helped students prepare for the test on the day of the actual competition. Also a special thanks to Anne Self, Friends of the Rappahannock, (Aquatics Judge) Kevin Howe, (Wildlife Judge) Amy Walker, DCR (Orals Judge) and Wayne Davis, VASWCD 2nd Vice President (Orals Judge). Jamestown High School, from Colonial Soil & Water Conservation District, was the 2021 Area III Virginia Dominion Energy Envirothon winner.

Three Rivers SWCD Website Launched



The District's new website is up and running. The staff completed the design modernization and updated content/resources for students, teachers, and producers. **Web address is:** www.trswcd.org



EDUCATION

Science SOL Conservation Capsules

Due to the pandemic, TRSWCD was unable to get into the classrooms, so we developed educational capsules for teachers to provide hands-on Science SOL materials to their students. The capsules are all-inclusive interactive science activities targeting Kindergarten through 6th grades that include lesson plans for the teachers. Below are the 8 capsules currently available.



Common Water

SOL Correlations: K.2, 1.5, 2.5

Students will : Illustrate how multiple users of water resources can affect water quality and quantity. Examine the complexities of providing water for all water users.

Water Contaminants

SOL Correlations : K.1, K.4, K.5, 1.8

Students will: Identify factors that affect air and water quality. Understand the importance of protecting and maintaining water resources.



Conservation Jeopardy

SOL Correlations : 3.4 - 3.7, 3.9 - 3.11, 5.7, 6.2, 6.5, 6.7, 6.9

Students will: Expand vocabulary and terms associated with soils, erosion, water quality, wildlife, recycling, and agriculture in Virginia.

The Incredible Journey

SOL Correlations : 3.9, 6.9, ES 9

Students will: Describe movement of water within the water cycle and understand that energy from the sun helps drive the water cycle. Identify the states of water as it moves through the water cycle.



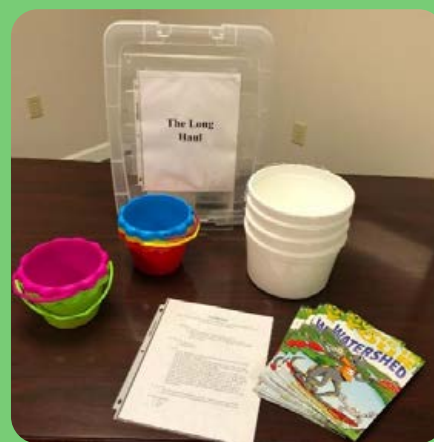
EDUCATION



Storm Water

SOL Correlations : 5.1, 6.1, 6.5, 6.7

Students will : Identify dependent and independent variables as well as the constants of the activity. Collect, record, and analyze data through measurements.



The Long Haul

SOL Correlations: K.2, K.10, K.11, 3.9

Students will: Appreciate the readily available water supplies in the developed world. Lesson: Understanding how easy access to water can encourage people to use large amounts of water.



Your Virginia Watershed

SOL Correlations : 6.5, 6.7. Students will:

Investigate human interactions that affect watershed systems. Locate and identify Virginia's regional watershed systems, tributaries, wetlands, and estuaries.



Erosion Simulator

SOL Correlations: K.5, 1.4, 2.7 - 2.8, 4.1, 4.9, 5.1, 6.5, 6.7,

Students will: Realize plants need air, water, and sunlight to grow. Visually see erosion of soil particles. Show the importance of protecting and maintaining water resources.

The District also provides instructional information and resources for the Boy & Girl Scout patch program; "Soils Expert" and "Living In Your Watershed" for 1st through 5th grade. Both lesson plans correlate to Science SOL's.

EDUCATION

Three Rivers SWCD Teacher Mini Grant Program

Annually the District offers mini grants to Essex, King William and King & Queen teachers. The mini grants are intended for projects that integrate soil and water conservation into any curriculum. For the FY20-21 school year, four grants were awarded in the amount of \$2,017.00. The Chesapeake Bay Governor's Schools of Warsaw, Bowling Green and Glenss were awarded \$500 each to collaborate on a Microclimate Study.



The Governor's School Teachers final report: Grant money was used to purchase supplies for a home microclimate test kit that was distributed to students in September at all three campuses. In small groups, students came up with parameters they wanted tested and instructions for the rest of the students to collect data. They recorded data in their yellow rite-in-the-rain field notebooks. Some of the parameters measured by students included: atmospheric temperature, rainfall, rain pH, rain nutrients, soil pH and soil nutrients. Students collected data weekly for a few months in the Fall, once in the Winter and for a few weeks in the Spring. In addition to quantitative data collection, students also did nature journaling in their data collection spot to make qualitative observations, once in the Fall, Winter and Spring. An additional activity that related to their study was carried out for Earth Day in April. Students did a soil and hours of sunlight analysis at a place in their yard in order to create a pollinator garden. After analyzing their site, students had an opportunity to get 3-6 native perennial pollinator flowers to plant in the space, choosing those plants that best met their soil and sunlight conditions.

The 4th grant was awarded to the Hamilton-Holmes Middle School to develop an environmental based outdoor classroom/learning lab on the school grounds. Due to the restrictions of Covid, the school was unable to complete the project and asked for an extension with a completion date of Spring 2022.

EDUCATION

2020 Virginia Farm Bureau Hay Bale Decorating Competition

Three Rivers SWCD placed 1st in the "Best Agricultural Theme" VA Farm Bureau Hay Bale Decorating Competition presented by the Women's Leadership Committee. The theme of our bale design was "Pollinators are so Important to the Agriculture Community". The District received a check for \$100 that will be used for environmental education in our schools.



VASWCD Photo Contest

Youth Winner of the VASWCD Photo Contest
"Misty Mattaponi" by Ethan Davis
taken in King & Queen Co.



Newsletters

The District's quarterly newsletter was mailed to approximately 1,628 citizens in our community, including state and local officials, schools and cooperating agencies. A special Thank You to our sponsors of the newsletter: Three Rivers Forestry, Riverland Insurers, Barbour Printing, Java Jacks, James River Equipment, and Colonial Farm Credit.

OUTREACH

Reel In & Recycle Project



The District has developed a program to collect Monofilament Fishing Line to keep our waterways “tangle-free”. Staff and Interns installed three receptacles and signage promoting proper disposal of the used fishing line at June Parker Marina in Essex County, the public boat landing in Aylett (King William) and Rainbow Acres Camp Ground in King & Queen County. The staff has been monitoring the receptacles and collecting the fishing line since installation. The District will be sending the collected fishing line to Berkeley Conservation Recycling in Iowa for processing.

Outreach & Social Media Contacts

Facebook “Likes” for
community engaging
posts
1,974
Google Business
Searchers
497

Soil & Water Stewardship
Week Church Contacts
80
Farmer’s Market
Contacts
77

Cost Share updates to
Producers for program
guidelines
624

Teacher Contacts for
available programs &
resources
534

“Living in Your
Watershed” Booklets
delivered to schools &
libraries
377

OUTREACH

District Field Trials

This year the District partnered with VCE and three cooperators to evaluate the use of cover crops in row crop production. These farm operators are critical to the district carrying out its educational and outreach goals. We thank these producers for working with us to put in test plots for research as these require a significant amount of time and cooperation throughout the year.

The three cooperators were MTG Partners, Brandon Farms, and Benjamin Ellis, Jr.

MTG Partners were the cooperators on a large plot evaluating the use of legume cover crops in corn production. Results from this plot were excellent and continued to show the value of legume cover crops in corn production. We have learned that well-managed legume covers can provide over 100 lbs. per acre of plant available nitrogen for corn.

Brandon Farms were the cooperators on a plot evaluating the use of different small grain cover crops in soybean production. They also cooperated on a plot evaluating brassica cover crops in soybean production. Yields in both plots were very good and we appreciate the Waring's continued interest in evaluating the use of cover crops to improve soil health and crop production on some of our sandy soil types.

Benjamin Ellis, Jr. cooperated on plots evaluating both the performance of corn following legume cover crops and the performance of soybeans following small grain cover crops. With all the challenges presented from a wet fall harvest, we were still able to gather useful data with Benjamin's help. We appreciate his diligence in helping us get that data.

We appreciate these operations' willingness to work with us to retrieve the valuable data results.

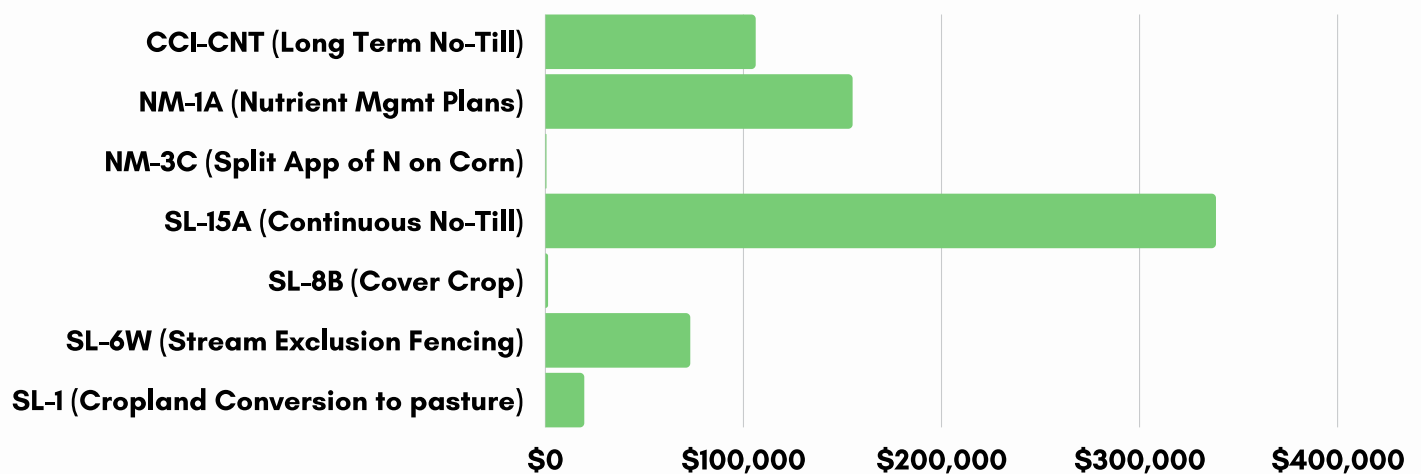


VA AG BMP COST SHARE PROGRAM

The TRSWCD locally administers the VA Agricultural Best Management Practices (BMP) Cost Share Program and Tax Credit Program, which allows the District to offer technical and financial assistance to Producers who wish to implement eligible BMP's. Listed below is an accounting of BMP's, Cost Share funds allocated and the number of contracts completed.

Total VACS Cost Share provided to Producers for FY21: **\$692,479.20**

VACS Funding Allocated to BMP's



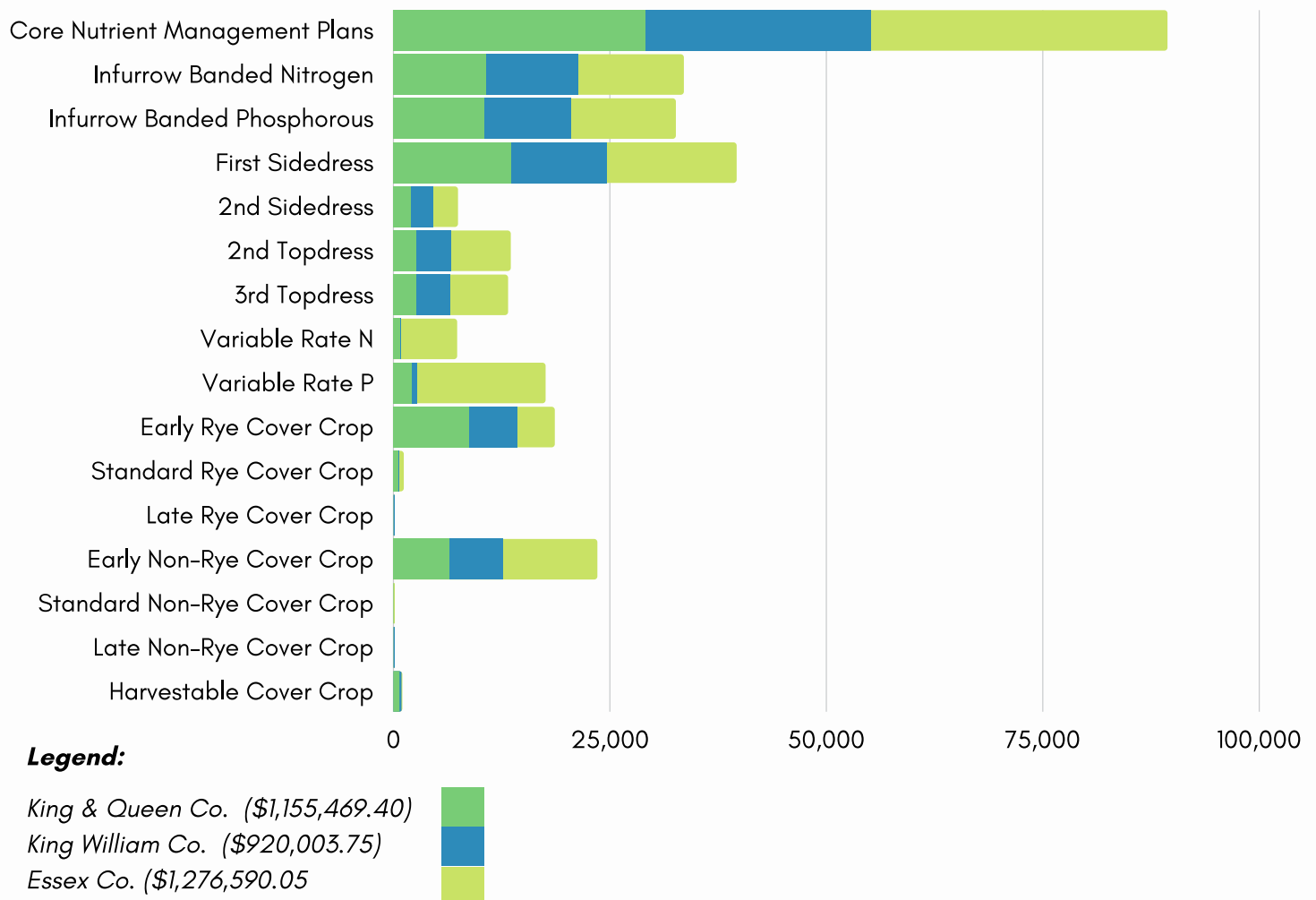
Breakdown of Funding Per BMP's

CCI-CNT:	\$105,912.50	18 Contracts	NM-1A:	\$154,842.20	95 Contracts
NM-3C:	\$106.80	1 Contract	SL-1:	\$19,355.70	2 Contracts
SL-15A:	\$338,317.00	19 Contracts	SL-6W:	\$72,877.00	1 Contract
SL-8B:	\$1,068.00	1 Contract			

WHOLE FARM APPROACH GRANT

The Department of Conservation & Recreation awarded Three Rivers SWCD with a grant for another year to pilot the new BMP - WFA-1 “Whole Farm Approach” to local producers. This approach bundles agricultural Best Management Practices to collect data, assure that implemented nutrient management plans are accurate and up to date, minimize the impact of nutrients used in crops and highly managed hay production, and to provide for the establishment of vegetative cover on cropland for protection from erosion and the reduction of nutrient losses to groundwater. Due to the success of the program – the District was able to allocate VACS funding to supplement WFA signup to fund all applications. Total Cost Share allocated to Producers was **\$3,352,063.20**.

WFA-1 BMP acreage implemented by County



RMP PROGRAM

The Virginia Resource Management Planning program provides a voluntary way to promote the use of conservation practices that improve farming operations and water quality. RMP plans are designed to encourage farmers or landowners to use a high level of Best Management Practices that reduce runoff pollution to local waters and in many cases, improve the farmers' financial bottom line.

In return for full implementation, the plan holder can be assured that he or she is in compliance with any new state nutrient, sediment, and waste quality standards; in particular, regulations related to the Chesapeake Bay and all local stream segment TMDLs. The certificate of safe harbor is valid for 9 years provided the farmer continues to implement the RMP.

The District has a Technical Review Committee made up of conservation professionals that review these plans. After review and inspections are complete, the Board of Directors approve the plans or approves RMP-2 for cost share payment.



HERE'S TO ANOTHER GREAT YEAR!



Acknowledgements:

The Commonwealth of Virginia supports the Three Rivers SWCD through financial and administrative assistance provided by the Virginia Soil & Water Board and the Department of Conservation & Recreation.