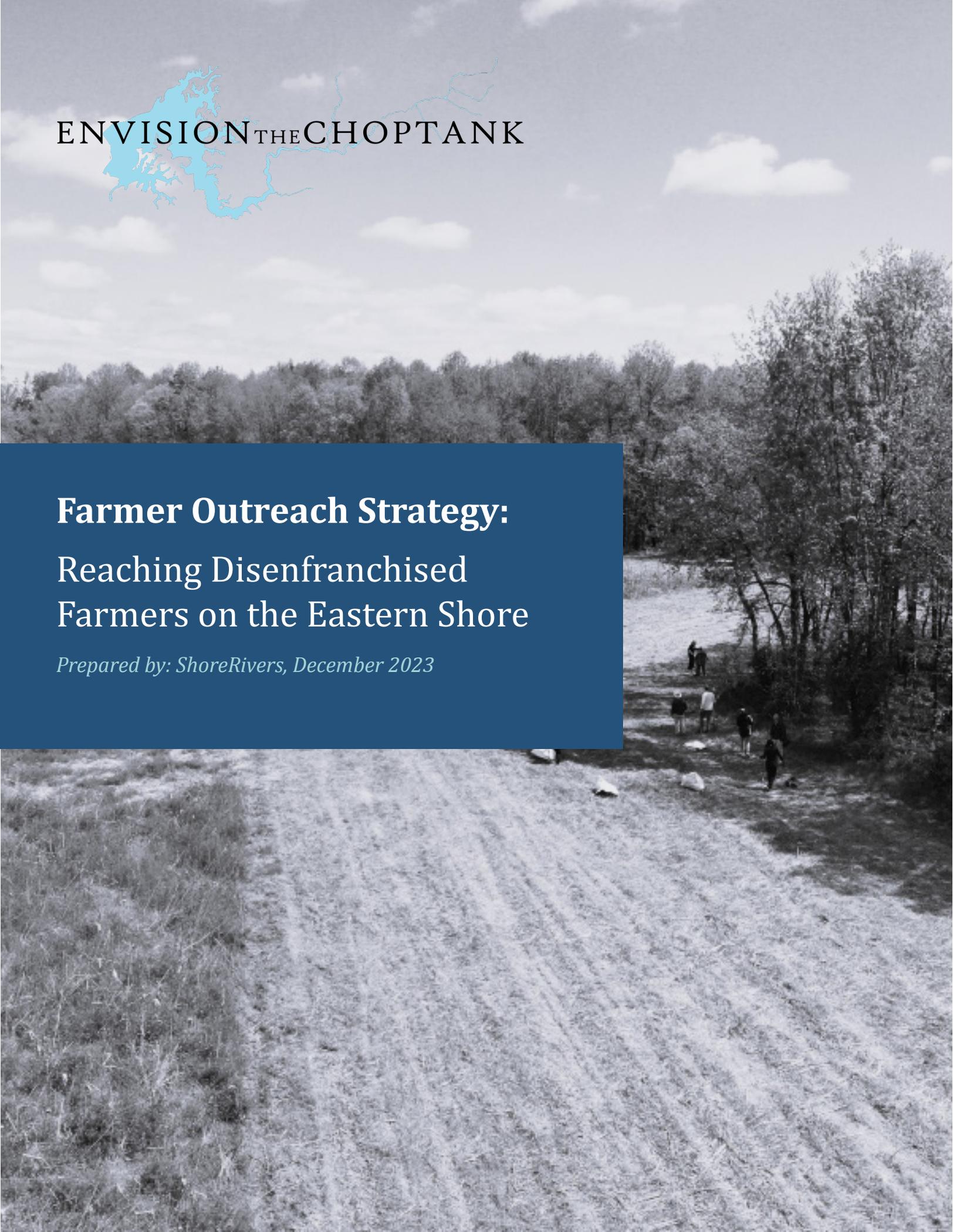




Farmer Outreach Strategy: Reaching Disenfranchised Farmers on the Eastern Shore

Prepared by: ShoreRivers, December 2023



Introduction

Conservation practice adoption and implementation are vital to improving soil health and water quality from agricultural land. These best management practices are supported by the Farm Bill's conservation programs (i.e. Environmental Quality Incentive Programs, Conservation Stewardship Program, Conservation Reserve Program) and Maryland's Agricultural Cost-Share Program, and are designed to support farmers in addressing resource concerns and improving the sustainability of their farms with financial and technical assistance. Farmers across the United States voluntarily enroll into these programs year after year.

Unfortunately, these programs have historically underfunded non-white producers and small, diverse farms. Farmers of color have faced historical discrimination and inadequate assistance in terms of land ownership and federal support for years. Land ownership issues often arise for a farmer's heir—this is land that has been passed down from one generation to the next without a will or other type of estate planning document that can prove ownership, making them ineligible for federal loans and conservation programs. This has led to a loss of land ownership. In Maryland, for instance, Black farmers have decreased by 96% from 1910 (6,372 farmers) to 2017 (277 farmers) (U.S. Agricultural Census, 1910 & 2017).

Federal support issues are closely tied to historical discrimination from United States Department of Agriculture (USDA) agencies, as exhibited in the Pigford vs Glickman class action lawsuit of 1999, where evidence of systemic racial discrimination against Black farmers was uncovered. Additionally, white farmers own 98% and operate 96% of the farms across the U.S., leading to federal and state programs that cater to their operation size and crop production (Ayazi & Elsheikh, 2015). A 2019 investigative report found that 94.4% of the share of funding for conservation practices went to white farmers (Rosenberg, N., & Stucki, B. W., 2019).

The USDA defines historically underserved farmers as farmers or ranchers who identify themselves as beginning producers, socially disadvantaged, or veterans or those facing limited resources.

There have been recent efforts from federal and state agencies to better serve historically underfunded farmers. The USDA defines them as farmers or ranchers who identify themselves as beginning producers (started farming or became primary operator less than 10 years ago), socially disadvantaged (those belonging to groups that have been subject to racial or ethnic prejudice), or veterans or those facing limited resources (low farm profits and a household income below poverty level). For example, the federal Farming Opportunities Training and Outreach program (a merger of The 2501 Program and the Beginner Farmer and Rancher Development Program) was established in 2018 to provide permanent funding to increase participation of historically underserved farmers in USDA programs and services. In Maryland, the newly established Small Acreage Cover Crop Grant aims to provide financial assistance for small farmers (<10 acres) who don't qualify for traditional cover crop programs. Nevertheless, there is still much work to be done to be successful in engaging these farmers as many of them still struggle to access or trust USDA programs, and don't see themselves or their way of farming reflected in their staff and program offerings (Levy, 2023).

Envision the Choptank is a partnership between community organizations, government agencies, and local citizens seeking to find collaborative solutions to improve water quality in the Choptank River watershed while also meeting the needs of local communities. In an effort toward achieving Envision the

Choptank’s goal of engaging communities and breaking barriers in the agricultural sector; the objective of this outreach plan is to provide a summary of the input and perspective of disenfranchised producers, provide viable methods to increase access to resources that support conservation, and recommend steps to grow capacity for implementing conservation practices. This will be achieved through literature review, and a review of first- and second-hand interviews with farmers, landowners, and organizations involved in agriculture and outreach.

Background Information

Socially disadvantaged farmers, per USDA’s definition, include Black or African American, American Indian or Alaska Native, Hispanic or Latinx, Native Hawaiian or other Pacific Islander, and Asian farmers and landowners. In 2017, these disenfranchised farmers accounted for approximately 3.3% of the total number of farmers in the Choptank River watershed (Table 1), compared to 2.5% in 2012 (Attachment A; U.S. Census of Agriculture, 2012 & 2017). There was a positive increase in American Indian or Alaska Native, Hispanic or Latinx, and Asian producers between 2012 and 2017. Unfortunately, Black or African American producers decreased by 23% during that same time period, and we have anecdotal records of even lower numbers due to producers retiring or passing away.

There may be discrepancies between the census data and on-the-ground information about the number of producers in the area. A report by King et al. (2016) suggested that this discrepancy could be due to outdated information, over-counting of minority landowners who rent to non-minority producers, and under-counting of minority producers who rent from non-minority landowners. Additionally, the Census of Agriculture has changed their data collection throughout the years and, in 2017, farms could report up to four producers instead of having to choose only one (Pilgeram et al., 2020).

Table 1. Demographics of producers in the counties of the Choptank River watershed in 2017

| County | All (including White) | Black or African American | | | American Indian or Alaska Native | | | Hispanic or Latinx | | | Asian | | |
|--------------|-----------------------|---------------------------|-------------|----------|----------------------------------|-------------|----------|--------------------|-------------|----------|-----------|-------------|----------|
| | | Total | % | Acres | Total | % | Acres | Total | % | Acres | Total | % | Acres |
| Caroline | 906 | 3 | 0.3% | D | - | - | - | 13 | 1.4% | 169 | 7 | 0.8% | D |
| Dorchester | 621 | 16 | 2.6% | 2,640 | - | - | - | 13 | 2.1% | 2,309 | 34 | 5.5% | 2,461 |
| Queen Anne’s | 850 | 10 | 1.2% | 75 | 6 | 0.7% | 47 | 10 | 1.2% | 3,739 | 1 | 0.1% | D |
| Talbot | 533 | 1 | 0.2% | D | - | - | - | 4 | 0.8% | 54 | 3 | 0.6% | D |
| Kent, DE | 1,396 | 5 | 0.4% | 576 | - | - | - | 15 | 1.1% | 530 | 3 | 0.2% | D |
| Total | 4,306 | 35 | 0.8% | - | 6 | 0.1% | - | 55 | 1.3% | - | 48 | 1.1% | - |

Note: Includes data from the entire counties, which comprises areas outside of Choptank River watershed boundary; no record of Native Hawaiian or Pacific Islander; D = withheld to avoid disclosing data from individual or small number of operations. Adapted from U.S. Census of Agriculture, USDA National Agricultural Statistics Service, 2017.

Producers are defined as any person who is involved in making decisions for a farm operation. This may include decisions about such things as planting, harvesting, livestock management, and marketing. The producer may be the owner, a member of the owner’s household, a hired manager, a tenant, a renter, or a sharecropper. Consequently, some farmers may not have a role in decision-making regarding the adoption of conservation practices, especially if they lease the land.

The majority of disenfranchised producers in Maryland farm on under 50 acres, with many farming fewer

than 10 (Figure 1; U.S. Census of Agriculture, 2017). Additionally, most of these producers have diverse operations with a variety of crops and livestock (Figure 2.). Diverse farming systems have been reported to be common with young, beginning, and racially and/or ethnically diverse producers across the United States (Iles et al., 2023, Ackoff et al., 2022).

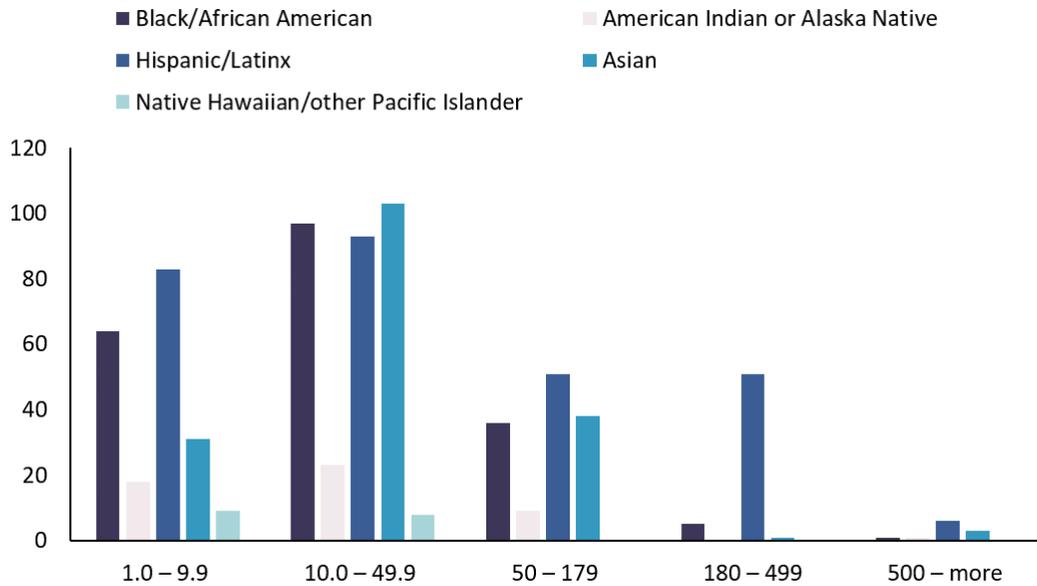


Figure 1. Farm size (acres) by race and ethnicity of producers in Maryland (data not available for each county). Adapted from U.S. Census of Agriculture, USDA National Agricultural Statistics Service, 2017.

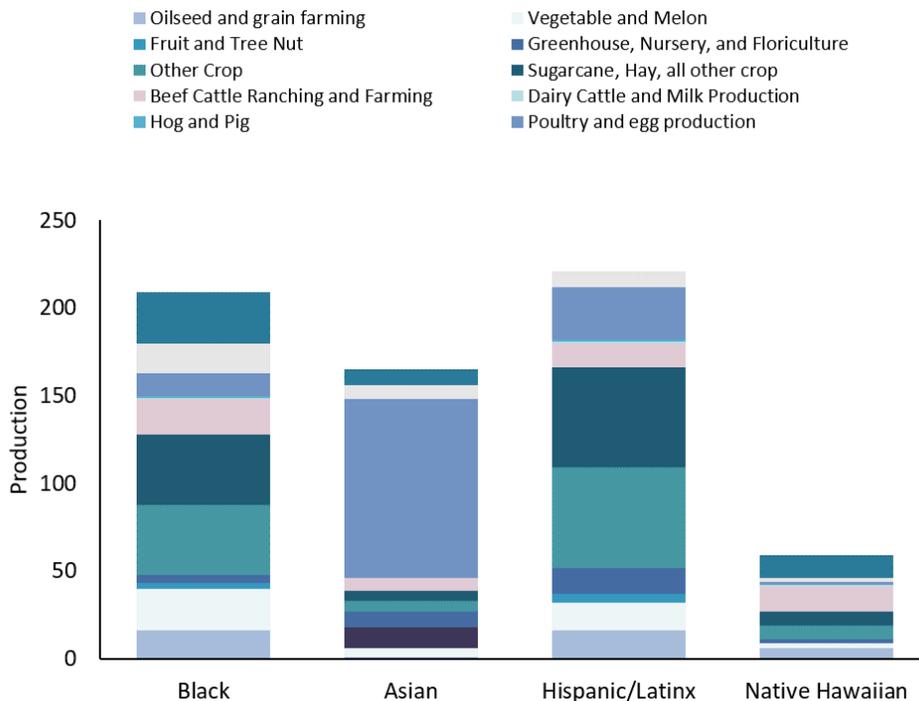


Figure 2. Farm productions by race and ethnicity in Maryland (data not available for each county). Adapted from U.S. Census of Agriculture, USDA National Agricultural Statistics Service, 2017.

Methods Used

In 2022, ShoreRivers conducted semi-structured interviews that were classified as first- and second-hand account interviews. First-hand accounts consisted of interviewing members of the disenfranchised community, which in this phase were Black farmers and landowners. Second-hand accounts included individuals or entities currently working with producers who are not themselves necessarily members of that community, such as Soil Conservation Districts in the Choptank watershed, non-profits, and University of Maryland Extension. These second-hand account interviews were carried out first to gain a better understanding of their services and relationships with the producers.

As part of Envision the Choptank's collaborative effort, a subgroup called the Envision Farmer Outreach Plan was created. This subgroup includes three non-profits, a federal agency, University of Maryland Extension, and Envision the Choptank's facilitators. The subgroup met several times during the project to discuss objectives, interview structures and general feedback.

In 2023, ShoreRivers partnered with The Nature Conservancy's (TNC) Maryland-DC Chapter to be more efficient when interviewing farmers and landowners and avoid interviewee fatigue, since both organizations were working on similar projects. Three main questions were formulated to design the interviews:

1. What economic and environmental barriers or challenges are historically underserved producers experiencing?
2. What information sources do historically underserved producers primarily use and trust in farm decision-making?
3. What factors are contributing to farmer's use or lack thereof of federal and state conservation programs?

From April–July 2023, we worked together to interview 18 farmers who fit under the USDA criteria of historically underserved and/or were female (classified as diverse in the results). This target audience differed from the previous year's sole focus on disenfranchised farmers by racial and ethnic identity since it was a limited sampling population. This year's expanded approach was to interview producers whose operation and/or race/ethnicity is distinct from what is dominant in conventional agricultural systems (big acres, commodity crops). This helped us increase our sampling size and was consequently more representative of the diverse operations in the Delmarva.

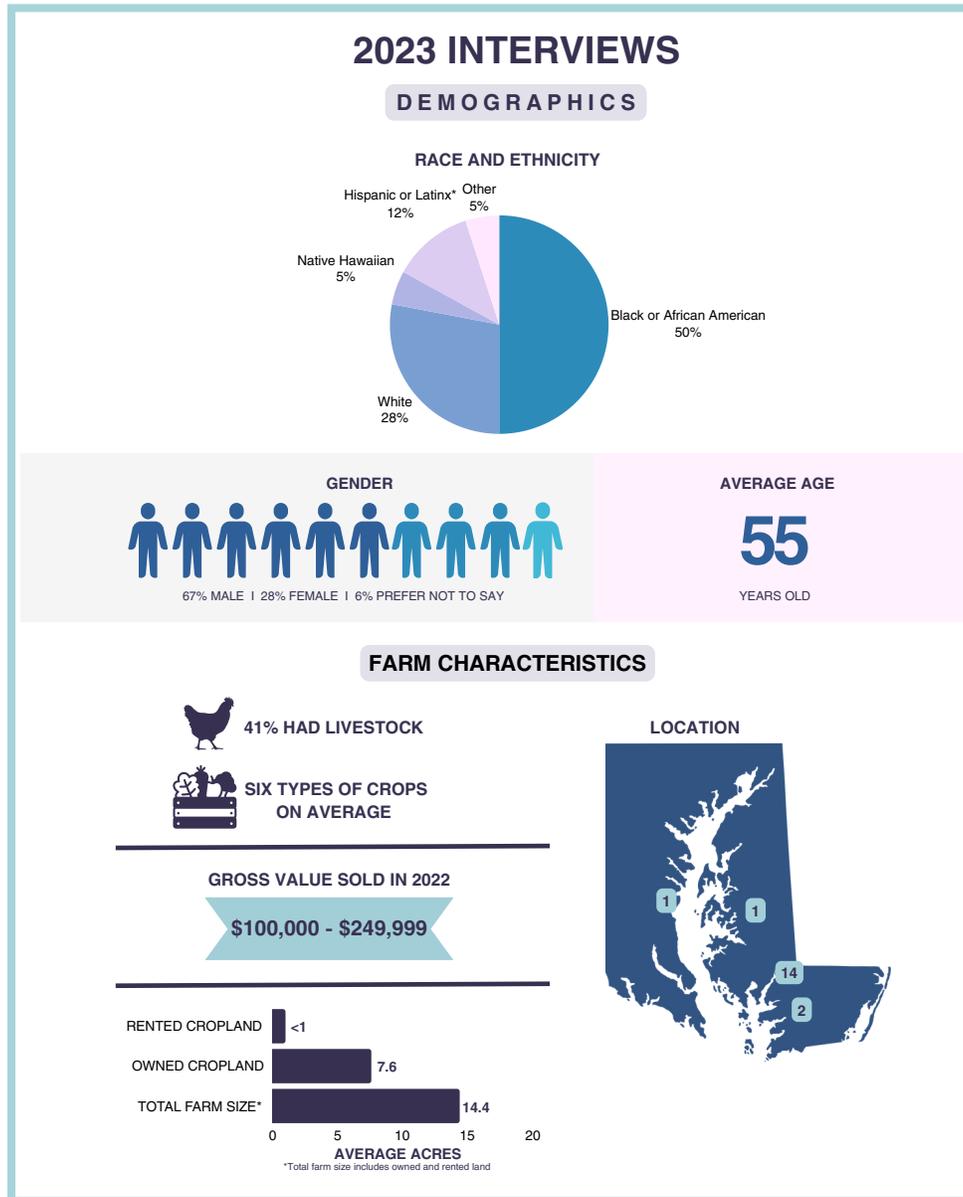
Some of the interviews were made possible through TNC's connection with University of Maryland Eastern Shore (UMES) Extension, which serves small farms and diverse operations on the Delmarva Peninsula. The other interviews were made possible through connections with other partners and producers, and were done in-person at either their farm or in a central location. Producers were compensated with \$200 gift cards for their time and participation. They filled out a short survey to collect demographic and farm characteristic information (Attachment B) before being interviewed. All interviews were recorded and transcribed through an online service. The Nature Conservancy's social scientists provided the research design and qualitative data analysis.

The interview questions were created to provide a preliminary understanding of the barriers to conservation adoption by historically underserved farmers in the Delmarva region. Afterward, interviews were analyzed based on the following themes: major barriers or challenges in their production, environmental challenges and how they address them, trusted sources of information, and factors shaping decisions to enroll in conservation and restoration programs.

Results

The statistics and findings below were based on the data from the 2023 interviews, but the 2022 interviews were kept in mind for the purpose of discussion and providing recommendations. The sample size, although sufficient for qualitative analysis, may not necessarily translate to the needs of all producers, but can be a great starting point for the Delmarva region.

Summary of Producer Characteristics

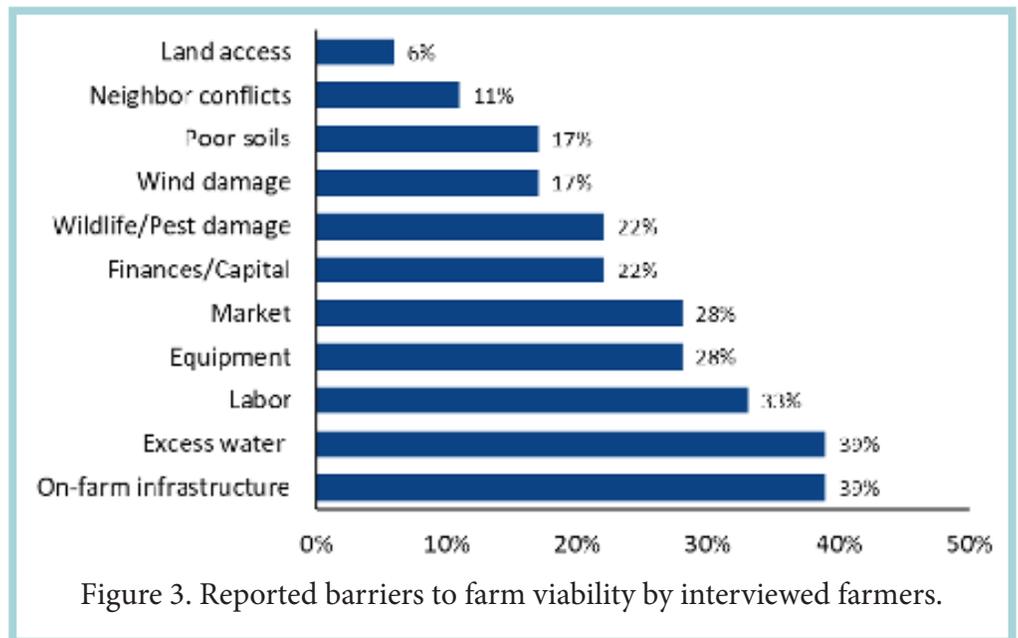


Barriers to Farm Viability

Farmers were asked about what barriers and challenges they face in their production in general. These are main priorities for farm viability and, consequently, may also be barriers for conservation adoption (Levy, 2023). Farmers were also asked about their environmental challenges to provide a better understanding of their experiences. The farm viability barriers found were related to market, infrastructure, labor, and others (Figure 3). These findings are similar to the challenges and needs reported in another Delmarva-focused study by King et al. (2016).

Market

Farmers rarely felt that market availability and access was an issue. Only 28% of interviewees (4/18) noted it as a barrier. The majority of the interviewed farmers participated in UMES Extension programs and have been assisted with market access. For example, UMES Extension has successfully facilitated market access through a partnership with the Maryland Food Bank where small farmers provide traditional crops to food banks who serve a majority population of Latin American and Caribbean communities. As a result of increased availability and access to the market, 22% of farmers felt that they had then encountered new barriers to success. These are factors that prohibited their capacity to scale-up production to meet market demands, such as infrastructure, equipment, and labor.



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Infrastructure and Equipment

Of the 18 farmers, 39% said they didn't have the proper on-farm infrastructure and generally felt that they needed new or more infrastructure. This included things such as refrigeration units, greenhouses, high tunnels, irrigation, or basic needs (wells or electricity) on their farms. Twenty-eight percent of farmers said they did not have the equipment they needed, for example, walk-behind tractors, tillers, and traditional tractors. Interviewees felt that a significant barrier to improving their infrastructure and equipment needs was limited capital and a perceived lack of availability or knowledge of state or federal cost-share programs that could support upgrades.

Labor

Many of the farmers (33%) noted the challenge of finding and affording labor. Farmers emphasized that labor costs had increased significantly given inflation and paying these wages was increasingly difficult. As one farmer described it:

"..and then the second thing would be labor. Even if you pay the highest amount of money, like \$20 an hour, it's still difficult to find people to stay with. It's hard, you find somebody could get a job at \$15 an hour at a coffee shop. So if you want to work outside, then you have to pay \$20, which is a big chunk of money." (MD16)

Land Access

Although only one farmer mentioned land access as a barrier, it has been reported as a significant barrier for a lot of diverse, young, and beginning farmers (Ackoff et al., 2022). Prior year's interviewees mentioned how hard it was to find and acquire land for production. Over the past decade, farmland prices have doubled in some areas and risen far higher in others due to real estate development or commodity prices (USDA, 2023). This reinforces the importance of helping farmers access capital and of continuing to work on solving their heirs' property issues.

Environmental Challenges

More than half (61%) of the farmers mentioned some sort of environmental challenge, such as wind damage, excess water, wildlife and pest damage, and poor soils on their farm. The most significant challenge among all (39%) was excess water problems. Some farmers specifically noted that county ditch maintenance was needed to improve drainage off their land, while others had generally low-lying land that was highly susceptible to ponding. In some rare cases, these issues impacted the entirety of the respondent's operation and limited their capacity to consistently plant a crop.

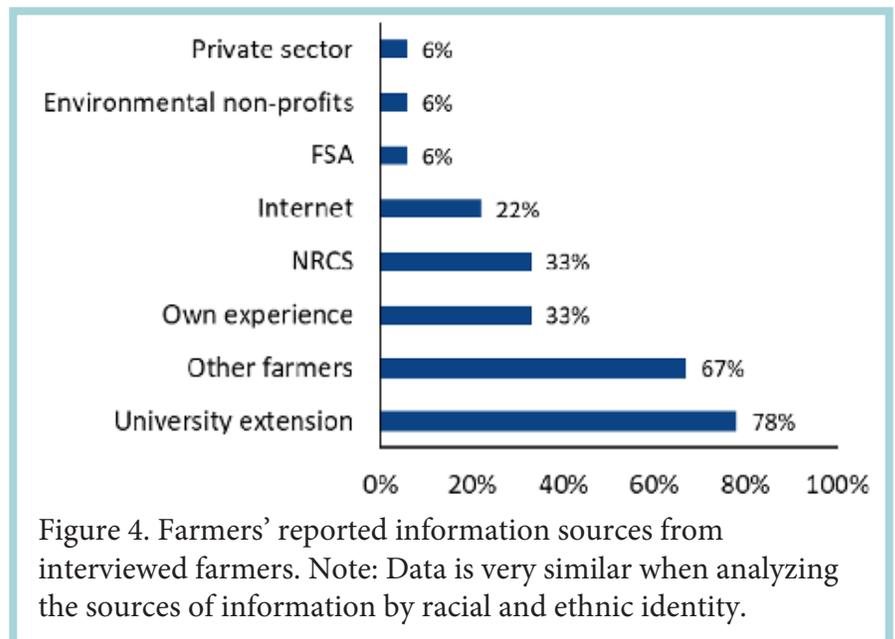
Sources of Information

Farmers were asked about what sources of information they use to address the challenges and barriers mentioned above. We asked them to discuss their use of trusted information sources to get a better understanding of the networks they were connected to. This enabled us to understand who shapes their decision-making and what role federal conservation organizations play in them.

Farmers mentioned consulting multiple sources of information (Figure 4). University Extension from several regional universities was a major source of information—the most popular was UMES Extension. This was probably as a result of UMES Extension facilitating the connections for the interviews with farmers in their network and their work in small farm outreach. The next most used source was other farmers. While some noted that other farmer's information may be biased, they generally appreciated being able to discuss ideas or commiserate on experienced challenges with their peers. These sources of information are similar to the findings by Gaul et al. (2019), where most small farm producers mainly consulted other farmers, extension agents, and commercial publications.

Federal conservation organizations, Natural Resources Conservation Services (NRCS) and the Farm Service Agency (FSA), were used by a smaller percentage of farmers. Of the six farmers who reported connecting with NRCS, two made a point to emphasize the limited role that NRCS played in their decision-making; they'd use it as more of a secondary point of connection after they talked with their other primary sources of information. Most farmers mentioned how helpful their local NRCS office is or has been.

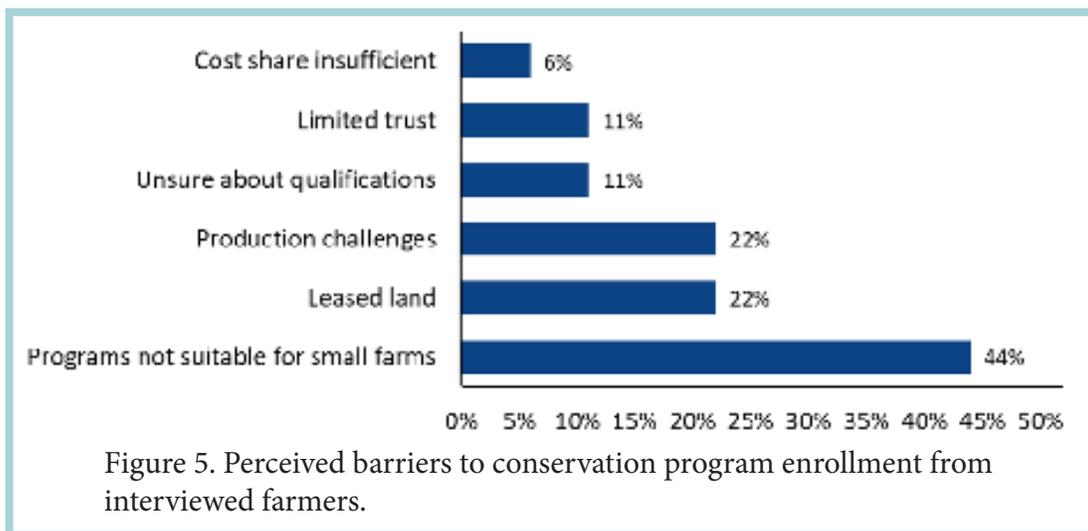
Very few farmers reported trusting or using the private sector for information. Our TNC partners pointed out that “this contrasts with past work focusing on large-scale commodity producers, which suggests this group of farmers primarily uses and trusts the private sector—such as fertilizer dealers—to advise on their management decisions” (Beethem et al. 2023; Stuart et al. 2018). Ultimately this suggests that diverse farmers are connected to, trust, and use different sources of information compared to “established producers.”



Conservation Program Use

After discussing barriers and challenges, farmers were asked about their use of federal or state conservation programs and what factors shaped their participation.

All farmers interviewed were aware of federal or state conservation programs, such as the Environment Quality Incentives Program (EQIP) and Conservation Stewardship Program (CSP). However, only two farmers were actively enrolled in a program or had used them in the past. They had specifically enrolled in EQIP to fund the building of high tunnels. Two other farmers had an edge-of-field practice through Conservation Reserve Program (CRP) on their farm, but these had been inherited from the previous owner from whom they purchased the farm. Notably these two farmers were the ones with the biggest acreage of land—124 and 24 acres—highlighting how edge-of-field practices are sometimes more practical on bigger farms.



Despite their limited use of conservation programs, farmers were widely supportive of, and interested in, the conservation benefits of the practices they promoted. **Some even emphasized that environmental outcomes were the primary factor shaping their decision-making, but acknowledged the barriers to adoption of the practices.** Most of the barriers were related directly to farm size, land ownership, and production challenges (Figure 5).

Farm size was mentioned by farmers because they perceived that conservation programs were not suitable or applicable to their small acreages and diverse farms. However, some farmers suggested they may be able to offer “an acre” for conservation practices because they felt they were important. Diverse, young, and beginning farmers have been reported to be environmentally conscious and practice some sort of regenerative agriculture (Iles et al., 2023, Ackoff et al., 2022, King et al., 2016). Some farmers’ experiences led them to believe that these federal and state organizations were not interested in installing these practices on their small farms. One farmer expressed:

“Yeah, I’m generally aware, but not a great deal of specificity, primarily because I did not see them and I really unfortunately still don’t see them as being particularly interested in us little folks. So we’re sort of the forgotten bunch of this whole thing. They do big stuff, they do important stuff, but there are a lot of small farmers like us who basically are simply not in their field of vision.” (MD12).

Farmers who leased land noted that as a barrier, and a significant one as many programs require land ownership or collaboration with a landowner for enrollment. This has been found to be a major barrier for conservation adoption in the U.S. that is rarely taken into account in conservation programs (Ranjan et al., 2019; Carolan, Mayerfeld, & Bell, 2004). Ranjan et al. (2019) identified several barriers and suggested “improving communication between non-operating landowners and operators and modifying cash rent lease terms in order to build in flexibility for equitable sharing of risks and rewards.”

Additionally, farmers noted that conservation programs are important, but simply not a priority as they have other challenges to face and economic goals to achieve first. Two other potential barriers were limited trust with NRCS and the government in general, and limited knowledge of the available programs. Farmers often felt that they, their family, or other farmers have been ignored or taken advantage of by NRCS in the past. These observations, combined with the perception that the federal and state organizations are not interested in working with small farmers, may contribute to their frustration. Rarely was the historical racism of the USDA mentioned in these conversations, but it did come up for some producers as a factor contributing to their skepticism and limited engagement.

Methods and Recommended Steps

Capacity-building

Overall, these interviews highlighted the importance of capacity-building for historically underserved producers. Capacity-building is the process of developing and strengthening the skills, processes, and resources that individuals and organizations need to survive, adapt, and thrive. For farmers, capacity-building can include access to resources, knowledge, and support to ensure a sustainable and resilient farm.

A recommended step to increase capacity is the creation or support of a small and diverse farmer community program in the Delmarva. This would be a space where farmers can learn about conservation practices and programs from other farmers and organizations. Farmer connections are a great way to provide support and information access. These groups could also be a source of information about resources needed to run a successful farm business, including how and where to get a loan, market access, and business management skills.

Outreach

Our interviews and literature review showed that historically underserved producers are interested in conservation but don't participate because of their perceptions of these programs. Increased outreach from USDA institutions and other organizations is crucial for conservation adoption. For example, EQIP has funding (i.e. High Tunnel Initiative) that fits historically underserved farmers' needs, and it is important to do outreach to increase practice adoption and keep funding available in the state. Another barrier mentioned was leased land, therefore efforts should be made toward educating and connecting with landowners about conservation and modifying cash rent lease terms for a more equitable sharing of risks and rewards.

Most of the producers interviewed mentioned that their primary sources of information were University Extension and other farmers. We suggest focusing resources on these two sources of information, especially on farmer-to-farmer learning programs. Farmer-led groups and field days are a great way of sharing information on conservation programs through personal experiences. Farmers who have participated in conservation programs could be provided with training and extra cost share or a small stipend to act as mentors for other farmers, similar to Maryland FarmerLINK's Mentor Match Program. Additionally, Hispanic-serving institutions, 1890 Historically Black Colleges and Universities (HBCUs),

and community-based organizations who already have relationships with these producers can benefit from more funding to increase their outreach and technical assistance.

Outreach should preferably in-person, through each producer's preferred mode of communication, and in the language they are most comfortable with. If hosting field days or training, events should be scheduled for the most convenient time for farmers, which is often during the weekend or after work hours, especially if they have off-the-farm jobs. Organizations that are starting to create relationships with small and diverse farmers could use the outreach strategy of going to where their target communities are (ex. places of worship) and explore the possibility of creating community connectors. These community connectors are people from within the community who already are providing a non-conservation focused service and can help share information.

Technical Assistance

Federal and state agencies are becoming more aware of historically underserved farmers' barriers thanks to feedback from farmers and organizations and, with the new Farm Bill coming up, they are creating new or modifying existing conservation programs. For example, USDA announced in October that their 2501 Program is providing more than \$27 million in grants to help underserved farmers own and operate successful farms through increased training, outreach, and technical assistance resources. More locally, the Maryland Department of Agriculture (MDA) modified their cover crop program to offer Small Acreage Cover Crop Grants, while further developing other grants programs to help small and diverse farms. These changes will increase the need for technical assistance. Helping farmers enroll in one program can consequently provide them access to other conservation program funding available through USDA and MDA.

Applications are already difficult for well-resourced producers and organizations, and they are even more complex for historically underserved producers and organizations. As USDA entities are sometimes understaffed and don't have the resources to provide technical assistance to all farmers, we suggest partnering with third-party organizations, such as community-based organizations or non-profits, to help farmers navigate application processes.

Organizing an event where different state and federal, non-profit, and other organizations "speed date" with a farmer could be a great way of optimizing conservation practice adoption. This approach has been used by a few organizations in the Shenandoah Valley, who suggest inviting a small number of farmers to participate at a time. A map of their farms is printed out for each organization to draw on and explain what services they can provide. This helps the farmer see what can be done on their farm, instead of trying to find and understand all of the programs available by themselves. With having all of these technical providers in the same room, the organizations can also figure out how their programs can be combined and reduce the farmers out-of-pocket costs and/or increase environmental benefits.

Innovative Programs

We recommend creating innovative programs that help address historically underserved farmers' economic and environmental needs. Our interview findings emphasized how the economic and environmental challenges are not mutually exclusive and both have an impact on farm viability. Some examples of innovative programs include:

- Levy (2023) suggests developing entry-level applications that are designed to be easier and less time consuming for small and historically underserved producers and community-based organizations applying for USDA conservation programs.

- “Dual-purpose” programs, where an infrastructure or equipment need is met at the same time as a conservation practice implementation. For example, if a farmer installs a high tunnel as a soil and water conservation practice, funding for a refrigeration unit will be provided too.
- Organizations that apply for funding can create flexible conservation programs for farmers and landowners. These programs could have a low or no minimum acreage requirements, and maintenance support is provided, as are incentive payments.

Farm Bill Support

The upcoming Farm Bill contains several marker bills that can help better serve historically underserved producers and need advocacy support. The Justice for Black Farmers Act will enact policies to end discrimination within the USDA, protect remaining Black farmers from losing their land, and provide land grants to encourage a new generation of Black farmers. The Agriculture Resilience Act seeks to increase the set-aside funding for beginning and socially disadvantaged farmers in EQIP and CSP from 5% for each to 30% of funding combined. The Small Farm Conservation Act modifies EQIP to create a new subprogram dedicated to help small farmers and ranchers access and receive adequate technical assistance. These are just a few examples of myriad bills that are seeking better funding and resources for small and diverse producers. Several organizations (American Farmland Trust and National Sustainable Agriculture Coalition) have written thorough reports (Levy, 2023; NSAC, 2023) with suggestions for the next Farm Bill.

In the end, strengthening the capacity of small farmers empowers them to engage in policy discussions, advocate for their needs, and influence agricultural policies that affect their livelihood—something all conservation-minded organizations should be invested in.

Conclusions

These results, methods, and recommendations can be reproducible for other areas of Maryland, but it is always advisable to inform outreach plans with input from the target audience to best serve their needs. Small and historically underserved farmers have various barriers and challenges to conservation adoption, but this doesn’t mean they are not interested. We have to make sure their farm viability needs are taken into account in conservation programs offerings. Furthermore, supporting them in other aspects of farming, such as loans, market access, and business management, is essential to ensure their success. There must be equitable access to information, programs, and efforts toward improving soil health and water quality in a changing climate—especially as small and diverse farming operations are the ones that could be most impacted by climate change. For a list of additional resources for farmers and other stakeholders, please see Appendix C.

Funders

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Attachment A

Table. Demographics of producers in the counties of the Choptank River watershed in 2012

| County | All (including White) | Black or African American | | | American Indian or Alaska Native | | | Asian | | | Hispanic or Latinx | | |
|-----------------|-----------------------------|------------------------------|------------|----------|-------------------------------------|------------|-------|-----------|------------|-------|--------------------|------------|----------|
| | | Total | % | Acres | Total | % | Acres | Total | % | Acres | Total | % | Acres |
| Caroline | 989 | 4 | 0.4 | D | | - | | 3 | 0.3 | D | 3 | 0.3 | D |
| Dorchester | 610 | 16 | 2.6 | 3,825 | | - | | 12 | 2.0 | 64 | 1 | 0.2 | D |
| Queen Anne's | 837 | 6 | 0.7 | D | 1 | 0.1 | D | | 0.0 | | 11 | 1.3 | 3,733 |
| Talbot | 523 | 8 | 1.5 | 5412 | 2 | - | D | | 0.0 | | 3 | 0.6 | 63 |
| Kent, DE | 1,324 | 12 | 0.9 | 516 | 1 | - | D | 4 | 0.3 | 140 | 19 | 1.4 | 722 |
| Total | 4,283 | 46 | 1.1 | - | 4 | 0.1 | | 19 | 0.4 | | 37 | 0.9 | - |

Note: Includes data from the entire county, which comprises areas outside of the Choptank River watershed boundary; no record of Native Hawaiian or Pacific Islander; D = withheld to avoid disclosing data from individual or small number of operations. Adapted from U.S. Census of Agriculture, USDA National Agricultural Statistics Service, 2012.

Attachment B

Pre-Interview Questions

1. Please provide your first and name (this information will be kept completely confidential).

First Name: _____

Last Name: _____

2. What county or counties is your farm operation located with?

| | |
|--------------|---------------|
| Allegany | Harford |
| Anne Arundel | Howard |
| Baltimore | Kent |
| Calvert | Montgomery |
| Caroline | Prince George |
| Carroll | Queen Anne's |
| Cecil | Saint Mary's |
| Charles | Somerset |
| Dorchester | Talbot |
| Frederick | Washington |
| Garrett | Wicomico |
| | Worcester |

3. About how many types of crops did you grow in 2022?

4. Did you have any livestock on the farm in 2022?

No Yes - What type(s) of livestock _____

5. In 2022, how many acres of land did you own, rent, rent to others, and grow crops on?

Land owned (crop and non-crop): _____ acres

Land rented from others (crop and non-crop): _____ acres

Land rented to others (crop and non-crop): _____ acres

Total cropland: _____ acres

6. In what year were you born?

7. In what year did you become a primary decision-maker for this farm?

8. Did this farm previously belong to anyone in your family?

No
Yes

9. How would you describe your gender?

Male Non-binary
Female Prefer not to say

10. Are you of Hispanic, Latino, or Spanish origin?

No
Yes

11. What is your race? Please select all that apply.

White or Caucasian
Black or African-American
Native American or Alaska Native
Asian
Native Hawaiian or Pacific Islander
Some other race, please specify: _____

12. Which category below best describes your formal years of education? Check one.

Some school, but no high school diploma (or GED)
High school diploma (or GED)
Some college (includes Associate's degree)
Bachelor's degree or higher

13. How many days did you work off the farm in 2022? Indicate how many days in which you worked at least 4 hours in an off-farm job, and include work on someone else's farm for pay.

None 50-199 days
1-49 days 200 days or more

14. What was the gross value of farm products sold as part of your farm operation in 2022?

| | |
|-----------------------|--------------------------|
| Less than \$100,000 | \$350,000 - \$499,999 |
| \$100,000 - \$249,999 | \$500,000 - \$999,999 |
| \$250,000 - \$349,999 | Greater than \$1,000,000 |

15. May we contact you in the future to give you a summary of what we learned?

Yes! My email is.... _____
No thank you.

16. Would you be interested in hearing more about restoration or conservation programs that your land might be eligible for and which you could be paid to enroll in?

No thank you.

Yes! What is your preferred contact method?

Interview questions

General questions

1. As a farmer, what are the major problems or challenges you are facing right now?
 - a. What environmental challenges, if any, are you experiences in your fields? (e.g. flooding, erosion, soil health, etc)
 - b. How have you tried to address these challenges?
 - i. Probe—cover crops, no till, buffer strips?
2. When it comes to your farm management decisions, what sources of information do you typically use (Extension, private sector, NRCS, Conservation Districts, Other farmers)?
 - a. Which one do you trust the most?
 - b. When you experience the environmental challenge(s) you just mentioned, do any of those sources provide any recommendations for how to best deal with it?

Restoration

3. How familiar—if at all—are you with USDA's or State of Maryland's conservation or restoration programs (such as EQIP, CRP, WRE)?? Describe if unfamiliar
 - a. Standard script: These programs are typically funded by federal or state money and they generally pay landowners to restore portions of their land, such as by installing a wetland on marshy ground, grasses buffers between fields and waterways,, or they provide cost share for the adoption of conservation practices (e.g. EQIP).
 - b. Are you doing any of these or any other conservation practices without using external funding?
4. Have you ever been contacted about enrolling a portion of your land into a USDA or State Maryland funded restoration program?
5. Have you ever enrolled in one of these USDA or State of Maryland funded conservation or restoration programs? Why/why not?
 - a. If you rent/lease land, how has that impacted your decision or capacity to enroll, if at all?
6. If “No” to 4 and 5 - In the future, would you ever consider using a conservation or restoration program to adopt new practices or restore a portion of your land (such as installing a drainage, a wetland, grassed waterways, etc.)?
 - a. What would shape your decision? e.g., potential concerns giving up some crop land, payment levels, ownership status of the land
7. Do you have any concerns about working with federal government staff or programs?
8. Is there anything about restoration or conservation programs or your farm in general that we should have asked about, but didn't?
9. Finally, looking to the future, what do you want to learn more about or start to do on your farm?

Attachment C

List of Additional Resources for Farmers

- Future Harvest Chesapeake Alliance for Sustainable Agriculture – Beginner Farmer Training Program, Agricultural Leadership Development Initiative, Million Acre Challenge, and their Annual Conference
- University of Maryland Eastern Shore – Small Farms Program and Small Farm Annual Conference
- Maryland Agricultural and Resource-Based Industry Development Corporation (MARBIDCO) – offers assistance to qualifying farms and rural businesses in securing affordable capital and credit for equipment, commercial facilities, and real estate purchases.
- National Sustainable Agriculture Coalition – is an alliance of grassroots organizations that advocates for federal policy reform to advance the sustainability of agriculture, food systems, natural resources, and rural communities.
- University of Maryland Extension – Mid-Atlantic Women in Agriculture Program
- Maryland Department of Agriculture – Small Cover Crop Program and their Healthy Soils Competitive Fund.
- Southern Maryland Agricultural Development Commission – provides vision, support, grants, and marketing & promotion to farmers in five southern Maryland counties of Anne Arundel, Calvert, Charles, Prince George’s and St. Mary’s, but many of its initiatives reach statewide.
- Northeast Sustainable Agriculture Research and Education (SARE) –Farmer Grant Program