# King and Queen 2023 Situation Analysis Report

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## Summary of community issues and Extension office response

Priority Issue	Planned Unit Response
Strengthening the local food system - Addressing hunger issues - Ensuring safe, high quality foods	<ul> <li>Continue current ANR programming</li> <li>Partner with local growers to assess needs and gaps in programming, address those needs through educational programs</li> <li>Expand school garden program to include more students- so students learn to grow, prepare and preserve their own food</li> <li>Continue to partner with local agencies to find innovative ways to address hunger in the community</li> <li>Support King and Queen efforts for a Farmers Market</li> <li>Advocate for King and Queen VCE getting SNAP Program Assistant</li> </ul>
Youth Development - Helping youth develop leadership, citizenship, and other life skills - Getting more adults involved in mentorship - Addressing youth mental health	<ul> <li>Continue current 4-H programming</li> <li>Create a marketing program</li> <li>Hold Positive Youth Development Workshops for Volunteers and Community members</li> <li>Special efforts in programming for Agriculture, Natural Resources, Environmental and Mental Health</li> </ul>
Increasing Agriculture, Natural Resources and Environmental Literacy - Protecting water quality - Protecting air quality	<ul> <li>Offer Drinking Water Clinic annually</li> <li>Work with King and Queen Public Schools to offer an annual MWEE</li> <li>Work with King and Queen Public Schools to offer an annual Ag Day</li> </ul>

### Introduction

The King and Queen Extension office conducted a situation analysis over the latter part of 2023. The purpose of conducting the analysis was to identify key issues in King and Queen County that Virginia Cooperative Extension (VCE) will address through educational programming.

Using data from the VCE Situational Analysis Resource website, a unit profile for the county and community survey was developed. Key points from the unit profile were considered when creating the community survey. The survey had several issues and asked the respondents to rate each issue on a five-point scale, asking how much effort should be put into VCE programming. The scale was no effort to very high effort. Respondents selected if VCE should locally have a very high, high, moderate, low or no effort to each issue. The survey was administered using Qualtrics online platform. A link to the survey was sent directly to approximately 75 residents.

Recipients of the survey included county board of supervisors, county employees, school teachers, Soil and Water Conservation directors, and parents and guardians of 4-H members. The Mattaponi, Pamunkey River Associations were asked to distribute the survey amongst their membership as well as to any other resident that they thought would provide feedback. When the survey was closed in December of 2023, 43 participants had responded.

The findings from the unit profile and the survey were analyzed and key issues for King and Queen County were identified. A Unit Profile was first constructed using a variety of sources, including, but not limited to, the 2018 Situation Analysis, the Virginia Employment Commission, the U.S. Census, and the USDA's Census of Agriculture. The Unit Profile sought to capture relevant geographic, demographic, and economic data.

### **Unit Profile**

King and Queen is a county of 326 square miles (11 of which are water). The county, roughly 70 miles long and 10 miles across at its widest. King and Queen has no incorporated towns and any real geographic or population center. A central thoroughfare, The Trail, connects the two ends of the county. King and Queen has many tributaries, the Mattaponi, the York river and Dragon Run which is a headwater for the Piankatank River. It is also home to almost 10,000 acres of Dragon Run State Forest.

According to the United States Census Bureau 2020 census 6,608 residents live in the county. Situated on the Middle Peninsula in VCE's Northeast District's, the county shares the Mattaponi River with King William County, its neighbor to the southwest. The Rappahannock Indian Tribe is headquartered in Indian Neck in the Northeastern part of King and Queen.

Population density of King and Queen is 21 people per square mile. The population of King and Queen County, Virginia in 2022 was down 3.7% from the 2010 census. For comparison, the US population grew 7.7% and Virginia's population grew 8.2% during that period.

As of 2020, 69.8% of the population was white, 24% was black, and the remainder was made up of other minorities. This has changed since 2017, the white population has grown and the black population has decreased. Other demographics in the county are Mixed Race at 3.7%, Hispanic at 3.9% and Native American make up 1.8% of the population. Of these residents 24% of the population was 64 or older. Residents under the age of 20 comprised 19% of the population. The median age is 48.

Three public schools serve the entire county and have an enrollment of 858 students. The schools are the PK-6 King & Queen and Lawson-Marriott Elementary Schools and the 7-12 Central High School. King and Queen Central high school has an average math proficiency score of 37% (versus the Virginia public high school average of 60%), and reading proficiency score of 77% (versus the 81% statewide average). The school has a graduation rate of 84%, which is less than the Virginia average of 90%.

Median household income in 2019 was \$63,689, according to Virginia Department of Health Data Commons. The overall poverty rate for King and Queen in 2022 was 14.2%. In 2022, about 10.6 percent of Virginia's population lived below the poverty line, making King and Queen a poorer county than average.

The largest industries in King and Queen are Government (state, local, and federal), Manufacturing, and Transportation/Warehousing, with the three largest employers being King and Queen Public Schools, the County of King and Queen, and United Laboratory Company. Under 300 people both live and work in the county. The majority of the residents commute out of the county to find work.

In the 2017 Census of Agriculture, King and Queen had 151 farm operations, which has grown by 12 % since the 2012 census. Also increasing is the amount of land in farms, which increased 15% to 48,246 acres. The majority of these are field crop operations, but also livestock, poultry, and related products. One dairy farm also reported. Although farms have increased in area, the net cash income made by farming in King and Queen was down 32% from 2012 at \$3,223,000. Of the 252 producers that reported 161 were male and 91 were female. The majority being between 35-64 years of age, 16 were under 35 and 85 were 65 and older. The vast majority, at 219 identify as white, 27 identify as Black, 4 as Native American, and 2 as Asian. It is also noteworthy that of the 252 producers in King and Queen, 63 are new and beginning farmers.

### **Community and Resident Perspectives**

Looking at the issues ranked high or very high effort in the county were food systems, youth development and natural resources were the general issues to be addressed. King and Queen was similar to the state in many of the consensus issues. Strengthening the local food system, was ranked the highest issue in King and Queen. It was also one of the highest rated issues in our district and in the state, as was ensuring safe, high-quality foods. Getting more adults involved with youth mentoring and helping youth develop leadership, citizenship and life skills were issues that were on both the state and the county priority issues. Protecting water quality was also a consensus issue for both the state, county and district.

Table 2. Thigh very fligh continuinty issues based on survey results by King and Queen County residents.		
Issue	Scoring	
Strengthening the local food system	118	
Helping youth develop leadership, citizenship, and other life skills	115	
Protecting water quality	113	
Helping communities improve their quality of life	108	
Getting more adults involved in mentoring youth	107	
Addressing hunger issues	106	
Addressing adult and youth mental health	105	
Ensuring safe, high quality foods	104	
Promoting agricultural, natural resources, and environmental literacy		
Protecting air quality	103	

Table 2. High/Very High community issues based on survey results by King and Queen County residents.

Note: Scale for scoring survey participants ranting was 0=No Effort, 1=Low Effort, 2=Moderate Effort, 3=High Effort, 4=Very High Effort.

### **Community Issues**

Strengthening local food systems can improve food access for consumers, increase farmer profitability, stabilize and/or grow local economies and enhance community viability. Consumer choices about food spending and diet are likely to be influenced by the accessibility and affordability of food retailers—travel time to shopping, availability of healthy foods, and food prices. Some people and places, especially those with low income, may face greater barriers in accessing healthy and affordable food retailers, which may negatively affect diet and food security. Strenghtening local food systems, ensuring safe, high quality foods and addressing hunger were identified as issues in the county. King and Queen County does not have a single grocery store. Many of the respondents to the situational analysis survey commented on the lack of a grocery store in the county. Many sited accesses to food being an issue for county residents and many also commented on poverty and lack of healthy food options. In three separate comments the county was referred to as a food desert. One respondent stressed the need for a year-round farmers market. In discussion with community partners, agents often hear that lack of a grocery store and access to food is a problem in King and Queen.

Through working with partner agencies and in the school system, the King and Queen VCE office knows that county schools provide breakfast and lunch to all the youth that attend school. Students may also qualify for the backpack program and receive meals for over the weekend. The school system also delivers meals throughout the summer using the school bus routes. Elderly people or those that qualify without transportation may receive food through the Meals on Wheels program. Mount Zion Baptist Church is currently the only food pantry in the county, although residents can receive food from the CornerStone Community Development Center in King William County. The C.A.R.E. Center in the Shackleford's area is currently working on developing a food pantry for the lower end of the county. Currently, there is a community garden that provides food to the community as well, during certain times of the year. Although there are some options for those who take part in the programs there are still gaps and many people have to travel long distances for food and even longer distances for fresh or high-quality food.

Youth programming and lack of adults to mentor youth were issues identified in the survey. Currently, outside of school programming, King and Queen has a Boy Scout Troop that meets in the upper part of the county. A 4-H Homeschool club meets in the same location and a 4-H livestock club takes turns meeting between King and Queen and King William Counties. There is an afterschool program at the high school for 7-12th graders through the 21st Century Grant and many of the churches offer a youth group. However, church youth groups are also dependent on adult volunteers. King and Queen youth can take part in King William Parks and Recreation sports leagues, but the county does not have a parks and recreation department of their own. Approximately a quarter of the respondents in the survey referenced youth needing more programming in some way. Barriers to youth programming in King and Queen have to do with, not only the lack of willing adult volunteers/mentors, but the lay out of the county and the lack of programming space. The county's only library and meeting space that is open to the public is in the upper end of the county. Currently the library is only open five days a week and only 32 hours a week. This will be changing in the near future, as the library is transitioning from a reginal system to a local county system. The Upper King and Queen Ruritan Club, which is located near the library is home to the both the Boy Scout Troop and the Homeschool 4-H Club. The lower end of the county which is where most of the population is does not have a public space available for youth activities.

Our last community issue is protecting natural resources. The survey identified protecting water quality, protecting air quality and promoting agriculture, natural resources and environmental literacy as high

effort issues. Water quality "themes" affecting quality of water resources in agricultural and rural watersheds include: animal manure management, drinking water/human health, environmental restoration, nutrient and pesticide, management, pollution assessment and prevention, water management and conservation, water policy and economics, and lastly watershed management. When it comes to air quality in rural areas according to the USDA air quality can be affected by agriculture. Agricultural production releases a wide variety of material into the air—for example, windblown soil, nitrogen gases from fields and livestock, fine particulates from diesel engines and controlled burning of fields, and pesticides. Pesticides can move in air currents in two ways: aerial drift (when applied with crop dusters), and volatilization (a process by which solids or liquids are converted into gases). Other potential pollutants associated with agricultural production include hydrogen sulfide, ammonia, odors, and other volatile organic compounds from animal manure; methane from dairy cows and cattle; and nitrogen oxides from fertilized fields and internal combustion engines. These pollutants can affect people's health, reduce visibility, contribute to climate change, or simply be a nuisance.

When it comes to literacy of agriculture, natural resources and the environment, the key term is literacy, meaning a competence or understanding of the complex dynamics and systems that are involved in these topics. Through Extension agents in the middle peninsula working with the RAFT project environmental literacy was identified as something to be addressed in King and Queen county. When participants of our survey were asked to identify the most pressing issue in the county responses included things like: "steward of natural resources and supporting agriculture should be the only goal of the VCE" and "Bring back the Chesapeake Bay Act" others said things along the line of supporting agriculture and stopping the spray of pesticides.

### **Future Programming to Address Community Issues**

The priority community issues that the Extension office is able to address are strengthening the local food system, youth development, and educational programming to increase agricultural, natural resources, and environmental literacy. We feel that we can also address other high priority issues through these issues.

#### Strengthening the local food system

Currently the ANR Extension agent has a vegetable garden at the high school which is used by the selfcontained classroom. Expanding this program to more students and involving more teachers will be a way of connecting youth with the concept of growing, preparing and preserving their own food. Other programming will include partnering local growers to address any needs they may have. Partnering with the VA Farmers Market Association to create a toolkit and manual to instruct market managers on how to accept SNAP at farmers' markets, as well as marketing resources farmers and market managers can use to advertise. The VCE office will continue to partner with Thrive Virginia, the King and Queen Resource Council to see how we can assist when it comes to hunger in the community. For agricultural programming partners will include Three Rivers Soil and Water Conservation District and the King and Queen Farm Bureau. The VCE office will use the Model for Community, Local, and Regional Food to address needs local food system needs in the community.



Fig. 1 VCE Model of community, local, and regional food systems.

### Youth Development

The 4-H Extension agent will continue all efforts currently taking place in King and Queen county. The agent will work with the ANR agent to continue youth programing to expand youth programming. The 4-H agent will advertise for volunteers to work with youth to address the issue of adults mentoring youth and will hold workshops in Positive Youth Development for volunteers or those interested in the topic. 4-H agent will continue partnership with the school system as well as try to expand programming. Special efforts will be made to program youth mental health, natural resources and agriculture. Marketing 4-H programing will be expanded to regular social media posts, and more communication through the schools. Partnerships will include the King and Queen County Library, Three Rivers Soil and Water Conservation District and King and Queen C.A.R.E. Center.

### Agricultural, Natural Resources, and Environmental Literacy

The King and Queen ANR and 4-H agents currently focus much of their programming on agriculture, natural resources and environmental literacy. A high priority will be put on these topics in the future. Several of the joint county programs will continue with intention of increasing literacy in the community.

Drinking Water clinics which in the past have been held on a biannual basis will be held every year to increase participants. These clinics will also help to identify water quality issues in King and Queen.

Extension will continue to partner with other agencies to put on a Meaningful Watershed Educational Experience (MWEE) for King and Queen schools. The office will also strive to hold a three county Ag day with King and Queen and Essex counties. VCE will partner with the Mattaponi Pamunkey River Association, Three Rivers Soil and Water Conservation District, King and Queen Public Schools and the Upper King and Queen Ruritan Club to provide these programs.

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