

Written Report for Project F.A.R.M. - Farmers Access to Resources Map

Ashley Valle
Jill Leszynski
Morea Daley
Quiton Hazen
Stella Zhou

School of Public Health, University of Washington
Nutrition 493: Food Systems Capstone
Dr. Sipos
June 8th, 2020

Introduction, Background and Context:

Farmers are a cornerstone of the United States food system. We rely heavily on farmers for food production, yet our agricultural system and farmers are facing increasing difficult challenges and obstacles. According to PCC's Farmland Trust, around 70% of farmers will retire without a successor in place. This presents a huge problem in the resilience of our food system at both a national and local level (PCC. 2020). Through the project we created, we hope to help mitigate the challenges and obstacles that farmers face when establishing themselves in the industry.

Farming in the United States is not an easy profession. Making a living as a farmer can be very challenging, and land, equipment, labor, training, and healthcare can be very expensive. Additionally, enterprising farmers face an uphill battle when trying to establish themselves as producers in the industry. Some of the largest barriers they face are "prohibitive land prices, student loan debt, lack of skilled farm labor, and limited health care options," (National Young Farmers Coalition. 2019). Inability to access farmland is one of the leading barriers which entrepreneurial farmers face. Land affordability is an extremely challenging factor for prospective farmers in Washington State, as large levels of population migration into the Pacific Northwest region are driving up land prices. Additionally, large amounts of local farmland are being lost to development.

For our project, we partnered with PCC Farmland Trust (PCCFT). Their mission is to protect and steward threatened farmland across Washington State. They keep land in production by making it accessible to future generations of farmers (PCC. 2020). Since it was founded in 1999, PCC's Farmland Trust has helped conserve 2,548 acres of farmland for the next generation

of farmers. In addition to PCC Farmland Trust, there are a number of different organizations and agencies across Washington State which are providing necessary assistance to both established and up-and-coming farmers. In 2021, PCCFT plans to launch their Farm to Farmer Network. This network aims to connect entrepreneurial farmers “and landholders with the tools and resources they need to keep farmland in production, protect natural resources, and reconnect local communities across the state of Washington,” (PCC Project Sheet).

Our project mission was to create a map of organizations and resources that are currently available to entrepreneurial farmers in Washington State. We accomplished this task through multiple steps. First, we developed and distributed a survey to around 60 organizations who work within the agricultural industry either directly with farmer clients or working to preserve farmland. We created a spreadsheet using the responses from our survey, and then linked the spreadsheet to mapping software in order to generate the map. Our hope was that PCCFT could use this map when launching their Farm to Farmer Network next year. Through understanding which organizations already exist, where they primarily operate, and what resources they provide for farmers, PCCFT could make more informed decisions regarding where to allocate their resources based on need. We also hoped that the participating organizations could use the map to gain an understanding of where they might be able to partner with each other in order to better serve their clients. Broadly, we hoped that this project would help to improve the resiliency of Washington State and Pacific Northwest food systems by decreasing barriers that entrepreneurial farmers face when trying to establish themselves in the agricultural industry.

Methods

There were several steps we took to get to our final (but still ongoing) map. In order to prepare for creating our map, we educated ourselves on the Farm to Farmer Network of 2021 that PCC Farmland Trust is planning to launch. Our first step was getting in touch with our community partner, Megan Jenny, the Director of Community Partnerships at PCCFT. With her help, we identified about 60 different organizations that had potential resources to offer farmers. We decided on email as the most efficient way to reach out to those organizations, so we divided up the list of organizations amongst the 5 of us and searched for their contact information on the internet. Our group researched survey design and development through the internet, and we worked with our community partner to develop the proper questions for our survey. We created two different test surveys to determine how exactly the surveys interacted with the software. Our survey was created on Google Forms, which automatically generated a Google Sheet page of responses (see Figure 1). This page was, and will continue to be, automatically updated as responses come in, so we do not have to manually update it every time there is a new response to the survey. In order to minimize work and inconsistencies, we drafted a mass email to send out to the list of organizations, including a description of who we are, what our project encompasses, and how the organization can play their part. Attached in the email was a link to the final survey we created, where the organization would enter their name, their location, and the type of services they can offer to farmers. To keep this project professional and longstanding, we created a new email specifically for this project which can be passed on to our community partner, Megan, after this project ends. This way, she can remain the direct source of contact for the organizations after we graduate. This project is ongoing, and therefore will continue to receive

responses from organizations on the survey, which will update the map. That is why we found it important to make an email separate from any of our personal emails, so that the productivity of this project was not halted when we stepped down from running it. Therefore, we sent the email out with the survey attached from uw.pcc.projectfarm@gmail.com to all the organizations.

Label	Where is your organization active? Select all counties that apply	What type of services do you provide for your farmer clients? Select all the apply
Blue Mountain Land Trust	Asotin County Columbia County Garfield County Walla Walla County	Farmland conservation Educational curriculum Workshops on production (ex. Poultry processing or cover crops) Advocacy Natural resource conservation
SnoValley Tilth	King County Snohomish County	Land Access/Land transfer Educational curriculum Workshops on production (ex. Poultry processing or cover crops) Advocacy Other
Enterprise for Equity LINC Foods	Clallam County Grays Harbor County Jefferson County Lewis County Mason County Pacific County Pierce County Thurston County Wahkiakum County Spokane County	Lending Business planning Aggregation/distribution of product
North Olympic Land Trust	Clallam County	Grant program Land Access/Land transfer Farmland conservation Advocacy Natural resource conservation COVID-19 response
Whatcom Land Trust	Whatcom County	Farmland conservation
Snohomish Conservation District	Snohomish County	Grant program Business planning Production training Land Access/Land transfer Succession planning/estate planning Farmland conservation Educational curriculum Workshops on production (ex. Poultry processing or cover crops) Natural resource conservation
San Juan Islands agricultural Guild	San Juan County	Grant program Aggregation/distribution of product Marketing Land Access/Land transfer Succession planning/estate planning Other
Lewis Conservation District	Lewis County	Equipment acquisition/maintenance Farmland conservation Educational curriculum Workshops on production (ex. Poultry processing or cover crops) Natural resource conservation
Growing Veterans	Whatcom County	Advocacy Other
Vashon-Maury Island Land Trust	King County	Aggregation/distribution of product Farmland conservation Natural resource conservation
Capitol Land Trust	Grays Harbor County Lewis County Mason County Thurston County	Farmland conservation
Jefferson Land Trust	Jefferson County	Farmland conservation Natural resource conservation

Figure 1: The Google Sheets spreadsheet of survey responses and data which was then linked up to Kumu mapping software

Once we started receiving responses, we shared our google sheet page with Kumu, the mapping software. Kumu worked similarly to the google sheet in that it stayed automatically updated with every new response. As we received responses, we created and formatted our map. Ultimately, we decided on showcasing each organization and the resources they provide, while not including the location on the visual map. The location information was still available on the map if an organization's "bubble" was selected, but we decided that having the location on the visual map would create too much clutter and make the map difficult to read. This process was not without issues, as we had much learning to do about each step before diving in.

The first major issue we ran into was our survey design. At first, none of us really understood how important the format of the survey was, but we were all able to learn a little survey design through internet research and form our three-question survey. The final survey seems simple, but took a lot of time and learning. Another roadblock we faced was in learning how to use the Google software, specifically how to use Google Forms for our survey and how it interacted with Google Sheets. Once we figured this out and our survey was ready, we ran into issues finding contact information for every organization, as occasionally there was no info to be found. Luckily, we were able to get help from our community partner Megan in getting some of the missing information, but ultimately, we did have to skip a couple organizations in order to move forward. In the waiting time for responses, we faced an additional challenge in learning how Kumu worked. We spent several days experimenting with our test surveys and Kumu to develop a plan and prevent further issues when trying to generate our finalized map. We read support articles and watched tutorial videos provided by the Kumu team, and we asked the Kumu support team questions when they arose. All of these issues presented unique challenges but we were able to overcome each with time and learning in each individual step.

Outcomes

There were multiple outcomes which resulted from our project. Our first outcome was the survey which we created. The 3 questions included in the survey provided, and will continue to provide, PCCFT with the name each organization who responds, the counties in which they operate, and what farming related services they can provide for farmers. Some of the resources these organizations offer are related to training, marketing, land access and other aspects of farming that will potentially help future farmers or farmers in need. All of the members of our

team sent out the survey we created to the organization contacts we found, resulting in our second outcome: the initial data we needed for the final project outcome. We hope that PCCFT can use this data in their future projects, including the Farm to Farmer Network. Our final outcome helps PCCFT by mapping out for them what resources are already available to farmers in certain regions, what areas need resources the most, and showing where they can reach out to organizations for partnerships. As seen in Figure 2, this map is a visual representation of the data we collected from our survey, and it is able to show connections between organizations and services.

After getting responses from about a third of the organizations, we started to make a map on Kumu, which is our main deliverable to our community partner. In this map, you are able to move around clusters to better map out what information you want to study or, as seen in Figure 3, focus on specific organizations or regions. Overall, our map is going to help PCCFT gain a better understanding of where resources are needed or where they are overly available. This will help them in launching their 2021 Farm to Farmer Network, as they can use this information to possibly collaborate with other organizations or decide where to allocate their resources based on need.

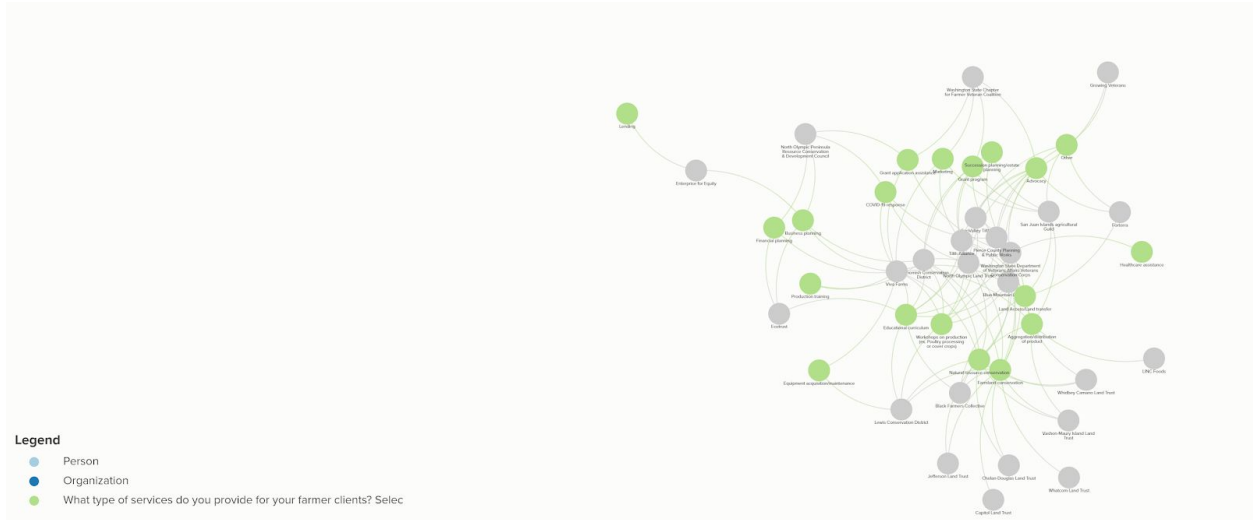


Figure 2: Our final map - updated as of 6/1

Ecotrust

TIMESTAMP 5/19/2020 12:31:03

WHAT TYPE OF SERVICES DO YOU PROVIDE FOR YOUR FARMER CLIENTS? SELECT ALL THAT APPLY
 Financial planning
 Business planning
 Educational curriculum

WHERE IS YOUR ORGANIZATION ACTIVE? SELECT ALL COUNTIES THAT APPLY
 Island County
 King County
 Pierce County
 Skagit County
 Snohomish County
 Whatcom County

#washington-state-farmer-resources-map/ecotrust

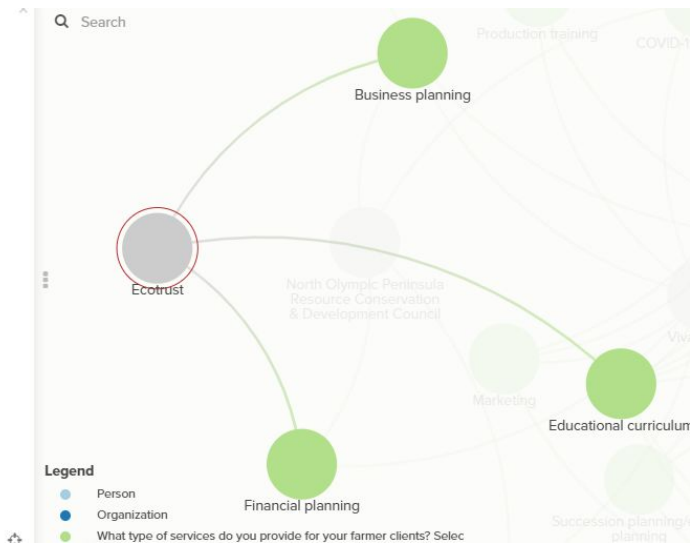


Figure 3: An example of selecting a specific organization on the map. Counties where the organization is active are on the left, along with resources provided. Resources provided are also represented in the visual map towards the right.

Sustainability and Resilience

When interacting with the Kumu resource map, we can easily see that nine organizations are working on natural resource conservation and thirteen organizations are working on farmland conservation. These organizational efforts directly contribute to the environmental and

ecological sustainability of Washington State. These organizations can expand on existing projects and develop their environmental consciousness into applicable plans.

Our resource map helps the organizations involved better understand how to utilize ecological goods and services more efficiently by potentially partnering with each other. Using the location data indicated by the map, organizations with a baseline understanding of the systemic disinvestment that has occurred in certain vulnerable communities or regions of Washington State can use the map to better serve these areas. This project contributes to the sustainability and resilience of PCCFT and the broader food systems in various ways.

First, after gaining more knowledge on which counties each organization focuses on, PCCFT can have a better understanding of how to allocate resources and understand regional differences, which is helpful to improving local food security in the Pacific Northwest. For example, from the resource map, we can see that production training resources are only provided by two organizations: Viva Farms and Snohomish Conservation District. These two organizations are centered in Skagit County, King County, and Snohomish County, which only covers the Northwest part of Washington State. Ideally, production training resources should be more dispersed to educate the next generation of farmers across the state of Washington. If they wish, the other organizations can learn from or cooperate with these two organizations to provide production training services in wider geographical areas.

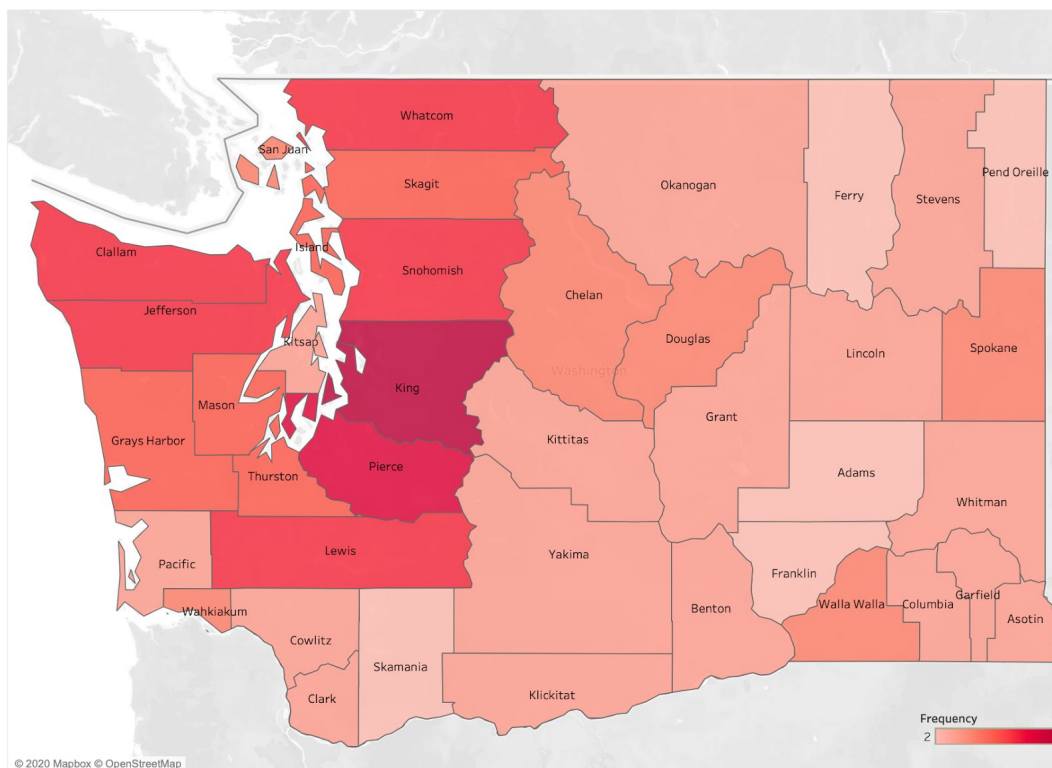


Figure 4: Heatmap of food system organizations

From the survey responses we received, we generated a heat map showing the counties that have been focused on by different food system organizations. In Figure 4, we can see that organizations focus on mostly Northwestern areas near the coast, and King County is the most popular among all the counties in WA. To have a more equitable and balanced food system, more organizational power should be directed toward light-colored counties such as Skamania and Adams to reduce food deserts and support vulnerable communities.

Second, after understanding the type of services that these organizations provide to the farming community, we learned about what kind of services are lacking and what to improve in the future. For example, we can see through interacting with the resource map that healthcare assistance resources are provided only by one organization: Washington State Department of Veterans Affairs – Veterans conservation corps. However, healthcare assistance is closely related

to workers' rights and public health issues. Therefore, it requires more attention from both the private and public sectors to address this issue immediately. More healthcare assistance resources should be provided to food system workers, especially in the context of COVID-19.

Third, we built this platform for organizations to better understand each other's strengths and weaknesses, so that they can learn from each other and communicate more efficiently. The web of various organizations adds on to the complexity of our food system and thus makes it more sustainable and resilient overall.

However, we are not able to address the majority of issues that exist in our local and statewide food system. For example, we are not able to address environmental issues directly, workers' rights, gender, and racial inequality issues, etc. Also, food equity among different populations in a particular region remains unknown. Nevertheless, this resource map will help the organizations involved to build a better food system and would act as a stepping stone to address all these issues in the future.

Conclusion:

Our map was created through successful collaboration with many organizations, including PCC Farmland Trust. We are incredibly grateful for their help in creating this map and completing this project. We hope that this map will be a helpful aid to them when they launch their Farm to Farmer Network next year. Through the work of PCC Farmland Trust's Farm to Farmer Network, we hope that the barriers farmers face when establishing their businesses will be improved along with the resiliency of the Washington State Food System. Ultimately, we hope that our work will help to improve our food system and agricultural community for many future generations.

Sources:

1. National Young Farmers Coalition. (2019, April 14). Average age of farmers continues to rise. Retrieved April 2020, from <https://www.morningagclips.com/average-age-of-farmers-continues-to-rise/>
2. PCC. (2020). Our Farms, Our Future. Retrieved 2020, from <https://www.pccfarmlandtrust.org/ourfarmsourfuture/>
3. PCC. (2020). Partnerships. Retrieved 2020, from <https://www.pccfarmlandtrust.org/our-work/partnerships/>