



# KITTITAS COUNTY FOOD SYSTEMS RESILIENCE

## Impact from smoke and fire

This snapshot is formatted to give an in-depth analysis of findings related to impacts of smoke and fire over the last decade on the Kittitas County, Washington, food system. The study included three focus groups (18 participants total) and nine individual interviews with IRB<sup>1</sup> approval and informed consent across Kittitas County. Participants included community advocates, city and county government, farmers and food businesses, non-profits, schools, and state organizations. The Kittitas County Chamber of Commerce supported the project through outreach for participation in interviews and focus groups.

Overall, community members shared a strong desire for increasing consumer education, awareness, and networking opportunities with locally produced foods as well as expanding market development through the exploration of a year-round market, food enterprise and skill building center. These opportunities are seen as connected strategies for improving Kittitas County's food system's resilience. Additionally, community members identified the need for coordination of communication through establishing points of contact, resource directories, and phone trees.

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*Special thanks to all the farmers, businesses, organizations, staff, and individuals that met and shared their stories with us throughout the past year. Thank you for your work and dedication to resilient food systems. We are humbled and grateful for your time.*

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<sup>1</sup> Institutional Review Boards and Protection of Human Subjects- study Exempt



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# IOWA STATE UNIVERSITY

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# KITTITAS COUNTY SUGGESTED PRIORITIES

Based on the snapshot, interviews and focus groups, below are priority projects suggested for Kittitas County, Washington, food system. These are broad categories that relate to the ability to prepare and sustain during disaster and build back stronger. The report shares findings on the community and farm and food system from the research conducted in January 2025 as well as updated priorities based on the action planning sessions in February 2025. For notes and voting information from the action planning sessions, please see [Appendix D](#).

During the action planning session, the two categories that received the most votes for prioritization were (1) consumer education, awareness, and networking and (2) market development (year-round market, food enterprise center, and skill building). The priority that will be acted on through funding from the Agricultural Marketing Resource Center will include hosting up to 3 farm and food awareness events and exploring the feasibility and assets for establishing a skill building center. Potential events include taste testing with locally grown and produced foods at the farmers markets, presentation and discussion of future needs for Kittitas County, and other events that encourage networking between farmers and buyers. Exploring the feasibility for a skill building center includes identifying skill center requirements in Washington, asset mapping of existing buildings, equipment, and programming for technical and business education. A report from the Kittitas County Chamber of Commerce on the priority project can be found in [Appendix A](#).

## Suggested Priorities

### 1. Communications

- 1.1. Call tree and Directories
  - 1.1.1. Options to get notices (i.e. electric companies, etc.)
  - 1.1.2. Flow chart for who to contact
  - 1.1.3. Develop based on type of disaster and stage in disaster
    - 1.1.3.1. Preparedness, response, recovery, mitigation
    - 1.1.3.2. Fire/ smoke/ water
- 1.2. Build relationships prior to disaster
  - 1.2.1. Associations Outreach
    - 1.2.1.1. Discuss what could be done for preparedness (fruit association/ cattlemans/ sheep/ farmers market/ farm bureau/ county/ sheriff)
    - 1.2.1.2. Networking meetings
    - 1.2.1.3. ID what is currently occurring through listservs
  - 1.2.2. Partnership with Emergency Managers
    - 1.2.2.1. Improve understanding of food and agriculture
      - 1.2.2.1.1. i.e. When to cut fences; Allowability of farmers to get to farm
  - 1.2.3. Build protocols/ awareness of needs through different organizations
- 1.3. ID and designate clear point of contact for needs/ resources
  - 1.3.1. Clear understanding of who to contact for what
  - 1.3.2. Ways to participate EM updates

### 2. Community Protocols

- 2.1. Hosting table-top scenarios and emergency workshops

- 2.1.1. Livestock handling
- 2.1.2. Biosecurity
- 2.1.3. Community / schools/ etc.
- 2.2. Create preparedness, response, and recovery protocols community wide
  - 2.2.1. Awareness on how disaster initiation - disaster declaration occurs
  - 2.2.2. Share broadly city plans/ county plans
  - 2.2.3. Develop county on emergency management center
  - 2.2.4. Create watershed plan in partnership with Yakima
  - 2.2.5. Develop COAD within Emergency Management Center for the county
    - 2.2.5.1. Develop volunteer plans- support for businesses and farms
- 2.3. Create list and recommendations for bug out kits
- 2.4. Political discussions on policy needs related to stewardship of land

### **3. Research**

- 3.1. Comparison of historical and current practices and impact on community (financial/ disasters/ policies/ etc.)
  - 3.1.1. Water
  - 3.1.2. Power/ electric
  - 3.1.3. Lumber/ forestry/ timber
  - 3.1.4. Land use
    - 3.1.4.1. Irrigation comparison for solar vs. hay vs. other farm practices
    - 3.1.4.2. Development vs. agriculture vs. forestry
- 3.2. Identify best practices for land use and planning
  - 3.2.1. Recreation/ diversification of farming and development
- 3.3. Research on alternative markets/ waste management for products impacted by smoke

### **4. Business**

- 4.1. Best practices for businesses/ farms by disaster type
  - 4.1.1. "How -to" sign up for contract with FEMA for disaster relief
  - 4.1.2. Toolkits and Flow Chart
    - 4.1.2.1. Prepping land/ livestock/ market/ business
    - 4.1.2.2. Fire prevention and suppression
    - 4.1.2.3. Smoke safety
    - 4.1.2.4. How to use generator
    - 4.1.2.5. Post disaster clean up
    - 4.1.2.6. How to navigate insurance
  - 4.1.3. Templates for farm and food business disaster plans
- 4.2. Local Food Coordinator/ Value Chain coordinator
  - 4.2.1. Help connect and build markets
  - 4.2.2. Develop directory and marketing campaigns for local/ regional food system
  - 4.2.3. AgVocacy -everything you do - agriculture is involved
  - 4.2.4. Host farmer peer-to-peer networks and learning
- 4.3. Consumer Education and Network
  - 4.3.1. Host regular events for consumer/ farmer meet-ups--> farmers markets/ other events

- 4.3.2. Directory/ Find a Farmer/ market
- 4.4. Market Development
  - 4.4.1. Value-added options for farmers and businesses
    - 4.4.1.1. i.e. hunting/ trails/ agritourism
  - 4.4.2. Year-round farmers market
  - 4.4.3. Food Enterprise Center
    - 4.4.3.1. Commercial kitchen
    - 4.4.3.2. Processing
    - 4.4.3.3. Education
  - 4.4.4. Skill Building
    - 4.4.4.1. Succession Planning
    - 4.4.4.2. Marketing
    - 4.4.4.3. Apprenticeship

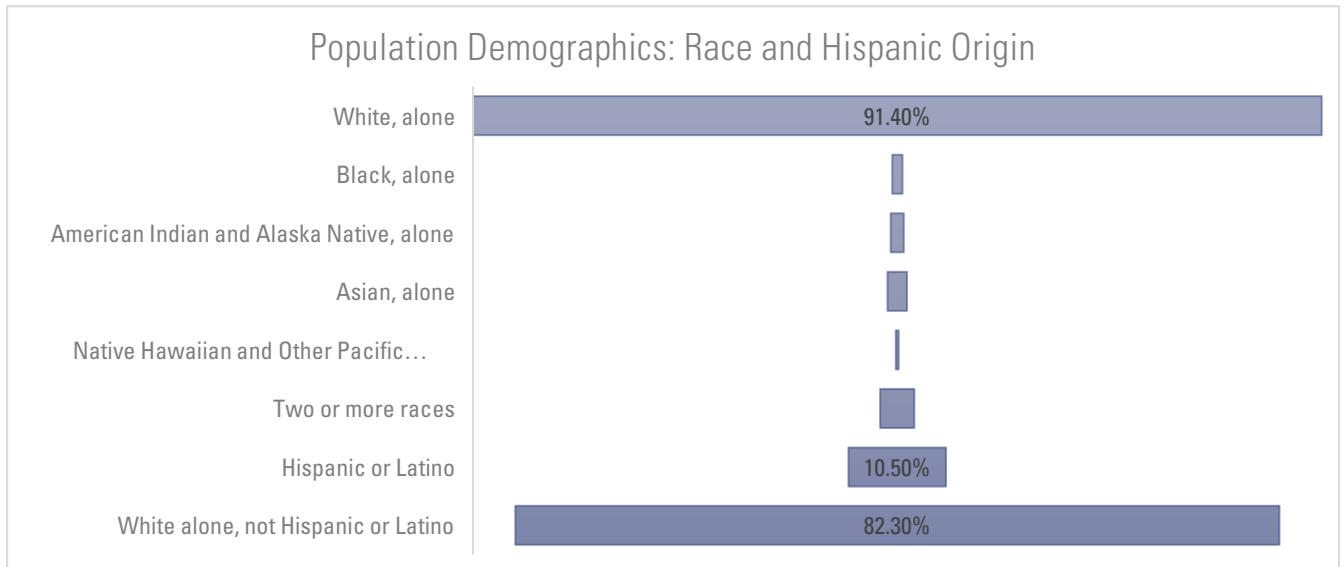
# COMMUNITY OVERVIEW

This section reviews values and ways that community members participate and connect in community. Within interviews and focus groups, open-ended questions were asked about their community, like “how would you describe your community to someone else,” “what are the best parts about your community,” and “what are the worst aspects of your community?” Responses are reflected in the following pages.

Kittitas County is centrally located in Washington State, adjacent to Chelan, Douglas, Grant, Yakima, and Pierce Counties. The county consists of 2,315 square miles, or about 1.4 million acres. Kittitas County has 4 municipalities: Ellensburg (the largest and county seat), Cle Elum, Roslyn, and Kittitas.

In 2020, Kittitas County had a population of 44,337 (U.S. Census Bureau, 2023). The population grew by 2.7% to an estimated 45,508 in 2023 (U.S. Census Bureau).

- Ellensburg: estimated population 18,666 (U.S. Census Bureau, 2023)
- Cle Elum: estimated population 2,157 (U.S. Census Bureau, 2023)
- Roslyn: estimated population 950 (U.S. Census Bureau, 2023)
- Kittitas: estimated population 1,438 (U.S. Census Bureau, 2023)



**Figure 1: Population demographics by race and Hispanic origin (United States Census Bureau, 2023)**

It is estimated that Kittitas County experiences a poverty rate of 14.3% compared to the state average of 10.3% (U.S. Census Bureau, 2023). More information regarding poverty data can be found in [Appendix B](#).

## Livability

Personal health status is shown to be impacted by where one lives, works, and plays. According to the AARP Livability Index, [Kittitas County, Washington](#), has an overall ranking of 52 (out of 100) for livability. This ranking is developed based on housing, neighborhood, transportation, environment, health, engagement, and opportunity.

## Kittitas County Livability Index Overall Ranking: 52

Housing: 51	Housing is measured by metrics and policies that promote affordability, availability, and accessibility.
Neighborhood: 36	Neighborhood is measured by metrics and policies focused on proximity to key destinations, safety, and supporting mixed-use development.
Transportation: 51	Transportation is measured by metrics and policies related to convenience, safety, and options.
Environment: 61	Environment is measured by metrics and policies related to air and water quality, as well as energy efficiency, and hazard mitigation plans.
Health: 61	Health is measured by metrics and policies that promote healthy behaviors including smoking cessation, and exercise opportunities.
Engagement: 64	Engagement is measured by metrics and policies that include voting rights, human rights, and cultural engagement.
Opportunity: 38	Opportunity is measured by metrics and policies that capture job availability, government creditworthiness, and graduation rates.

**Figure 2: Livability Index Rankings; all definitions from AARP (AARP, 2024)**

One of the lower rankings fell within neighborhood with concern for access to amenities like grocery stores, farmers markets, and libraries as well as lack of diversity of jobs and services. Opportunity was another lower ranking with a score of 38. Indicators include income inequity getting worse as well as decreasing age diversity. However, both jobs per worker and high school graduation rates have been increasing in the county with about 0.60 jobs per worker and 87.6% of students graduating.

Kittitas County ranks fairly high for environment, health, and engagement, with state and local policies related to energy, utilities, health, and voter participation. Housing concerns include the decreasing availability of multi-family housing and increasing cost of housing leading to about 17% of income spent on housing (AARP, 2024).

### Focus Groups and Interview Findings

Echoed throughout the interviews and focus groups, participants shared a deep sense of pride in the Kittitas County community. Located centrally in Washington, Kittitas County is a strategic location for business and leisure opportunities. With access to Interstate 90, residents have proximity to services in Seattle and Western Washington as well as access to farmland and outdoor recreation opportunities in the Cascade Mountains, upper Yakima River Valley, and the Columbia River. A participant said, “[Kittitas County is in a] sweet location – there is desert, mountains, ocean nearby. Tons of hunting, fishing, hiking.” In addition to space for recreational

activities, the Rodeo community, local art, and community events were named as assets of the community.

Kittitas County is seeing an increase in residents moving to the area from Western Washington, which has locals both excited and worried. With the new residents coming in, there are new market opportunities for business development and economic growth.

However, participants shared concerns about losing the small-town character of the community, balancing development and preservation of farmland, and increased strain on limited public resources. Referencing urban sprawl and cost of land, one participant said, “As a farmer, people moving from Seattle is challenging. Land value is so high that it doesn’t pay to farm anymore.” Another participant said, “[I] don’t want to see this community turn into a bedroom community for Seattle and lose its character.” In addition to challenges with urban development, some producers shared disagreement with converting farmland to long-term specialty crops, such as fruit trees.

The value of agricultural education was shared and supported as participants shared about agricultural programs available at the Thorpe School District and Central Washington University. One participant shared that “[Kittitas County] is a strong agricultural community, and [I’m seeing] more youth interested in agriculture now than there was 10-15 years ago.” However, when discussing labor challenges, multiple farm and food businesses shared about the difficulty in finding and retaining a skilled workforce.

As described from focus groups and interviews, the Kittitas County community has strong values of self-sufficiency and independence that trace back to homesteaders settling along the Oregon Trail. Community members often mentioned the large role that social capital played within Kittitas County. Personal connections between community members have often driven forward partnerships and community efforts in building a resilient food system. One participant remarked, “Everyone knows everyone,” and another shared that the best thing about Kittitas is that “it’s still a small community – if something happens, people generally help [in times of] catastrophe.”

However, building trust and relationships can be difficult, especially for newcomers without personal connections to the community. A participant said, “Kittitas is clique-ish. Outsiders are definitely outsiders.” While talking about the importance of working with other farmers, one producer commented on the distrust of outsiders saying, “There’s a big sense of if you can make friends in farming...it’s more of a grassroots [effort] breaking into that community. They don’t trust you because you didn’t grow up here, so we [always explain that] we did grow up here but moved away for work and came back.”

Despite “everybody living in harmony most days,” as one participant shared, multiple participants shared about feeling a sense of divisiveness between community members based on differing values and beliefs. Multiple participants shared that a lot of the conflicts and divisiveness is seen on social media. Another community member said, “I really only see it online. In town, people get along and do their thing. There’s some kerfuffle in city council meetings over LGBTQ issues. Most times, people are bringing valid points to the table, it’s just hard to see balance.”

Although there were some political differences between focus group participants, many participants shared about feelings of mistrust and disconnection with statewide elected officials and policymakers. Commenting on the general community’s feelings toward the government, one farmer said, “Convincing people it’s a good thing, that the government can help, is hard here. [The community] is very private and people don’t want to tell you anything...People quit school because they didn’t want to wear masks, homeschooled or switched districts, because they didn’t want the government telling them what to do.”

There was a mixed response on the recently announced federal funding freeze. Some participants felt like this was a positive step forward toward decreasing reliance on the government. However, others shared concerns about federally funded programs and resources potentially losing funding and stalling future plans. One participant shared, “I put in for a USDA grant but it wasn’t signed by the 22nd. I worked on that grant for two years and just got approved...but all grants got frozen.”

Another area of concern was federal policies for tariffs and global trade agreements, especially among producers that grow hay for export. One participant said, “you can’t be a big exporter if you’re not a big importer. We need to import a lot of things to competitively export products because of the back-hauls.” Overall, participants agreed that there is a need for improved communication between the farming and agricultural industry and policymakers.

## BUSINESS AND INDUSTRY

While the first section of the report took a broad look at community engagement and values, the next portion focuses on the business and industry, specifically related to food and agricultural systems.

According to the Small Business Administration, there is a size standard that is used to understand the size of a business, therefore, leading to the definition of “small” changing by industry and business type (U.S. Small Business Administration, 2023). Standards are based on average annual receipts and the number of employees (ranging from 100 to over 1,500 employees) (U.S. Census Bureau, 2021). [Appendix C](#) provides a more comprehensive breakdown of employment size and payroll for businesses by industry category in Kittitas County. Table 1 displays employee numbers for businesses in Kittitas County.

Within Kittitas County, it is estimated that there are 1,500 businesses, with an annual payroll of \$630,081,000 (U.S. Census Bureau, 2023).

**Table 1: Kittitas County, number of establishments by employment size (U.S. Census Bureau, 2023).**

	<b>Number of establishments</b>
<b>Less than 5 employees</b>	883
<b>5-9 employees</b>	297
<b>10-19 employees</b>	192
<b>20-49 employees</b>	93
<b>50-59 employees</b>	25

<b>100-249 employees</b>	6
<b>Total</b>	<b>1,500</b>

## Forestry, Timberland, and Forest Products

With almost 17.7 million acres of non-reserved timberland and more than 2.9 billion board feet Scribner of timber harvested in 2020, forestry and forest products are a key industry with significant economic impact in Washington (Scott, et al., 2025). Washington’s forest and forest products sector contributed more than \$8.4 billion to the total U.S. gross domestic product (GDP) (National Alliance of Forest Owners, 2025). Foundational to the state timber industry, almost 102,000 workers earned \$8.64 billion in total payroll (direct, indirect, and induced) in the forest and forest products sector in 2025 (National Alliance of Forest Owners, 2025).

Tables 2 and 3 show Washington timberland ownership classification by acres and percentage and timber harvest by ownership classification. Publicly owned lands accounted for 791,00 thousand board feet Scribner, or about 26%, of Washington timber harvest in 2020. National forests, primarily managed through the USDA Forest Service, make up 33% of the total timberland in Washington, and contributed 155,057 thousand board feet Scribner, or 5% of total timber harvested in 2020. Almost 75% of timber harvest came from private and American Indian tribal owned lands, which account for about 51% of timberland ownership.

**Table 2. Washington timberland by ownership class, 2018 (Scott, et al., 2025)**

<b>Ownership</b>	<b>Acres</b>	<b>Percentage of state timberland</b>
<b>Private</b>	9,057,000	51%
<b>Federal</b>	5,702,000	32%
<b>State</b>	2,394,000	14%
<b>Other public</b>	519,000	3%
<b>Total</b>	17,672,000	100%

**Table 3: Washington timber harvest by ownership, 2020 (Scott, et al., 2025).**

<b>Ownership</b>	<b>Thousand board feet Scribner harvested</b>
Private and tribal timberland	2,166,177
<b>Public</b>	<b>791,292</b>
<b>National forest</b>	155,057
<b>State lands</b>	605,403
<b>Other public</b>	30,832
Total	<b>2,957,470</b>

Washington’s forest products industry is comprised of a broad range of forest production facilities and geographies with industry activity more concentrated west of the Cascades and along the Puget Sound (Scott, et al., 2025). Although the Central region is the least productive

timber region in the state, Kittitas County reported 17,539 thousand board feet Scribner of timber harvested in 2020, primarily sourced from state, private, and tribal owned lands (Table 4) (Scott, et al., 2025). Kittitas County has two forest products facilities: one sawmill and one other primary processor (Scott, et al., 2025). 245 workers in the county’s forest products industry earned over \$13 million in total wages (Mason, Bruce & Girard, Inc, 2021). With almost \$100 million in annual revenue in 2021, the county’s forest products industry contributed over \$700,000 in combined total taxes (Mason, Bruce & Girard, Inc, 2021).

**Table 4: Kittitas County, WA, timber harvest by ownership, 2020 (Scott, et al., 2025).**

	<b>Kittitas County</b>
<b>Ownership</b>	<b>Thousand board feet Scribner harvested</b>
<b>Private and tribal</b>	5,797
<b>National forest</b>	3,208
<b>State</b>	6,534
<b>Other public</b>	2,000
<b>Total</b>	<b>17,539</b>

## Agriculture

According to the USDA, a farm is defined as “any place from which \$1,000 or more of agricultural products were produced and sold, or normally would have been sold during the census year” (USDA NASS, 2022, pp. Introduction, VIII). The definitions of terms used in Tables 5-7 can be found in the 2017 Census of Agriculture, [Appendix C](#) (USDA NASS, 2022).

As of 2022, there are 738 farms in Kittitas County, which is 27% less than the total farms in 2017 (USDA NASS). Those farms include 165,205 acres of land, down 4% from 2017. (USDA NASS, 2022). 68 farms participated in variable federal government programs, with receipts of \$1,114,000 (USDA NASS, 2022).

The median size of a farm in Kittitas County is 20 acres (USDA NASS, 2022). Tables 5-7 detail information on the number of farms by product type, farm value, and number of acres. According to the USDA NASS statistics, 526 farms are making less than \$24,999 per year, which is close to 71% of the total farms in Kittitas County, and 510 farms are less than 50 acres (USDA NASS, 2022; USDA NASS, 2022).

Table 5: Total number of farms and total sales by agricultural products sold (USDA NASS, 2022)

	Kittitas County	
	Total # of Farms	Total Sales
<b>Crops, including nursery and greenhouse crops</b>	<b>348</b>	<b>\$62,280,000</b>
<b>Grain, oilseeds, dry beans, and dry peas</b>	16	\$1,150,000
<b>Corn</b>	-	-
<b>Wheat</b>	9	\$739,000
<b>Other grains, oilseeds, dry beans, and dry peas</b>	9	\$410,000
<b>Vegetables, melons, potatoes, and sweet potatoes</b>	29	\$4,276,000
<b>Fruits, tree nuts, and berries</b>	39	(D)
<b>Fruits and tree nuts</b>	33	(D)
<b>Berries</b>	13	\$35,000
<b>Nursery, greenhouse, floriculture and sod</b>	19	(D)
<b>Cultivated Christmas trees</b>	8	\$20,000
<b>Other crops and hay</b>	277	\$36,672,000
<b>Livestock, poultry and their products</b>	<b>302</b>	<b>\$13,288,000</b>
<b>Poultry and eggs</b>	56	\$150,000
<b>Cattle and calves</b>	205	\$10,968,000
<b>Milk from cows</b>	2	(D)
<b>Hogs and pigs</b>	17	\$38,000
<b>Sheep, goats, wool, mohair, and milk</b>	42	\$260,000
<b>Horses, ponies, mules, burros, and donkeys</b>	45	\$700,000
<b>Aquaculture</b>	1	(D)
<b>Other animals and other animal products</b>	27	\$337,000
<b>Direct to Consumer Markets</b>	47	\$1,456,000
<b>Direct to Retail Markets</b>	24	\$938,000
<b>Processed and Value-Added products</b>	24	\$772,000

**Table 6: Farms by value of sales**  
(USDA NASS, 2022)

	<b>Kittitas County</b>
<b>Value</b>	<b># of Farms</b>
<b>Less than \$1,000</b>	247
<b>\$1,000 - \$2,499</b>	68
<b>\$2,500 - \$4,999</b>	62
<b>\$5,000 - \$9,999</b>	51
<b>\$10,000 - \$19,999</b>	82
<b>\$20,000 - \$24,999</b>	16
<b>\$25,000 - \$39,999</b>	38
<b>\$40,000 - \$49,999</b>	4
<b>\$50,000 - \$99,999</b>	53
<b>\$100,000 - \$249,999</b>	59
<b>\$250,000 - \$499,999</b>	33
<b>\$500,000 or more</b>	25

**Table 7: Size of Farms by acres operated**  
(USDA NASS, 2022)

	<b>Kittitas County</b>
<b>Acres Operated</b>	<b># of Farms</b>
<b>1 – 9</b>	199
<b>10 – 49</b>	311
<b>50 – 69</b>	34
<b>70 – 99</b>	22
<b>100 – 139</b>	25
<b>140 – 179</b>	30
<b>180 – 219</b>	15
<b>202 – 259</b>	8
<b>260 – 499</b>	39
<b>500 – 999</b>	30
<b>1,000 – 1,999</b>	9
<b>2,000 or more</b>	16
<b>Total # of Farms</b>	<b>738</b>

## Focus Group and Interview Findings

From interviews and focus groups, participants shared that the agricultural sector is primarily split between commodity agriculture and smaller scale local food production. Kittitas County is known for its high-quality hay and forage production with both global and domestic markets. According to the Census of Agriculture, forage production, including hay and haylage, covered 36,161 acres and accounted for more than \$36 million in sales in the county (USDA NASS, 2022). Among the most prized commodities grown is Timothy hay, which is widely regarded for its green color, high fiber content, and nutritional value. About 90% of all Timothy hay grown in Kittitas County is exported overseas with Japan as the leading market. Timothy hay is also shipped to countries around the Pacific Rim region and the United Arab Emirates. While sharing about the many moving parts and logistics of hay brokerage business, one participant mentioned the importance of navigating cultural differences in developing contracts and customer relations, especially for the global market. For example, Japanese customers value specificity and attention to detail while Korean customers prefer consistency and bulk.

However, outside of hay production, most smaller farms have diversified production with livestock, specialty crops, like fruits and vegetables, flowers, and agritourism. Many farmer participants shared that having various revenue streams is important for risk management and resilience. One farmer said, “Diversification is how you survive...Agritourism type stuff gives people a diversified income – they don’t have to be completely dependent on a specific market.”

The participating farmers most commonly engage in direct-to-consumer markets, such as farmers markets, farm stands, Community Supported Agriculture (CSA) programs, and U-Pick agritourism. However, producers also participate in intermediate, wholesale, and institutional markets. A few farmers mentioned selling products to local restaurants and schools. A farm that offers United States Department of Agriculture (USDA) and Washington State Department of Agriculture (WSDA) inspected meat processing services to other meat producers shared, “One of [our customers] has had a lot of luck selling to schools because of the grant funding [for schools to procure from local producers].” Procuring local ingredients is also a value of food businesses in the area. A food manufacturer shared that they source local ingredients to create their food products that they sell wholesale as well as online retail. Through cooperatives throughout the Pacific Northwest, they procure as much of their base product as they can locally and regionally.

Kittitas County is seeing economic growth driven by small businesses and entrepreneurship. A participant commented, “Food systems and services are greater than 20 years ago. Twenty years ago, Downtown Ellensburg was a ghost town. The Downtown Association and the Chamber helped make our downtowns vibrant.” Another participating farmer said, “We’re very fortunate in Ellensburg – it’s a good place to be in business. The City’s good, the County’s good, the Chamber’s great.”

Multiple participants shared about the usefulness of resources and support that the Kittitas Chamber of Commerce provides to local farms and businesses. The Chamber offers business and agritourism advising services, programs, and workshops on topics, such as best practices for small businesses, marketing, and other topics that arise from the community. For example, in response to an increase in farm stands and the need for increased education on regulations, the Chamber began a series of Farmstand Workshops to support entrepreneurs as they navigate business planning and logistics. However, there is a need for increased awareness of the various resources and programs available to farmers and food businesses.

## Food System

The intent of this research is to understand the interest and ability to have a resilient food system. Primarily, the research seeks to understand the community’s interest in local and regional foods, and the community’s willingness to participate and purchase from farm and food businesses that operate within a local or regional geography.

Local and regional food marketing has seen an increase in Kittitas County since the 2017 Census of Agriculture with major increases in direct-to-consumer, wholesale, and value-added product markets. According to the 2022 Census of Agriculture, 47 farms reported selling food directly to consumers at a value of \$1,456,000. Twenty-four (24) farms reported sales of \$938,000 for food sold directly to retail markets, institutions, and food hubs for local or regionally branded products (USDA NASS, 2022). Sales of processed or value-added agricultural products were valued at \$772,000 (USDA NASS, 2022).

## Findings from Interviews and Focus Groups

Throughout the interviews and focus groups, it was clear that all participants value supporting their local community and its food system. One farmer shared, “My passion is to have a local

food system, supported by locals, provided by locals.” Most producers shared that they do see that the community is interested in local foods and understanding where food comes from. One participant remarked, “[There is] definitely huge interest in local foods – everybody, no matter what side of the aisle political or religion-wise... People want good clean food.” Participants shared that interest and sales for local foods increased during the Covid-19 Pandemic, but they are now seeing general consumer behaviors shift back to large supermarkets. Multiple producers shared about the decline in sales in direct-to-consumer markets, especially in-person at brick-and-mortar stores.

Within Kittitas County, there are two seasonal farmers markets: the Ellensburg Farmers Market and the Roslyn Farmers Market. Although farmers markets are a direct-to-consumer market for producers, multiple participants commented on seeing more non-food vendors at the market. A participant said, “Farmers markets have definitely expanded. The Roslyn Farmers Market is a fun one to go to for more arts-and-crafts-type stuff.” One of the challenges that was named related to selling at farmers markets included navigating licensing, permit, and insurance requirements at the city, county, and state levels. One farmer commented, “It’s being willing to travel 30-35 minutes if I want to do their farmers market. We have a Washington state business license, but I have to get a license for each town (like Cle Elum, Yakima and Roslyn). It’s lots of paperwork and keeping track of taxes.”

Multiple participants expressed that there was a need for a more conveniently located year-round market that sells locally grown and produced products. One producer shared, “Consumers are willing to go to the farmers market and love it and want to find out about it, but [the farmers markets] are only open during a small window, and they don’t have a year-round facility, and I think that’s what’s needed is a year-round farmers market.” Other comments included, “There is a nearby year-round farmers market building in Wenatchee, but we don’t have that here yet. I see that coming here,” and “Would love to get a year-round market, but we’d need some sort of indoor space.”

Even with the increasing interest from consumers, it was commonly mentioned that consumer awareness and education about local foods and actual engagement is lacking. One farmer commented, “The biggest thing is getting consumers to engage with the local food community, engage with their food more, so they aren’t reliant on boxed food or ready-to-go meals or Hello Fresh. Consumers should be learning kitchen skills and how to cook.” Across focus groups and interviews, producers shared about the challenge of consumers preferring convenience and affordability when shopping for their groceries. One producer said, “A lot of people grab cheap and easy.” Multiple producers shared about the cognitive dissonance that occurs in consumers that say they value locally grown and produced foods, but then behavior otherwise, especially when it comes to the price of locally grown and produced food. One participant commented, “Problem is that in order to raise food the way that we do, market it, and delivery, it’s expensive... There are lots of local businesses that want to support the local food producers, but the bottom line doesn’t always work.” Another farmer said, “Prices have gone through the roof!” when discussing inflation and the input costs of seeds, plant starts, equipment, and operating costs.

In a similar vein, multiple farmers shared about challenges they face with marketing, especially related to consumer engagement. Participants agreed that it can be difficult balancing customer

engagement and social media with the day-to-day operations of their business. Another area of marketing that some producers struggle with is navigating the different channels and methods available to reach their customers. Noting the generational difference in consumers, one producer said, “There is a divide between people who know social media and those who don’t. [Kittitas County] is an older community. They don’t do social media except once in a while to check Facebook. You’ll have to target where they’re going to be in that community. You also have [consumers] my kid’s age, my daughter runs my social media for me. That’s where [younger people] are looking for that info.” Other participants spoke of farm corridors, and how these collaborations of farms within the South Spokane, North Valley, and West Plains regions help each other with marketing, sales, and events.

Many participants were excited about seeing an increase in youth engagement in food and agriculture, mentioning farm to school programming, the local FFA chapter, and homeschooling families. While the majority of participating producers primarily do direct-to-consumer sales, some shared that they do diversify markets and sell wholesale to local schools as well. However, it was mentioned that selling to schools was easier when there was grant funding available for schools. WSDA Farm to School efforts include programming, resources, technical assistance, and grant funding for schools and farmers to support local procurement and school meals.

Another aspect of farm to school programming is incorporating technical and vocational education. Within the last few years, the Thorp School District has been shifting toward career and technical education (CTE) and is currently in the last stage of that conversion. Middle and high school classes for mandatory subjects are focused on applied education and CTE; for example, algebra is pre-engineering. Other new additions to the Thorp School District include an outdoor classroom and nature trail to promote outdoor learning, a school garden and production greenhouse, and a 30 ft x 40 ft building that students helped to build.

## **NATURAL DISASTERS**

Disasters impact all of community life, ranging from mild challenges for transportation and access to devastating loss of infrastructure and life. Kittitas County has been involved in 13 designated disaster areas since 2011 according to FEMA (2022); Table 8 details each of these disasters that have impacted the counties.

The funding allotment is shown for the entire region of impact, as specific county level data is not available. Each line details the name of the disaster, date, type of assistance and total amount allotted. While federally proclaimed disasters do not showcase the full extent of extreme weather on the region, this is one way to understand impacts from disaster, such as infrastructure damage, debris, and damage to shelter and community areas. Types of disaster declarations include:

- DR: Major disaster declared
- EM: Emergency Declaration
- FM: Fire Management

Public Assistance category definitions used in Table 8 can be found on the [FEMA website](#).

**Table 8: Disaster declarations in Kittitas County (FEMA, 2022)**

<b>Disaster Declaration</b>	<b>Date</b>	<b>Assistance Type</b>	<b>Funding allotted (full region)</b>
<b>Severe Winter Storm, Flooding, Landslides, and Mudslides DR-1963-WA</b>	Jan. 11, 2011 – Jan. 21, 2011	Public Assistance PA PA A-B: Emergency work PA C-G: Permanent work	PA-A-B: \$1,113,835.77 PA-C-G: \$3,327,192.89 PA Total: \$4,629,128.71
<b>Washington Taylor Bridge Fire FM-5005-WA</b>	Aug. 13, 2012 – Aug. 28, 2012	Public Assistance PA-B: Emergency work PA-H: Hazard mitigation	PA-A-B: \$63,053.01 PA Total: \$6,669,639.04
<b>Washington Table Mountain Fire FM-5020-WA</b>	Sept. 19, 2012 – Oct. 5, 2012	Public Assistance PA-B: Emergency work PA-H: Hazard mitigation	PA-A-B: \$24,222.71 Total: \$3,030,510.33
<b>Washington Colockum Tarps Fire FM-5038-WA</b>	July 27, 2013 – Aug. 14, 2013	Public Assistance PA-B: Emergency work PA-H: Hazard mitigation	PA-A-B: \$53,280.54 PA Total: \$6,824,731.93
<b>Washington Saddle Mountain Fire FM-5064-WA</b>	July 19, 2014 – July 20, 2014	Public Assistance PA-B: Emergency work PA-H: Hazard mitigation	PA-A-B: \$1,689.23 PA Total: \$40,562.99
<b>Washington Snag Canyon Fire FR-5071-WA</b>	Aug. 2, 2014 – Aug. 26, 2014	Public Assistance PA-B: Emergency work PA-H: Hazard mitigation	PA-A-B: \$4,455.09 PA Total: \$9,986,747.15
<b>Wildfires in Washington DR-4188-WA</b>	July 9, 2014 – Aug. 5, 2014	Public Assistance PA, P PA-A-B: Emergency work PA-C-E, F: Permanent work	PA-A-B: \$3,164,448.12 PA-C-G: \$20,083,089.03 PA Total: \$24,042,641.15
<b>Severe Storms, Straight-line Winds, Flooding, Landslides, and Mudslides in Washington DR-4249-WA</b>	Nov. 12, 2015 – Nov. 21, 2015	Public Assistance PA PA-A-B: Emergency work PA-C-G: Permanent work	PA-A-B: \$5,673,110.72 PA-C-G: \$18,517.27 PA Total: \$25,021,200.36
<b>Washington Jolly Mountain Fire FM-5200-WA</b>	Sept. 2, 2017 – Sept. 22, 2017	Public Assistance PA-B: Emergency work PA-H: Hazard mitigation	PA-A-B: \$267,226.76 PA Total: \$267,226.76
<b>Washington Ryegrass Coulee Fire FM-5253-WA</b>	July 9, 2018 – July 11, 2018	Public Assistance PA-B: Emergency work PA-H: Hazard mitigation	PA-A-B: \$3,674.48 PA Total: \$3,674.48
<b>Washington Covid-19 EM-3427-WA</b>	Jan. 20, 2020 – May 11, 2023	Public Assistance PA-B: Emergency work	Not available.
<b>Washington Covid-19 Pandemic DR-4481-WA</b>	Jan. 20, 2020 – May 11, 2023	Individual Assistance Other Needs Assistance (ONA)  Public Assistance PA-B: Emergency work	IA Total: \$19,625,351.66 IA Applications approved: 3,814  PA Total: \$2,423,666,571.89  Hazard Mitigation Total: \$10,327,996.10
<b>Washington Wildfires and Straight-line Winds 4584-DR-WA</b>	Sept. 1, 2020 – Sept. 19, 2020	Public Assistance PA-A-B: Emergency work PA-C-G: Permanent work	PA-A-B: \$12,334,993.15 PA-C-G: \$31,349,595.02 PA Total: \$44,588,067.60  Hazard Mitigation Total: \$10,327,996.10

## Natural Disaster Impact

While there are disasters covered by FEMA for federal support, there are many instances where climate change is wreaking additional havoc on farming and businesses with ever-evolving cycles and changes in weather making it difficult to plan.

During the interviews and focus groups, participants were asked to reflect on their experiences of disasters. Participants named various types of disasters and severe weather events that impact Kittitas County including wildfires, volcanic eruption, strong winds, drought, floods, and extreme temperatures.

### Impact from Natural Disaster and Severe Weather

#### Wildfires, Fires, and Smoke

Eight out of 9 interviewees identified wildfires and fires while sharing about their disaster experiences. When asked what the primary disasters are the region, one participant said, “Fire. It affects everything.” While multiple instances of building fires and the devastating impacts on property and business were shared, most discussion about fire was related to wildfires.

Another participant said, “The fire issue is really, really big. In Eastern Washington, any fire in the Cascades becomes an issue – even the Canadian fires. It depends on where the smoke is moving. It’s having a bigger impact than it gets attention.” In 2023, the National Alliance of Forest Owners (NAFO) and the US Forest Service signed a memorandum of understanding (MOU) to formalize the coordination and collaboration for addressing wildfires within areas of adjacent ownership (USDA Forest Service & National Alliance of Forest Owners, 2023). The MOU and partnership seeks to facilitate the shared stewardship responsibility between NAFO and the Forest Service, allowing for “[increased] available wildfire suppression resources, strengthen initial and extended attack capabilities, coordinate on the ground tactical decisions, and achieve increased overall suppression effectiveness...” (USDA Forest Service & National Alliance of Forest Owners, 2023, pp. 1-2). Multiple participants shared their frustrations about forest management and environmental policies that prioritize conservation and wildlife habitat. These frustrations stem from management practices, such as not thinning forests to reduce fuel for wildfires (as previously done through logging and grazing) and allowing wildfires to continue burning. Participants shared, “Forests aren’t being thinned away to be healthy,” and “Our forests are so mismanaged that we end up with fires that have a devastating impact to agriculture in general.”

Participants shared various levels of preparedness and different strategies for mitigating risks related to fires. These included fire suppression systems, cutting fence lines for livestock, trimming trees and potential fuel for fires, coordinating fire lines/fire breaks, diversification of products, replanting strategies, learning how to use equipment, like chainsaws, and staying up to date on the fire path with resources like the Fire Watch app. However, it is also important to note farmers sometimes face challenges with emergency management policies that do not consider agricultural needs. A participant shared an example from a fire on the North Ridge, “A rancher wasn’t allowed in to cut fences [due to emergency management policies]. He went to jail and spent two years in court because he went through a gate he wasn’t supposed to trying to save his livestock. There has to be a better policy or better understanding of processes.”

Additionally, many participants shared that they do not have a plan for their farm or products. One farmer said, "I guess we just turn on the sprinklers and pray."

Another participant shared about the Kittitas Fire Adapted Community Coalition, which is a collaborative group in Kittitas County that supports restoration and wildfire mitigation as well as promotes education of the county on the role of fire in the landscape. However, no other participants were aware of the group, and it was shared that the Coalition hasn't "really considered that forestry and wildfire preparedness connect with the farm and food system" and "it's not the first thing you think of when we try to reduce fuels."

Not only does fire devastate the environment and property in its path, but it also can cause secondary disasters such as mudslides and flooding. The smoke from wildfires, nearby and far away, greatly reduces the air quality and crop yield, causes concern for both human and farm health, and prolongs the harvest process. A participant shared, "[Fire] also impacts labor with all the new regulations that are put in place with air quality and how many hours you can work, and if the air quality is good enough for workers to go out. Our fire season is when a lot of the harvest is going on for apples in the state: August, September, October...With the hours reduced, you're not able to take advantage of when you have good weather conditions because the overtime rules in the state of Washington make us pay overtime for anything over eight hours." Multiple farmers and participants commented on how the smoke impacts plant growth and produce quality and quantity. One producer shared, "Having that smoke in the air and blocking out the sun for days and days weirdly stunts the flowers. And we can't be out there working either. We need to take breaks or wear masks when we're out there in the smoke because I don't know what's burning." Tree fruit producers may coordinate waste management of smoke tainted fruits, but often the product ends up as waste. Participants explained that there are some cases of farmers using the excess fruit for livestock feed, composting, and spreading the fruit on fields, but there are additional costs of transportation, time, and identifying someone to take the product.

Other participants further explained the economic impacts of smoke decreasing the quality of crops, prolonging the harvest and ultimately reducing profit margins. A farmer said, "When we get that smoke, it takes all the UV out of the sun. Things don't grow; hay doesn't cure. We lose hundreds of dollars per acre if we have smoke hanging out over the land." A hay producer explained that perfect environmental and weather conditions result in "4-day hay," meaning freshly cut grasses are dried to a suitable moisture level for baling within three to four days. Speaking to the impacts of smoke from fires in Canada, the producer said, "The smoke settles in the Valley and traps moisture, which affects hay negatively. With the smoke, it can take 10-14 days for the hay to cure, and when it finally does cure, the hay can hold the smoke smell and appear bleached or grey. We're losing \$20-30 per ton with the smoke."

### **Extreme Weather**

Changing weather patterns, extreme weather, and frequency of extreme weather events were mentioned as challenges to the agricultural community in Kittitas County. One participant said, "Generally speaking, weather seems more extreme. Managing a hay harvest or crop around that can be challenging. We still management to get good hay going and put up." Participants also discussed the impact of extreme temperatures and weather events on tree fruit production. As a permanent crop, tree fruit production is a long-term process, meaning it

develops the buds the year before it fruits. Disruptions, such as extreme heat and cold events, impact the trees' fruit yield and reduce crop size. A participant in one of the focus groups shared about how in a record high 108-degree heat dome, "fruit essentially cooks on the trees" while "due to a week of sub-zero temperatures, the pear crop was 50% of its normal size."

### **Wind**

Wind was mentioned as "one of the best and worst things about the Valley." This is due to the wind tunnel effect when air is forced through the valley and increases speed. The air flow as a result is key to Kittitas County's role as a global leader in hay production because the wind allows the hay to dry quickly and retain its green color. However, the wind creates soil erosion challenges, and producers must create wind blocks. One producer shared, "We get 70 mph winds here, so we're getting topsoil constantly blown off. I had to come up with ways to fix that." Strong straight-line winds have also caused various types of damage to trees and property as well as power outages, especially when compounding on top of other disasters like wildfires, smoke, extreme heat, and drought conditions.

### **Human-made Systems**

Throughout the interviews and focus groups, discussions about disasters were often coupled with commentary on human-made systems and policies, such as water and electricity access. These essential utility systems are particularly vulnerable to competing political interests, and the inefficacy of these systems, resulting in no water access and power outages, compound on top of the impacts of natural disasters. Participants shared their frustration with the lack of representation and understanding of the impacts on agriculture in policymaking.

### **Drought and Water Access**

Throughout the interviews and focus groups, water access and drought were frequently mentioned. Kittitas County is located within the Yakima River Drainage Basin, which is fully appropriated and uses a prior appropriation system for assigning water rights. Landowners with priority dates prior to May 10, 1905, are assigned senior water rights. Properties established after that date are assigned junior water rights and are subject to reduced allocation in times of shortage (Kittitas County, Washington, Public Health, 2025). Availability of water is directly related to the amount of annual precipitation the state receives (State of Washington Department of Ecology, n.d.).

Participants shared about how it can be difficult to understand and navigate junior versus senior water rights, especially for new and beginning farmers. Due to the lack of snowpack, water distribution can be shut off early and significantly shorten the growing season for farmers. Junior water rights holders, in particular, are vulnerable to the disruptions caused by water shortages. One participant remarked, "Normally, in a regular year, the water turns on in mid-March and off in mid-October. If it's a dry year with little snowpack, the earliest [the water has been turned off] has been late August. Then, the growing season isn't as long, the grass isn't growing. We have to purchase more hay [for livestock feed], which is expensive."

While water and irrigation infrastructure can help mitigate water access challenges, participants shared that existing water and irrigation infrastructure is antiquated, and installation is expensive and often cost-prohibitive. Multiple participants received grants from the Natural

Resources Conservation Service (NRCS) for implementing or upgrading water management practices, such as all-sprinkler irrigation, prescribed grazing, and fencing.

### **Power Outages/ Electricity**

Multiple producers shared concerns about power outages, both those due to disaster and those that are scheduled or controlled by the utility companies. Power outages are particularly risky for producers that use irrigation or require cold storage for fresh produce, meat, and value-added products. One producer shared, "Power outages are really bad when we have a lot of meat hanging... we'll have 10, 15, 20 thousand dollars in value that will hang in there." Another producer shared how power outages can affect business operations in general, "Last year, they shut off our power, and they said, 'it's going to be out for three days' for the whole Thorp community, including residential. We had no computers, our business was just shut down." In response to the threat of power outages, multiple participants shared that they purchased or have access to generators and have outfitted their infrastructure to be able to attach it for backup power. However, a few producers shared that there is a need for education and resources on how to install and operate a generator.

### **Disaster Preparedness and Recovery**

Many of the participants described adapting and shifting practices for disaster preparedness and recovery. One producer said, "You gotta be willing to pivot and figure it out, people who get stuck aren't gonna make it." A common thread throughout all the discussions in the interviews and focus groups was the need for coordination and relationship-building prior to and after disasters rather than waiting for the disaster and then reacting. A farmer shared, "People tend to forget about resilience around the 6-month mark [post disaster]." This alludes to the importance of Community Organizations Active in Disaster (COADs) and the need for on-going planning as a community for thinking through mitigation opportunities for the future.

### **Usefulness of Organizations when Responding to a Natural Disaster**

When asked about organizations and usefulness, the County was often mentioned as the first line of defense for disasters. It was mentioned that the County has an Emergency Management director, and there are monthly mass disaster trainings. Producers also shared about local and state producer networks, such as the Cattlemen's Association and the Washington State Tree Fruit Association, being a strength during a disaster by providing capacity, communication, and coordination for disaster response. The Chamber serves as a Central Point of Contact in times of disaster and plays an important role in coordination and communication during disasters. It was shared there is a desire for community-wide collaboration and protocols for disaster preparedness, response, and recovery. A common thread throughout the focus groups and interviews was the desire for improved communication on disaster protocols with statewide and local governmental agencies, the Chamber of Commerce, and Central Washington University. One challenge that was mentioned was that emergency management communication and coordination seem to stay internal with the agencies doing the work. Farmers and food businesses shared that it would be helpful to be informed and aware of community-wide protocols for disasters. Participants also shared that it would be beneficial to have central points of contact for different needs and resources, such as storage availability, cold storage availability, livestock evacuation, and utility services.

Participants discussed needing increased understanding of agricultural needs when it comes to emergency management policies, especially during times of disaster. One participant shared, “I looked at the county’s emergency management website, it gives elements of the plan, and maybe if there was an emergency, it would have ‘contact here,’ ‘contact there.’ It just seems like this could be much more user-friendly.” During group discussion about disaster communication, some participant responses included:

- *My impression or observation over the last 20-30 years is that there is a lot of effective communication between the city, county, university, and state agencies when it comes to disaster response. Also see it in law enforcement. My sense is that those disaster response plans are quite familiar to the people doing that work on a daily basis. The question is who else needs to be plugged into that?*
- *It was neighbors helping neighbors. People got their pickups and trailers and just started stopping at houses to move their animals. It was incredible how that worked, and there wasn’t any formal plan.*

However, other participants felt as though there should be less assistance needed from the government. “We shouldn’t rely on the government to address these disasters,” a community member said, “I think we’re seeing an increase in people figuring out how to be independent. I think we should be able to take care of ourselves. Me and my neighbors take care of each other.” This sense of self-sufficiency and hyper-localized collectivism among neighbors was a common thread throughout the interviews and focus groups.

## Future

To understand future needs for natural disaster response, a review of FEMA’s National Risk Assessment for Kittitas County was taken into consideration. Kittitas County has a relatively moderate risk index of 84.44. The risk assessment considers expected annual loss, social vulnerability and community resilience based on datasets from 18 natural hazards (Department of Homeland Security, 2022). The formula utilized to assess risk is as follows:

*(Expected annual loss × social vulnerability) ÷ community resilience = Risk Index*

- Expected annual loss: “natural hazards component that represents the average economic loss in dollars resulting from natural hazards each year”
- Social vulnerability: consequence enhancing risk component and community risk factor that represents the susceptibility of social groups to the adverse impacts of natural hazards
- Community Resilience: consequence reduction risk component and community risk factor that represents the ability of a community to prepare for anticipated natural hazards, adapt to changing conditions, and withstand and recover rapidly from disruptions
- Risk Index: represents the potential for negative impacts resulting from natural hazards

The Expected Annual Loss (EAL) overview for Kittitas County can be seen in Figure 4. According to the index, the hazards with the highest risk index scores are wildfire, earthquake, and riverine flooding. Wildfire has a relatively high-risk rating and an EAL value of \$15,876,892 (FEMA, 2022). Earthquake and riverine flooding have relatively moderate risk ratings and EAL

values of \$5,173,435 and \$2,361,015 respectively (FEMA, 2022). Table 9 details estimates for expected annual losses from all natural hazard events for Kittitas County and highlights three highest scoring disasters.

<b>Composite Expected Annual Loss</b>	<b>\$26,623,172.03</b>
Building EAL	<b>\$23,785,670.35</b>
Building EAL Rate	<b>\$1 per \$539.59 of building value</b>
Population EAL	<b>0.23 fatalities</b>
Population EAL Rate	<b>1 per 189.97K people</b>
Population Equivalence EAL	<b>\$2,703,250.13</b>
Agriculture EAL	<b>\$134,251.55</b>
Agriculture EAL Rate	<b>\$1 per \$709.30 of agriculture value</b>

**Figure 3: Expected annual loss overview, Kittitas County (FEMA, 2022).**

**Table 9: Expected annual loss for hazard types, Kittitas County (FEMA, 2022).**

	<b>Kittitas County</b>		
<b>Disaster</b>	<b>Risk Index Rating</b>	<b>Expected Annual Loss</b>	<b>Score</b>
Wildfire	Relatively high	\$15,876,892	99.0
Earthquake	Relatively moderate	\$5,173,435	92.4
Riverine flooding	Relatively moderate	\$2,361,015	86.2
Volcanic activity	Relatively moderate	\$1,999,404	84.9
Avalanche	Relatively high	\$589,181	83.7
Cold wave	Relatively moderate	\$351,860	81.6
Landslide	Relatively moderate	\$81,442	78.2
Heat wave	Relatively low	\$37,111	40.7
Tornado	Very low	\$33,760	9.6
Winter weather	Relatively low	\$32,842	41.3
Lightning	Very low	\$30,364	20.4
Strong wind	Very low	\$29,348	11.3
Drought	Very low	\$14,625	45.9
Hail	Very low	\$11,174	14.8
Ice storm	Very low	\$720	2.5

Kittitas County's overall risk index is relatively moderate with a score of 84.44. social vulnerability ranking is relatively low at 30.08, which means that the community is less susceptible to adverse impacts of natural hazards when compared to the rest of the United States. Kittitas County's community resilience ranking is relatively high at 61.39, meaning 39% of U.S. counties have a higher community resilience. This shows there is a relatively high ability to prepare, adapt, and withstand disruptions compared to other areas.

## **Natural Disaster Resilience Next Steps**

Based on the full research scope, the following are suggested priorities and next steps. Additionally, partners were identified through focus groups for who would need to be a part of prevention and recovery.

### **Communications**

- 4.5. Call tree and Directories
  - 4.5.1. Options to get notices (i.e. electric companies, etc.)
  - 4.5.2. Flow chart for who to contact
  - 4.5.3. Develop based on type of disaster and stage in disaster
    - 4.5.3.1. Preparedness, response, recovery, mitigation
    - 4.5.3.2. Fire/ smoke/ water
- 4.6. Build relationships prior to disaster
  - 4.6.1. Associations Outreach
    - 4.6.1.1. Discuss what could be done for preparedness (fruit association/ cattleman's/ sheep/ farmers market/ farm bureau/ county/ sheriff)
    - 4.6.1.2. Networking meetings
    - 4.6.1.3. ID what is currently occurring through listservs
  - 4.6.2. Partnership with Emergency Managers
    - 4.6.2.1. Improve understanding of food and agriculture
      - 4.6.2.1.1. i.e. When to cut fences; Allowability of farmers to get to farm
  - 4.6.3. Build protocols/ awareness of needs through different organizations
- 4.7. ID and designate clear point of contact for needs/ resources
  - 4.7.1. Clear understanding of who to contact for what
  - 4.7.2. Ways to participate EM updates

### **Community Protocols**

- 4.8. Hosting table-top scenarios and emergency workshops
  - 4.8.1. Livestock handling
  - 4.8.2. Biosecurity
  - 4.8.3. Community / schools/ etc.
- 4.9. Create preparedness, response, and recovery protocols community wide
  - 4.9.1. Awareness on how disaster initiation - disaster declaration occurs
  - 4.9.2. Share broadly city plans/ county plans
  - 4.9.3. Develop county on emergency management center
  - 4.9.4. Create watershed plan in partnership with Yakima
  - 4.9.5. Develop COAD within Emergency Management Center for the county
    - 4.9.5.1. Develop volunteer plans- support for businesses and farms
- 4.10. Create list and recommendations for bug out kits

- 4.11. Political discussions on policy needs related to stewardship of land

## **Research**

- 4.12. Comparison of historical and current practices and impact on community (financial/ disasters/ policies/ etc.)
  - 4.12.1. Water
  - 4.12.2. Power/ electric
  - 4.12.3. Lumber/ forestry/ timber
  - 4.12.4. Land use
    - 4.12.4.1. Irrigation comparison for solar vs. hay vs. other farm practices
    - 4.12.4.2. Development vs. agriculture vs. forestry
- 4.13. Identify best practices for land use and planning
  - 4.13.1. Recreation/ diversification of farming and development
- 4.14. Research on alternative markets/ waste management for products impacted by smoke

## **Business**

- 4.15. Best practices for businesses/ farms by disaster type
  - 4.15.1. "How -to" sign up for contract with FEMA for disaster relief
  - 4.15.2. Toolkits and Flow Chart
    - 4.15.2.1. Prepping land/ livestock/ market/ business
    - 4.15.2.2. Fire prevention and suppression
    - 4.15.2.3. Smoke safety
    - 4.15.2.4. How to use generator
    - 4.15.2.5. Post disaster clean up
    - 4.15.2.6. How to navigate insurance
  - 4.15.3. Templates for farm and food business disaster plans
- 4.16. Local Food Coordinator/ Value Chain coordinator
  - 4.16.1. Help connect and build markets
  - 4.16.2. Develop directory and marketing campaigns for local/ regional food system
  - 4.16.3. AgVocacy -everything you do - agriculture is involved
  - 4.16.4. Host farmer peer-to-peer networks and learning
- 4.17. Consumer Education and Network
  - 4.17.1. Host regular events for consumer/ farmer meet-ups--> farmers markets/ other events
  - 4.17.2. Directory/ Find a Farmer/ market
- 4.18. Market Development
  - 4.18.1. Value-added options for farmers and businesses
    - 4.18.1.1. i.e. hunting/ trails/ agritourism
  - 4.18.2. Year-round farmers market
  - 4.18.3. Food Enterprise Center
    - 4.18.3.1. Commercial kitchen
    - 4.18.3.2. Processing
    - 4.18.3.3. Education
  - 4.18.4. Skill Building

- 4.18.4.1. Succession Planning
- 4.18.4.2. Marketing
- 4.18.4.3. Apprenticeship

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# APPENDIX A: KITTITAS COUNTY CHAMBER OF COMMERCE REPORT

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## PROJECT OVERVIEW



### **Amy McGuffin**

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In 2025, Iowa State University (ISU) Extension and Outreach’s Food Systems Team partnered with the Kittitas County Chamber of Commerce under an \$18,500 contract to strengthen the local food system. This collaboration was driven by community-identified priorities: residents expressed a strong desire for increased consumer education, local food awareness events, and the development of a year-round food enterprise/skill-building center to improve food system resilience. To inform project activities, the team engaged extensively with the community – conducting three focus groups (18 participants) and nine one-on-one interviews with farmers, food business owners, community leaders, and officials. The Chamber assisted in outreach for these interviews and focus groups, and the project included on-site research such as farm/market visits with ISU Extension and Outreach staff in the spring and summer. The following sections summarize the key deliverables, outputs, and outcomes of this work as outlined in the Scope of Work.

### **Farm and Food Awareness Events**

The project hosted up to three Farm and Food Awareness events during spring and summer 2025 to raise the profile of local farms and food products and to engage the public. These events were designed to educate consumers and facilitate networking between producers and the community. Example event formats included tasting demonstrations featuring locally grown foods at area farmers’ markets, public presentations and discussions about the county’s future food needs, and farmer–buyer networking meetups. One event was integrated with market research for the proposed skill-building center (with ISU Extension and Outreach staff on-site to gather feedback). Outputs: The events collectively attracted residents, farmers, and food businesses, providing a venue to showcase Kittitas County products and share information about the upcoming skill-building center initiative. Outcomes: These awareness events increased community knowledge of local food offerings and built stronger connections between producers and consumers. They also generated valuable input – attendees discussed needs and ideas (e.g. desire for a year-round market and more value-added products) that informed the planning of the skill-building center. The positive response to these events suggests that continuing regular local food events could sustain public interest and momentum for the center’s development.

## **Skill-Building Center Requirements Briefing**

As a foundation for the feasibility study, the ISU Extension and Outreach team completed a “Skill-Building Center Requirements” briefing – a one-page document outlining what is required to establish and operate a food enterprise/skill-building center in Washington State. This briefing summarized relevant state regulations, licensing and food safety standards, facility requirements, and other key considerations specific to Washington. The deliverable provided a concise reference to ensure the proposed center would meet state guidelines and best practices. It was used to inform subsequent tasks (asset inventorying and educational program identification) so that those efforts aligned with the legal and technical parameters for such a center in Washington. Outcomes: The briefing gave project stakeholders and decision-makers a clear understanding of the baseline criteria for a skill-building facility. By confirming these requirements early, the team avoided pursuing infeasible options and ensured that site selection and program planning proceeded with realistic constraints in mind. This document effectively served as a checklist for compliance and design needs, guiding the vision of the center to fit within Washington’s regulatory context.

## **Infrastructure Asset Inventory for a Skill-Building Center**

The project conducted an asset inventorying exercise to identify existing local infrastructure that could support or house the envisioned skill-building center. Chamber staff surveyed buildings, land, and equipment across Kittitas County that might be suitable, including existing commercial kitchens, food processing spaces, educational facilities, and strategically located properties. The goal was to catalog resources that could be leveraged or expanded, rather than “re-inventing the wheel.” The delivery was an inventory (spreadsheet) listing each identified location with its attributes (e.g. size, available kitchen equipment, ownership, proximity to farmers or markets).

The asset inventory revealed both opportunities and gaps in local food infrastructure. Notably, the county’s only fully licensed commercial kitchen was privately owned and not readily accessible for broader community use. A small kitchen exists at the Old Armory building in Ellensburg, but it is too limited in capacity for commercial-scale food production. On the positive side, a significant asset identified was the FISH Food Bank’s facility at the airport, which is in the process of expanding to include a larger kitchen and substantial cold storage space. This food bank expansion presents a unique partnership opportunity – the added capacity for cold storage and commercial kitchen use could potentially support the skill-building center’s programming or serve as an interim site. The inventory also noted a handful of other shared-use kitchens (e.g. church or community kitchens), though many have equipment or usage limitations. The team additionally identified undeveloped sites and underutilized buildings whose location and zoning might suit a food enterprise hub, especially if owners were interested in redevelopment.

This comprehensive asset inventory provided a factual basis for site selection. It allowed the project to prioritize promising locations for the center. For example, leveraging the food bank’s new kitchen or partnering with an existing facility emerged as a likely cost-effective strategy, given the high expense of building a brand-new facility from scratch. The asset inventory also facilitated community buy-in – by highlighting existing resources, it showed how a skill-building center could enhance and network what the county already has. These findings were carried

into the final recommendations, where preferred site options (with their pros and cons) are outlined for the Chamber's consideration. The asset inventory will also be a useful tool beyond this project, as it creates a reference of food system infrastructure in Kittitas County for future planning.

## **Educational and Training Program Identification**

In parallel with physical asset inventorying, the project team identified existing educational and training programs, services, and individuals that could align with the skill-building center's workforce development mission. This effort recognized that to support farm and food businesses, the center must offer relevant skill-building opportunities. ISU Extension and Outreach and Chamber staff inventoried resources in the following key areas (identified in the Scope of Work):

- Labor & Hiring Practices: Training on labor regulations, hiring "dos and don'ts," and safety (for example, understanding Washington State Labor & Industries (L&I) requirements).
- Legal & Risk Management: Resources covering farm law, liability, insurance, and risk management best practices.
- Business Skills: General business and marketing training for farmers and food entrepreneurs, including marketing strategies, value-added product development, and basic business planning.
- Succession Planning: Programs or advisors to help farm owners plan for transitions (passing the farm to the next generation or new owners).
- Apprenticeships & Mentorship: Opportunities for hands-on learning such as farm apprenticeship programs or farmer-to-farmer mentorship networks. (Stakeholders noted that Washington's formal apprenticeship rules are not well tailored to agriculture, indicating a need to create more accessible apprenticeship models for farms.)

The team compiled a listing ("education inventory") of individuals, organizations, and programs corresponding to each of these areas. This includes, for example, contacts at Washington State University Extension for farm management and marketing courses, local non-profits that offer beginning farmer training, experienced producers willing to mentor, small business development centers for legal/risk workshops, and state agencies like L&I for labor compliance training.

This educational resource inventory provides a directory of potential partners and curricula for the skill-building center. By identifying who is already doing what, the Chamber can avoid duplicating existing services and instead coordinate with these educators to offer workshops or consulting through the new center. It also highlights gaps where new training programs might be needed (for instance, the absence of a formal on-farm apprenticeship program in the region). Overall, this task built a network of human capital around workforce needs – a crucial element for the center's success. These contacts and program outlines feed directly into the center's business plan, ensuring that its educational offerings align with real-world needs and available expertise in Kittitas County.

## Final Report and Proposed Business Plan

All findings and inputs culminated in a Final Report and Proposed Business Plan, developed jointly by ISU Extension and Outreach and the Chamber, which provides a roadmap for establishing the food enterprise/skill-building center. This comprehensive report synthesizes community input, research, and feasibility analysis into concrete recommendations for the center's development and operation. Key components of the proposed business plan include:

- **Operating Size and Scope:** Defining the appropriate scale of the center – for example, the facility size, capacity (how many businesses or students it can serve), and range of services. The plan recommends a multi-functional center sized to meet local demand without incurring unsustainable costs. Stakeholders favored a modest start that can expand over time, ensuring the center is right-sized for Kittitas County's population and producer base.
- **Management Plan:** Outlining how the center would be governed and managed. The plan evaluates options such as Chamber oversight, a new non-profit entity, or a cooperative model, and it recommends a management structure that maximizes local leadership and cross-organization collaboration. Roles and responsibilities (for a center director, instructors, partner agencies, etc.) are detailed to ensure accountability in day-to-day operations and long-term stewardship.
- **Market Strategy:** Detailing strategies for financial sustainability and community engagement. This covers how the center will attract users (farmers, food entrepreneurs, learners) and generate revenue or support. Recommendations include offering rentable kitchen/processing space, hosting year-round indoor farmers' markets or pop-up retail events, providing fee-based training courses, and pursuing grants or sponsorships. Marketing the center's services to both producers and consumers (e.g. "buy local" campaigns, success stories of products made at the center) is emphasized to build usage.
- **Collaboration and Partnerships:** Identifying critical partnerships to support the center. The plan calls for continued collaboration with organizations like the FISH Food Bank, WSU Extension, Central Washington University, local schools, and farm groups. For instance, the food bank could partner on food processing or distribution aspects, and extension agents or college faculty could help deliver educational programming. Such partnerships will broaden the center's impact and resource base, anchoring it in existing community efforts.
- **Site Selection and Facilities:** Recommending one or more priority site locations for the center, based on the asset inventory. The report evaluates the top candidate sites (e.g. leveraging an expanded food bank facility or upgrading the Armory's kitchen) and discusses necessary facility improvements or build-out. It also considers accessibility – ensuring the site is convenient for producers (for processing and storage) and for the public (for retail or classes). The plan integrates the educational infrastructure by suggesting on-site classrooms or meeting space for training, and it aligns facility needs with the identified program partners (for example, ensuring a commercial kitchen is up to code for food safety trainings).

Across these components, a recurring theme is flexibility and multi-functionality. Community input stressed that the skill-building center should serve many purposes: a commercial kitchen and processing center for farmers to create value-added products; a year-round marketplace for local foods; a training hub for business skills and farm apprentices; and even a resource during emergencies (e.g. providing cold storage or coordination space in the event of a disaster). The final plan embraces this by proposing a phased approach to develop a “food system resilience hub” that can adapt to the county’s needs. The recommended business plan is grounded in real-world data and community voices, giving the Chamber and local leaders a clear blueprint to move forward.

The delivery of the final report and business plan marks a significant milestone for Kittitas County. It translates months of research, community engagement, and analysis into an actionable strategy. The plan’s recommendations – from operating model to site choice – equip the Chamber of Commerce and its partners with the information needed to pursue funding, partnerships, and next steps toward establishing the skill-building center. By having a professionally vetted plan in hand, the community can confidently work toward implementation, knowing the concept has been tailored to local conditions and opportunities. Ultimately, this project’s deliverables (events, research, and planning) have laid the groundwork for strengthening the local farm and food economy. The process itself also fostered greater connectivity among stakeholders, ensuring that the momentum for local food resiliency will continue as the business plan moves into action.

The information above is drawn from the project’s Scope of Work and draft report findings, as produced by the ISU Extension team in collaboration with Kittitas County Chamber of Commerce. The community engagement details (focus groups, interviews, action planning sessions) and all data collection efforts are documented in the project’s draft report, ensuring that the final recommendations are backed by local insights and on-the-ground research.

# APPENDIX B: POVERTY DATA

Table 10: Income and Poverty Thresholds for the United States in dollars (United States Census Bureau, 2024)

Size of family unit	Related children under 18 years									
	Weighted									
	average									
	thresholds	None	One	Two	Three	Four	Five	Six	Seven	Eight or more
<b>One person (unrelated individual):</b>	15,940									
<b>Under age 65</b>	16,320	16,320								
<b>Aged 65 and older</b>	15,045	15,045								
<b>Two people:</b>	20,260									
<b>Householder under age 65</b>	21,090	21,006	21,621							
<b>Householder aged 65 and older</b>	18,970	18,961	21,540							
<b>Three people</b>	24,940	24,537	25,249	25,273						
<b>Four people</b>	32,120	32,355	32,884	31,812	31,922					
<b>Five people</b>	38,080	39,019	39,586	38,374	37,436	36,863				
<b>Six people</b>	43,090	44,879	45,057	44,128	43,238	41,195	41,131			
<b>Seven people</b>	49,080	51,638	51,961	50,849	50,075	48,631	46,948	45,100		
<b>Eight people</b>	54,410	57,753	58,263	57,215	56,296	54,992	53,337	51,614	51,177	
<b>Nine people or more</b>	64,760	69,473	69,810	68,882	68,102	66,822	65,062	63,469	63,075	60,645

Based on this poverty guideline, households can apply for assistance through the Supplemental Nutrition Assistance Program to receive monthly allotments to support their food purchases.

### USDA Supplemental Nutrition Assistance Program (SNAP) Participation

It is estimated that 1,801 households in Kittitas County received SNAP in 2021, or about 9.6% of the total households within the county. About 17% of those households had no workers within the past 12 months, 41.6% had one worker in the family, and 41.4% had two or more workers in the family (U.S Census Bureau, 2021)

Washington State’s food assistance program is called Basic Food, and it includes both the USDA Supplemental Nutrition Assistance Program (SNAP), a federally funded food assistance program for people with low incomes, and the Food Assistance Program (FAP), a state-funded program that provides food assistance to legal immigrants who are ineligible for federal benefits due to their immigration status. More information on eligibility and benefits can be found on the [Washington State Department of Social and Health Services website](#).

## APPENDIX C: BUSINESS AND INDUSTRY

Table 11: Business and Industry: establishments by employees and category, Kittitas County (U.S. Census Bureau, 2023)

Establishments by employees	Number of establishments	Annual Payroll	Number of employees
Less than 5	883		
5-9	297		
10-19	192		
20-49	93		
50-99	25		
100-249	6		
<b>Total</b>	<b>1,500</b>	<b>\$630,081,000</b>	<b>13,283</b>
<b>By category:</b>			
<b>Agriculture, forestry, fishing and hunting</b>	11	\$5,801,000	92
<b>Utilities</b>	10	\$5,586,000	51
<b>Construction</b>	301	\$94,635,000	1,337
<b>Manufacturing</b>	40	\$27,305,000	477
<b>Wholesale Trade</b>	51	\$42,299,000	497
<b>Retail Trade</b>	187	\$78,641,000	2,117
<b>Transportation and Warehousing</b>	61	\$23,631,000	357
<b>Information</b>	19	\$9,005,000	158
<b>Finance and insurance</b>	59	\$18,289,000	234
<b>Real estate and rental and leasing</b>	80	\$16,339,000	232
<b>Professional, scientific, and technical services</b>	119	\$36,846,000	509
<b>Management of companies and enterprises</b>	3	\$132,000	8
<b>Administration and support and waste management and remediation services</b>	88	\$23,892,000	522
<b>Educational Services</b>	19	\$4,767,000	421
<b>Health Care and Social Assistance</b>	103	\$110,145,000	1,950
<b>Arts, Entertainment, and Recreation</b>	32	\$18,727,000	1,029
<b>Accommodation and Food Service</b>	183	\$84,019,000	2,597
<b>Other services (except public administration)</b>	128	\$25,634,000	642
<b>Industries not classified</b>	4	\$197,000	3

# APPENDIX D: ACTION PLANNING NOTES

## Kittitas County Action Planning Group Notes

### Adaptive Resilience:

Wondering why fire is the main focus in a community that requires irrigation -

- Water access is also something that has also bubbled up
- Energy usage – it’s also the cost of energy, which puts us at a disadvantage compared to other counties that we’re competing with across Eastern Washington. This county has three power companies – there is PUD. But where I live, i can’t get either of those companies, I’m stuck with Puget Sound Energy. Finding power put me at a terrible disadvantage compared to the rest of the state.
  - Smoke is a terrible inconvenience sometimes, but drought and loss of infrastructure as the county converts more to the “other half of King County.” Estimated population doubled in a few years.
- Entire Valley is a bowl, we get those pressure zones – the smoke goes up and up and up. From somebody with a background in tree fruit, if people can’t breathe, they’re not going out in that. You need hay for forage. It shifts from an inconvenience to an interruption to the food supply.

### Kittitas County Community

- Everyone is expecting growth – it's projected. The projections that we see for county wide growth are pretty significant. There's some differentiation between lower and upper county. Different demographics. Land use – strict laws on land use. It's difficult to convert ag land into urban density. Ellensburg has a defined urban growth boundary. That's the limit of urban expansion. The rub – there are ag uses that been here forever. The city is not responsible for stopping growth, our obligation from our planning is to make sure we have the policies in place for when the growth happens. There are some fairly specific regulatory – passed down to Ellensburg. All about trying to protect land use. Washington has 283 incorporated cities. The majority of the population lives in the city. We’re a rural county, but we have almost ½ the population in Ellensburg.
  - Actual geographical difference between Upper County and Lower County, upper county is more susceptible to fire.
    - Doug Morrison – ended up in Jail for going to let his cattle out in the ridgeline.
    - Population growth – I've lived here my whole life, yes growth management says i should be able to farm forever, because I was in the first round of designation. But what i see, i live on rural arterials – i see a lot of traffic, i watch the commute. Growth management was supposed to leave the rural lands, but that hasn’t happened. Kittitas county has had erratic land use policies over the years. Land is going to get chopped up, and every time it does, it makes it more difficult. I’m a commercial farmer – that’s my living. What’s going to happen is there will be a few commercial farms. I see a lot of ground being chopped up into 20 acre

lots, which is the fastest way to ruin agriculture that I can think of. 20 acre lots are too big for one person to handle.

- It doesn't matter if it's city traffic/ commuter traffic
- Federal policies put in place to have infrastructure for water/power out here.
  - Economics have overpowered that
- People don't want to buy from Kroger
  - We should be worried about Kroger and the vertical integration and centralization.
- Zoning laws are a terrible way to manage growth. 20 acre density – i talk about it with density rather than 20 acre lot size. People come over wanting to live out in the country, some people want less acres. This is responsibly simple, not as costly.
  - Other counties have some different kinds of rules – husband has a farm in Skagit County – conservation easement, on Skagit flats, grows wonderful potatoes. There are other programs. Totally agree that we should be able to cluster development.
  - I see one of the challenges being the disconnect educating people why they need to care where their food comes from, and it doesn't come from one centralized source. The people in the City of Ellensburg need to know they can rely on the ag community.
- Risk of a fire but the impact that smoke has on the crops, it would impact a small flower farm. It affected grapes/raisins in California. It affects the grapes here too. It affects hay crops too. It's a significant risk.

### **Kittitas County Food System**

- Farm to Table concept: I know we have in Ellensburg – we have 2 primary food bank providers – Fish, Apoyo. Some of our council members did a tour of their facilities. Fish is expanding. The model is a little different – what we heard from the customers, apoyo really prioritize fresh fruits and vegetables in their boxes. We watched them pack them on a distribution days. Fish deals more with frozen/canned goods, nonperishables. What I thought though was there doesn't seem to be a well-established connection between local farm producers and those food pantries there. There may be an opportunity there.
  - Apoyo does utilize local produce – CWU connection.
- Labor: city standpoint – a lot of the challenges for everything, attracting businesses, qualified staff at university has to do with the cost of housing. Affordable labor laws – is there a sustainable workforce? Is there housing available for the workforce?
- Farmers have a hard time defeating the national minimum wage with overtime.
- We grow a lot here, but we only have a season. Increase value-added options.
- Education: Farm to School K-12 – we mentioned labor laws and zoning. Most of those have come from our elected officials in Olympia, which designated by King County and Pierce County, but we have to put up with the laws they pass in Olympia – there is ignorance to how these policies affect Kittitas County.

- Under education opportunities, we should put some sort of designation – education of what it takes to grow food for Western Washington
  - Recently judged some FFA competitions – a young girl from Thorp identified that very issue. She really wants to go into ag education. She was thrilled/excited, talked well over her allotted time. Education for kids on the Westside – they have no idea where their food comes from.
  - Broadening that education out to everybody that’s feeding information to decision makers in Olympia
- Smoke – exposure to wildland fire is out of our control. It's also about forest management and forest health. That has to remain a priority – if there’s any way to mitigate smoke impact, there has to be continued investment in forest – in light of significant budget cuts. People need to understand that, people really only worry about what’s in their back yard until there’s a fire in their backyard.

### **Disaster Impact**

- What comes to mind for me Yakima Basin – significant effort to improve water quality, fish passage. Balance between protecting resources and preserving farming.
  - Integrated Plan – the idea: instead of fighting through the courts for water. Environmentalists and irrigators – came together and presented this package to get funding. So far what has been funded was on the environmental side because reservoirs are harder to site and develop and fund. There is effort in that regard and continues to be.
    - It’s been underway for quite some time, the state started funding it the first acquisition was the Teanaway area – must have been 10 years ago. Still working on the impoundment of water, reservoir for resiliency for water rights. We’re losing snowpack – they called that the fifth reservoir. The water is not storing in the mountains like it used to. Some of the sites that were being considered are dead.
      - Even beyond that, when you talk about forest management, you have to remember whether it’s water irrigation/creeks or the forest floor, you have different management practices.
        - You run into federal, state, city, private?
        - Federal is not managed at all. Private timer has had the best management.
      - It’s sad when it has to become that type of an impact.
      - If they don’t get more snowpack on the Westside of the state, there’s talk of more storage.
        - I’m a senior water right holder, and all these plans drive me nuts. At the very end somewhere down the road, they don’t really ever impound the water.
        - We’re getting to a warmer climate and snowpack is erratic.
        - Conversion to sprinklers vs. Flooding irrigation

## Organization Usefulness

- County has an Emergency Management director
  - Monthly trainings – mass disaster trainings
  - There are some
- Chamber has been designated as Essential
  - When we have workshops, we share on 9 different platforms and still people say they haven't heard of it
- Granges – are they still relevant?
  - 2 functioning granges left that have a board in the county
  - We have an empty grange building – it used to be a key organizing hub for the farm community and i don't know what happened like that. They don't meet like that anymore. Their missions changed to specific. Manashtash – youth education, Squawk – weddings. We do have vacant buildings, which is an interesting thing because that could be a year round market.
    - What about food processing? They're big enough

## Prioritization

- Disaster communication – my impression/observation over the last 20-30 years with the city, there is a lot of effective communication between city, county, university, and state agencies when it comes to disaster response. Also see it in law enforcement. My sense is that those disaster response plans themselves are quite familiar to the people doing that work on a daily basis. The question is who else needs to be plugged into that?
  - How can we build a bridge between food/ag industry in that EM?
  - For example, the Taylor bridge fridge, the county fairgrounds was used as a designated livestock.
    - I was surprised and pleased. That fire was so fast. They managed to get most everybody's critters out. It was little bit sheriffs and people
      - It was neighbors helping neighbors. People got their pickups and trailers and just started stopping at houses to move their animals. It was incredible how that worked, and there wasn't any formal plan.
        - In that moment, gates were opened and animals were let.
        - Rich Elliot – well known for KBR farm rescue deputy chief – mayor – he was part of the response to the fire. he said he knew it was a different fire because the rattlesnakes were running away from the fire. It was strange to see.
- Sustainability – you can establish a phone tree, how do you maintain that? 2 years later, you lose a key link, then what?
  - Key part of this would be identifying sustainability of the phone tree
- In general, in a different space, I was working with a group that was trying to figure out how to deliver services. Everyone enters from a different space of what they need, and you need to have that central circle.

- It was the idea that if you're contacting anyone in the circle, from whatever position you need, you're going to be given consistent guidance. This is where you go to get this information. The frustration is getting passed around.
- Call tree – it has value, perhaps it requires monthly coordination/check ins to keep it up to date
  - HAM radio
- Disaster table top scenario – everything was knocked out, no power, no cell service.
  - How do you mitigate all that without the normal communications?
  - Ellensburg – gets power mostly from Bonneville. PSE is anticipating preemptive shutdowns to mitigate risks. Unrelated to us, we could be without power.
- No doubt that rural parts of the county are on the front lines of fire risk. There's conscious effort on how the development is being done for Ellensburg. Urban areas are being devastated.

## **Prioritization Activity**

### Communications

- Call-tree, flow chart, directors – 0
- Build relationships prior to disaster – 3
- *ID & designate points of contact (various needs/resources) – 5*
  - *Connecting to FEMA procurement*

### Protocols

- Host table-top/ scenarios and emergency workshops – 0
- Create preparedness, response & recovery procedures – 2
- Create list and recommendations for bug out kits – 1
- *Host political discussion on policy needs and impacts to farmers – 4*

### Research

- Compare historical/current trends/practices and impact on community \*i.e. water/power/land use – 0
- Identify best practices for land development related to agricultural protection – 2
- Research alternative markets/ innovation for products impacted by smoke – 0

### Business

- Best practices for business
- Local food coordinator/ value chain coordinator
- *Consumer education, awareness and networking – 9*
  - A good point of connection for people new to the area – a long time ago, we talked about how a piece of paper would explain to them that their neighbors are farmers, can't complain.
  - Tim Hudson – spread too thin. We used to have coop extension agents in every county. Not very many coop extension anymore – they're more regional based. It

is institutionalized, if you purchase property, you're not allowed to complain. Can we also include one about cats and how they tend to roam?

- *Market development (year round market, food enterprise center, skill building) - 7*
  - Chamber started doing workshops – people still wanted their own space, but interested in doing value-added, innovation with the products they provide out of their farms. If you come with the consumer education, people will choose to go to a farm related product than a mass produced product. We have some opportunities in Kittitas County to expand that. That's interesting to us (new, smaller producers) but not for commercial, long-time farmers. Bigger commercial farms – larger acreages – the fact that it takes 2 roundtrips to the port. Farms get chopped up, and I anticipate we'll lose one of the fertilizer companies – we have three fertilizer companies right now. When they do that, that runs the others' costs up. If I'm in the basin, I can get labor cheaper, fertilizer cheaper. We can't get contract crops from across the river. Maybe the one good news is Seattle is coming over to join us, and we have options for land. I've thought about small farm lot, but there's not enough of me to go around.
    - This sounds like it connects to the policy discussion – I feel like
      - What it takes to be a farmer. You can't tell somebody what it's like to carry 5 gallon buckets of water to your hogs. I'm getting job offers where I can triple the amount of money I make in a week. You have educate those kids to see "hey, this is a lifestyle, you can make money out of it."
      - With education, we've got a university that's got agribusiness. I don't know where those kids that are going through those classes end up in the summer. The same way with FFA. The truth is there are age restrictions now. There are also State of Washington laws, a certification that you can drive to a farm if you're 15 if you're going to your worksite – this needs to be signed off through an ag educator (work permits). My young employee I imported from Davenport informed me about it. Now you can't hire anybody under a certain age, there are so many things you can't do until you're 18.
      - Connects to the skill-building, apprenticeships
        - The state has apprenticeship, but the rules are not very blanket for agriculture. I've looked into it, and they don't fit.
        - How do you get a registered apprenticeship in Washington State?
          - Our biggest problem here is housing. It's a huge issue.
  - Rep Tom Dent – very supportive of farming industry
  - It's too bad we can't use CWU's dorms over the summer when they're not using them.
    - There's some conversations happening for workforce housing. There's some state limitations. There have been a lot of suggestions that one of

the possible solutions is to convert some student housing to housing, but it's complicated. The university is sort of limited in what it can do. The conversations are least happening.

- The number of farmers leaving the business because of the difficulty. There are two farms that are having auctions this year. The ground isn't going to stay idle. I wonder if there's going to be anybody left to take it over or rent it.
- Some of it is just people aging out.
- Some of the land is getting consolidated or selling it for development.
  - Education – able to take care of own community
  - If the county's cut off, we have enough people that are able to organize when a disaster happens.

I looked at the county's EM website, it gives elements of the plan – and maybe if there was an emergency, it would have contact here, contact there. It just seems like this could be much more user friendly. In case of emergency, if you want to donate, contact here. If you want to do this, contact here. Aftermath, if your farm is affected by the smoke, who do you call? What is the process? What's the most logical place people are going to look?

Does the county have any system set up at all so if people wanted to have notification? 90% of the people have phones. Let's say there's a fire – Taylor bridge was bad, but someday, they're going to have dry lightning storm with wind behind it, is there any communication system like amber alerts? There was discussion – it may be too expensive to do it and keep it up. Maybe it ties back to Kittcoms upgrades. It seems like over the phone, we're getting more and more emergency alerts, and they're coming from different places. Sometimes you have to sign up for.

- Unfortunately, a lot of the fires and emergency news, I get through Facebook groups. Social media pages. Which if you're not on, you don't know.
- It seems like county's role is emergency management coordinate – that seems like the logical place for communications. Maybe they think they do already.
  - Challenge – perhaps this communication/coordination is more internal.
  - With the city, it seems to be these coordinated events for things like “we're going to fill up sandbags” shared on social media. Who is organizing this?
    - It would be great if that was better structured, communicated.

## **Funding**

- What's available so that we're not putting too much money toward a facility but rather a program. We have all this food and produce during the summer, what about educating people on how to preserve that food
  - There used to be a community kitchen, cooperative extension used to do things like this
  - Master Food Preserver on the West Side
    - The armory has a kitchen – too small to be a commercial kitchen for production

- The only commercial kitchen in the community is privately owned. There's a lot of nuances that if somebody is looking to use the commercial kitchen for production purposes, they have to use that address.
  - Fish Food Bank – commercial kitchen – they've rented this out, it's a restaurant style kitchen. From what I understand, they're looking for space to expand – possibly building next door. I would just think that since they're in the business of providing food – and tapping in sources of food where they can – maybe there's some ability to leverage what they do a bit. The ability to use local products would be great – i think there's some cost-saving.
  - There's a handful of shared use kitchens, but there are limitations to what they can be used for and if they have equipment/ability to process like producers need
- I've lived in communities that have had the equivalent of cooperatives
- What we see with Saturday markets is people buying products from other regions and selling it here.
  - To what extent is the farmers market enforcing the locally grown rules.
  - There was talk about year round market – talk about moving the farmers market to the fairgrounds. There was a little bit of local things done, and a whole lot of not local, and more crafts and other stuff. At least, that was an attempt.
    - There was also some discussion for market development, if there was a fire, because you do have some out of city limits producers/butchers, they also needed cold storage options. I think that's really important to look at the skill center as multifunctional center. It could be a coop, entrepreneurship growth, a lot of people are requesting bottling processing. Looking at a feasibility of a well-rounded piece.
      - Feasibility study – is it feasible from the center point (hub communication)? Could the center have multiple functions? Skilled trainings – that resiliency piece: the best way to not have land divided up is to make sure that the farms are viable and profitable. If you think about the next Taylor bridge – which i hope never happens, the chamber was receiving everything people was dropping off, we don't have the refrigerated space. If you had a center that could go into action from donation, we were getting dog food deliveries, etc. All at the basement door.
        - Including the meat locker, if i could rent space to butcher deer
        - There was talk on the volunteer stewardship program – state fundings available – one of the things i discussed was a portable mobile processing unit.
          - Okanogan county has a USDA certified one – so you could sell your products.
        - In the assessment, could we do an asset inventory of what is existing? If there is somebody already doing the

work, and they can expand the work with X investment. We don't want to come up with a grandiose idea and put them out of business. People that had been engaged already have existing businesses could expand. Are they at capacity? I think that's a good conversation to have with our businesses.

- Fish Food Bank facility at airport – will have significantly expanded cold storage space. Maybe not tons of space to use – a unique asset to inventory.
- Maybe there are people with open land that are wanting to fill in that market gap

### **Project – Feasibility Study and events**

The Chamber – we would be the local connection, but we would contract the feasibility study through a Request for Proposals.

- Help with continuity, aligns with Chamber priorities

Biomass feasibility – taking forest floor products, creating innovation center for investors

Advice as a consultant – 22,500 doesn't go far, scope should be concise and deliverables should be achievable