

KITSAP COUNTY STRATEGIC AGRICULTURAL PLAN AND INVENTORY



**KITSAP COUNTY
BOARD OF COMMISSIONERS
August 2011**

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EXECUTIVE SUMMARY

Residents of Kitsap County, Washington like the natural environment that surrounds them. The farms and farmlands signify important values. These farmlands provide economic and cultural benefits to Kitsap through the growing food chain. Local producers have dealt for years with questions of how and where to process their goods, sell them to consumers, avail their products to all and find the best ways to compost and recycle waste into livestock feed or fertilizer for crops. Kitsap County must focus on the complete food chain to ensure the future of local food production and the preservation of our farmlands.

Kitsap County has a long history of addressing elements of the food system through interactive roundtables, community plans, surveys of farm producers and other public outreach to the agricultural community. With the assistance of a \$25,000 grant from the Washington State Conservation Commission, Kitsap County has been able to combine and overlay these efforts into a strategic community-based agricultural plan. This plan, coordinated with the assistance of local agencies, professional partners, and citizens, provides the following material:

- Assessment of regional and local economic and activity trends for farming.
- Review of regional strategies for local use.
- Review of County regulations as they affect agriculture
- Mapping and inventory of farming properties prioritizing their value for farmland preservation.
- Strategic plan for future actions by Kitsap County and the farming community.

LOCAL FINDINGS AND ECONOMIC TRENDS

Despite a long agricultural history dating back to the 1800's, the influx of population associated with Kitsap County's military bases has impacted the agricultural economy. Whereas at one time, food exports from Kitsap County were significant, they no longer are. In fact, the current food economy is more than \$1 billion, and less than .1% of food is sourced locally. The population increase has created competing uses for rural lands traditionally used for farming. The effects of this and other changes has limited the amount of land dedicated to farming, the sizes of individual enterprises, the type of farm workers and the age of today's farmers. From these trends, the Plan delineates the following findings:

- Land available for agricultural uses has been shrinking.
- Farms have grown in number but reduced in size over the last 100 years.
- Economies of scale have been lost for farms as their sizes and the number of farmers reduced.
- Sources of support for farmland preservation and the local food system are not well-known throughout the community.
- New farmers, including youth, are important to the long-term growth of farming in Kitsap.
- Increased technical assistance opportunities are needed for farm management and the other food system sectors.
- Small farms can provide nutritious products and services tailored to the growing local community food system.
- Farms can increase the value of their products through modest value-added processing operations.

REGIONAL STRATEGIES FOR FARM PRESERVATION

Kitsap County is not entirely unique in its farmland preservation challenges. A look to neighboring jurisdictions and across the nation for preservation efforts is helpful. This Plan reviews multiple strategies including transfer of development rights, right to farm ordinances, agricultural zoning, land acquisition, current use tax program, technical assistance and other incentives. In many cases, diverse jurisdictions use different versions of a strategy. For example, the transfer of development rights programs of King, Snohomish and Thurston vary with King operating a complex bank with a strong marketing program, Snohomish uses the existing real estate community for the program and Thurston struggles with implementation and marketing. This analysis underscores the benefits of each program style for potential local use.

MAPPING, INVENTORY AND PRIORITIZATION OF FARMLAND

Kitsap County and its citizens have gathered multiple layers of information regarding the location and types of currently active agricultural uses. These include advertising farm businesses, properties in the Current Use – Agriculture property tax classification and site designated by the Kitsap Conservation District’s Agricultural Land Inventory. However, these efforts have not previously been aggregated in this way. The maps overlay the use types to show concentrations of activities with an agricultural focus. These concentrations combined with the locations of prime farmland soils formed 46 farming areas countywide.

The farming areas are prioritized using subjective criteria including density of agricultural uses, lot sizes and proximity to water service areas, watersheds and water quality hazard areas. Then the farming areas were designated a priority one for near-term Kitsap County efforts or a priority 2. Both will be used in future implementation of preservation strategies.

RECOMMENDED STRATEGIES FOR THE FUTURE

Kitsap County will pursue farmland preservation in many ways based on regional and local farming trends, the food chain coordination, the preservation strategies review from elsewhere, and the prioritized farming areas. The following strategies are recommended to assess viable ways to preserve farmland countywide and bolster the food chain:

- Expand Comprehensive Plan policies and development regulations regarding local farming and foods. These include adopting a right to farm ordinance, refocusing the transfer of development rights program and the review of other regulatory reform (e.g. on-farm processing and sales).
- Partner with local agencies that have related expertise (WSU Extension, Conservation District, Health District, and Farm Bureau for example).
- Facilitate coordination between farming communities and the seasonal and year-round workforce and educational internships.
- Expand access for local foods to schools, food banks, grocers and restaurants, and diverse neighborhoods.

- Provide technical assistance on agricultural best management practices, product branding, marketing and technology.
- Coordinate opportunities for responsible composting of agricultural waste products.
- Expand the marketing and application of Buy Local provisions to grow the local market for crops and animal products and support farmers' markets and other local sales outlets.
- Continue to enhance and update agricultural mapping and coordinate a survey of local commercial kitchens.
- Encourage collaboration between agricultural associations and producers on processing infrastructure.

Other strategies may apply through grassroots efforts with the farmers and producers in specific areas who know their geography and practices best. Local farmers could propose ideas for application in their area for review by Kitsap County and the public, including:

- Implement agricultural zoning.
- Acquire land or agricultural conservation easements for farming and food production
- Explore financial incentives (such as farm energy audits, tax incentives)
- Consider other regulatory reform (e.g. animal densities or setbacks).

Through these actions, Kitsap County will be able to grow the agricultural economy using the strengths of the local small farming community as they promote healthy local foods and preserve valuable rural lands.

INTRODUCTION

Kitsap County citizens ... envision a future in which natural systems are protected: the water quality in our lakes streams and Puget Sound is enhanced; the village character of some smaller towns is preserved; the historical natures of communities is respected in order to preserve our heritage for future generations; a diversified economic base supports good jobs, contributes to healthy downtowns in cities and offer affordable housing choices; and the rural appearance of the county is perpetuated.

- Kitsap County Comprehensive Plan, 2010

Residents of Kitsap County, Washington like the natural environment that surrounds them. Many facets of local rural character – and methods to preserve it -- were defined during a 2010 “Year of the Rural” initiative. The appealing rural qualities include “the abundance of trees, low-density development patterns, access to recreation, views of water, mountains, farms, and a quiet, unregimented atmosphere. “

Situated between metropolitan Seattle-Tacoma and the Olympic Peninsula, Kitsap County is bounded by the Puget Sound and Hood Canal. It is home to approximately 248,300 residents and the third most densely populated in Washington State, with a density of 627 people per square mile. The rate of growth has slowed over the past five years, as it has across the region. This pause provides a window for assessing community interest to preserve working farmland and a local food supply. Unlike other jurisdictions in the region, Kitsap County did not zone commercial agricultural lands following passage of the Washington Growth Management Act. Thus, many farms on large land parcels have been converted for other uses.

Farmland is still available in Kitsap County. The United States Department of Agriculture designated 15,294 acres of prime farmland soil -- either dry-soil or with irrigation. The 2007 Agricultural Census identified 664 Kitsap farm operations. Kitsap County government maintains a current use tax assessment program for agricultural lands, with 214 enrolled parcels totaling 2,169 acres. The Kitsap Conservation District has documented 1400 more farms as part of their ongoing County Watershed Inventory.



Further, the Kitsap agricultural base is diverse. Farmers grow an array of crops (horticulture, fruits, berries and vegetables; forage and grains; viticulture, vermiculture, forestry, aquaculture and animal husbandry). Over half of Kitsap County’s 2007 agriculture sales, valued at \$7 million, were horticultural products such as nursery, greenhouse, floriculture and sod. It is also noteworthy that Kitsap County growers are among the state’s leading producers of Christmas trees and sheep and their

products. The abundant water bodies supply significant fish and shellfish harvests and the forests provide huckleberry and salal greens for the florist trade as well as edibles such as mushrooms.

Despite the changing farm landscape, local foods are increasingly popular businesses, with eight farmers markets, six successful community supported agriculture programs (CSAs) and growing markets for on-farm produce as well as custom livestock and poultry sales. Yet, locally sourced foods represent less than one percent of the nearly \$1 billion County residents spend annually in the entire food economy.

There is a need for an agricultural strategic plan to preserve farmlands, even with the broad range of agriculture in the Kitsap County economy. The Kitsap code allows agricultural uses in rural and urban zones, but does not distinguish ways to preserve or enhance agricultural resource lands from other allowed uses.

Portions of a strategic agricultural plan have taken shape over the last two decades and now would benefit from being organized into a clear strategy. For example, a 1992 Rural Policy Roundtable explored timber and agricultural viability. A 2000 series of facilitated “Rural Land Policy Community Meetings” asked public preferences regarding agriculture via electronic polling. The findings from a 2006 Washington State University Kitsap Extension survey concluded that inadequate support networks and industries exist to enhance farming activities. A Kitsap Economic Development Alliance survey during 2008-09 sought information from farmers about the challenges and opportunities for agricultural vitality in the Kitsap County economy. The Kitsap Conservation District inventories farmlands, detailing the number of properties that support the agricultural economy. And a 2010 “Year of the Rural” initiative updated the rural element of the Kitsap County Comprehensive Plan and invited submission of policies that acknowledge contemporary practices and needs.



Recognizing the growing importance of a sustainable food system, the Kitsap County Commissioners created a Food Chain program in 2009 and a Food and Farm Policy Council (Council) in 2010. The Council members seek ways that Kitsap County can support and encourage local food production, distribution, and access. A strategic food system plan could provide the roadmap toward the success of these motivated agricultural supporters.

An inventory and plan is critical to moving local agriculture forward in Kitsap County. It provides a method to consolidate the results of previous efforts, clarify successful methods, and prioritize lands suitable for long-term sustainable farmland preservation.

A Washington State Conservation Commission Farm Preservation grant to Kitsap County helps us prepare such a plan by outlining four deliverables. They include:

- Assess Kitsap County economic indicators, outline farmland preservation options and future outlook for agriculture.
- Develop an inventory and mapping of existing and potential agricultural land.
- Establish a mechanism to prioritize land for agriculture and develop a database of landowners and farmers.
- Create strategies for preserving agriculture in Kitsap.

METHODOLOGY

This plan and inventory strives to establish avenues that protect valued farmland in Kitsap County. Diverse methods were used to answer the critical question: How can farmlands be sustained into the future?

The steps toward an answer include a brief local agricultural history and assessment of national, regional and local agricultural trends that apply to Kitsap County. Then, farmlands are mapped prioritized to delineate potential areas for preservation. The ultimate goal is recommended strategies and a plan for the long-term preservation of high-priority resource lands.

Brief History of Kitsap County Agriculture

A review of literature establishes a context for the Kitsap County story on how local farming has evolved from early settlement until today. Particularly good historical views are offered by the Washington State University (which established a presence in Kitsap County since 1917) and the 1956 Washington State Department of Agriculture “Report on Kitsap County Agriculture”. Additionally, soils data, beginning in the 1930s, explains the soil science of the area and language from past comprehensive plans express the important role of farming in the community.

The basis of the plan’s history was compiled with input from WSU Kitsap Extension, personnel from Kitsap County (Community Development, Natural Resources, and the Board of Commissioners’ Office) and members of the community. This report used US Census data as well as regional and local information to describe the changing demographics of Kitsap farming through the early 20th century.

The description of current agricultural conditions also drew from WSU Kitsap Extension as well as from a recent agricultural economic analysis and two community agricultural surveys.

The “hot topic” of food systems and locally-sourced foods is receiving attention nationally - indeed, worldwide - and within Kitsap County. Its relationship to agriculture is integral to this research and, therefore, will be a component of Kitsap’s literature review.

Resources:

Kitsap County Comprehensive Plan (2010)

Kitsap County Food and Farm Policy Chain, *Annotated Bibliography* (2010)

Kitsap Economic Development Alliance *Community Agricultural Survey* (2008-09)
Washington State Department of Agriculture *Report on Kitsap County Agriculture* (1956)
Washington State University Kitsap Extension *Kitsap County Farm Map* (200

Assess Kitsap County's Agricultural Economic Indicators and Trends

National and regional documents delineate trends to offer suggestions for Kitsap County farmland preservation. In combination with other regional data, Kitsap commissioned an *Agriculture Sustainability Situation and Analysis* report (Chase Economics), to describe the recent trends and implications for Kitsap. Also helpful is a 2009 *Community Agricultural Survey* completed by the Kitsap Economic Development Alliance Agriculture Working Group that established a baseline of current farming conditions and attitudes. Recent efforts of the Kitsap Food Chain and the Food & Farm Policy Council contribute a perspective of how agriculture relates to the broader food system.



Resources:

Chase Economics. *Agriculture Sustainability Situation and Analysis* (2011)

Cornell University Cooperative Extension. "A Primer on Community Food Systems: Linking Food, Nutrition and Agriculture."

Jennifer Curtis. "From Farm to Fork: A Guide to Building North Carolina's Sustainable Local Food Economy." (2010)

Sarah Hackney, Gorge Grown Food Network. *Community Food Assessment* (2007-2009).

Kitsap Economic Development Alliance (KEDA), *Community Agricultural Survey* (2009)

United States. *Census of Agriculture* (1997, 2007)

United States Census (2010)

Kitsap County Food Chain Program

Kitsap County Food & Farm Policy Council

Puget Sound Regional Council, Food Policy Council

Inventory Existing and Potential Agricultural Land

Multiple sources of data are available to review the types and quantities of agricultural activities in Kitsap County. These various data efforts are valuable independently but much more so when compared to each other through quality mapping. This data included farms currently advertising their products, properties in current use agriculture property tax status, those identified by the Kitsap Conservation District as part of the agricultural economy and soil types prime for farmland. Kitsap County utilized its Geographic Information System to accurately map these various data sources and inventory the properties included within them. Once mapped, this data was compared to each other to determine patterns and clusters of uses that may be focus future farmland preservation efforts. The inventory included important information such a site address, ownership, contact information as well as any available information regarding the type of agriculture included on each property.

Two key definitions to be used are:

Farm and Agricultural Land: Kitsap County defined farm and agricultural land largely using Washington State RCW 84.34.020 for this plan (See Appendix A). This clearly distinguishes farmlands from open space and timberlands. It includes the diverse nature of Kitsap County's agricultural economy while still encouraging farming that achieved some level of commercial focus (e.g. over \$1,000 earned per farm per year).

Small Farming: As documented in this plan, small farming operations less than 50 acres in size are predominate in Kitsap County. For the purposes of assessing current trends and developing strategies for farmland preservation, the Plan will primarily focus on farms between 1 and 50 acres in size.

Resources:

- Kitsap Conservation District. *Agricultural Land Inventory* (2010)
- National Cooperative Soil Conservation Service. *Soil Survey of Kitsap County Area, Washington* (1980)
- Kitsap County Assessor's Office
- Kitsap Community and Agricultural Alliance (www.kitsapag.org)

Evaluation Metric to Prioritize Land in Kitsap County

Boundaries were drawn around the groupings, or clusters, of uses called Farming Areas. Each was evaluated based upon additional criteria. These include the concentration of each type of farm within the boundary, the soils types it contains, the area's proximity to watersheds and Kitsap County Health District analysis (Pollution Incident and Correction areas), and the lot sizes. A subjective review of these criteria gave each area either a priority 1 or 2 ranking.

Resources:

- Kitsap County Assessor's Office, 2010 Assessor's Taxation data
- Kitsap Conservation District, *Agricultural Land Inventory* (2010)
- Kitsap County Department of Community Development - Geographic Information System
- Kitsap County Department of Community Development. *Watershed (WRIA 15) Map* (2010)
- Kitsap County Health District *Pollution Incident and Correction Map* (2010)
- National Cooperative Soil Survey. *Soil Survey of Kitsap County Area, Washington* (1980)

Strategies to Preserve Agriculture in Kitsap County

Kitsap County has conducted an extensive public outreach and participation program over the years regarding agricultural issues. These efforts have included Rural Roundtables in the early 1990's, KEDA's agricultural survey in 2009 and the "The Year of The Rural" initiative in 2010. Additionally, the County has met individually with stakeholders throughout 2010 and 2011 to discuss the plan's goals, data and mapping needs as well as potential strategies applicable to Kitsap. Specifically, Kitsap County planners have met with the Kitsap Community and Agricultural Alliance, Kitsap County Food and Farm Policy Council, local food banks and farmers markets and community supported agriculture (CSA) programs.

The draft plan and inventory was distributed to these stakeholders and community groups for full review prior to two public open houses held on June 14 and 15, 2011 in Central Kitsap and South Kitsap, respectively. These open houses provided opportunities for the public to understand the proposed plan conclusions and strategies and provide feedback prior to final draft preparation. For the full list of public participation opportunities see Appendix B.

Additionally, Kitsap County reviewed the development code for potential impacts to agriculture and incorporated recent information from the American Farmland Trust and American Planning Association regarding national and regional agricultural program examples. Sources such as the Washington Department of Agriculture and other counties also contributed concepts with more specific applicability to the Kitsap region. These strategies include transfer of development rights, agricultural zoning, property acquisition, incentive programs and regulatory reforms.

Resources:

Tom Daniels. *"Farms and Farmland" Planning* (August/September 2009)
King County. *FARMS Report: Future of Agriculture: Realize Meaningful Solutions* (December 2009)
Kitsap County Rural Policy Roundtable. *Recommended Policies* (1992)
Washington State Department of Agriculture. *Census of Agriculture (2007)*
Washington State Conservation Commission. *Washington State Farmland Preservation Indicators* (December 2009)
Kitsap County Food Chain Program
King, Snohomish, Thurston, Pierce and Clark Counties
Puget Sound Regional Council
Municipal Research and Services Center

AGRICULTURE IN KITSAP COUNTY

Farming – From Early Settlement to Today

The Kitsap Peninsula was home for many Puget Sound native peoples. These tribes inhabited the various inlets located within the County, some permanently and some seasonally. Tribal food supplies came from the fresh and salt-water resources and the upland forests provided abundant aboriginal food supplies. The Port Gamble S'Klallam and the Port Madison Suquamish Tribes remain today. Suquamish Chair Leonard Forsman says, "The Tribe's history, symbolized by clam diggers, fishermen, basket makers and loggers, is in the landscape."

Non-native settlers arrived on the Kitsap Peninsula in the late 1850s, and quickly made timber an important industry. The Puget Sound Naval Shipyard opened in Bremerton in the 1890s and became a significant employment center. By 1900, wide swaths of timber had been harvested. When the timber interests moved on, large patches of logged-off stumpage were homesteaded. The auditor's report in 1858 listed twenty-seven "meat" cattle, five sheep and six hogs as the total livestock at the mill company in Port Gamble (WSU report, 1975).

The previously forested lands were rich with glacial till—ideal for farming. The marine climate and moderately low elevations supported agricultural activities with poultry, livestock, berries and forest products such as Christmas trees and holly. Until the 1930s, transportation for distributing these products was mostly via the small boats and vessels that plied the Puget Sound as the “*Mosquito Fleet*,” shipping farm produce to cities across the Sound and beyond.

The Puget Sound Naval Shipyard grew during the Spanish-American and World Wars I and II, and Kitsap County experienced rapid population increases as a result. The war efforts further expanded the role of farming in Kitsap as many new farmers planted crops specifically to assist in the war effort. These ranged from urban plots to expansive rural “Victory Gardens” to supplement the food supply during the war. Even 4-H youth tended large garden projects – in 1946, at least club 70 teens had gardens than 1500 square feet. One South Kitsap resident remembers their family had “a lot of garden,” extending from right beside the road back to a 25-tree orchard of apples, pears, peaches, plums and pears. She recalls everybody in the neighborhood “raised everything we needed to eat except what the climate couldn’t grow,” and canned summer’s bounties to last throughout the year (Moore’s Interview 2007).

After conclusion of World War II, Kitsap’s population continued to boom, reaching 84,700 people by 1955. Most of the residents still lived in the countryside while only 41% resided in cities. Table I illustrates the County’s population growth from 1860 to 1950 as farm sizes ranged from large (90 acres) to moderate (30 acres) in size. During the 1960s, small farms began to disappear across the United States as agricultural industrialization advanced. Kitsap County felt these impacts, too. In fact, the number of farms in Kitsap decreased by 71% while Western Washington lost 49%! These numbers reflect the 278 Japanese-American residents of Bainbridge Island, mostly strawberry farmers evacuated by order of the United States government.

**Table I. Population growth and distribution
1860-1950**

Census Year	Population	Percent Rural	Percent Urban
1860	544	100	0
1870	866	100	0
1880	1,378	100	0
1890	4,624	100	0
1900	6,767	100	0
1910	17,647	83.1	16.9
1920	33,162	73.1	26.9
1930	30,776	67.0	33.0
1940	44,387	65.9	34.1
1950	75,724	62.2	37.8

Source: 1956 Kitsap County Agricultural Report

The growing local population brought enhanced water and road transportation services, as well as more agricultural supports. Cooperatives had long been a popular resource. The first “Farmers’ Union” had organized in Silverdale in 1889 to buy feed. Subsequently, more cooperatives and associations proliferated to share research, processing, and marketing skills.¹ The agricultural support included such functions as processing centers, advocacy associations, as well as marketing and education. This improved food network gave more local, regional

¹ Washington State University Kitsap Extension lists, for example: Kitsap-Mason Dairymen’s Association, Kitsap County Fair Association, Kitsap County Livestock Association, Kitsap County Dairy Herd Improvement Association, Evergreen Breeders Association, Washington Cooperative Hatcheries, Washington Cooperative Chick Association, Washington Croft Lily Growers Association, Washington holly Growers Association, and the Washington Farm Forestry Association.

and national access to Kitsap products. In particular, large-scale berry (e.g., strawberries, cranberries, cane berries) and dairies were locating in the Poulsbo and Bainbridge Island areas of North Kitsap. Forest products predominated in South Kitsap and the Hood Canal area.

Farm Size and Type

Farming activities began to transition in the 1950s and 1960s with increased employment opportunities and population. The major changes were in the form of farm size and type of production. Table II gives a

Table II. Employment type - 1950

Type of Employment	Total Workers	Percent of Total
Agriculture	1,155	5.1
Forestry and Fisheries	491	2.1
Mining	22	0.1
Transportation	804	3.5
Construction	1,219	5.3
Retail/Wholesale	3,949	17.3
Miscellaneous Services	4,558	20.0
Government	9,659	42.3
Total	21,137	100.0

Source: 1956 Kitsap County Agricultural Report

snapshot of employment types during 1950. In particular, there were 9,659 government jobs, while agriculture retained only five percent (5%) of the County employment.

As more of the local workforce moved to other employment, farm sizes in Kitsap County also changed. Table III illustrates that a total of 1,104 new farms were created from 1900 to 1954. However, these farms went from an average of 72 acres in 1900 to 28 acres in 1954. The majority of 1950s agricultural activity took place on multi-purpose farms, which typically were a combination of dairy, poultry and fruits or other farming specialties seen in Table IV.

Evolving farm types and sizes, then populations shifting to urban employment activities, were the first steps toward a new stage of farming – and small farming now defines Kitsap’s agricultural landscape.

Table III. Farm size 1900-1954

Year	Total Farms	Total Acres	Average Farm Size (Acres)
1900	446	29,132	72
1910	950	42,332	65
1920	1,535	43,885	45
1925	2,359	51,453	28
1930	1,557	38,367	22
1940	2,102	46,196	25
1945	1,758	38,162	22
1950	1,792	46,031	26
1954	1,550	42,677	28

Source: 1956 Kitsap County Agricultural Report

Table IV. Type of farming – 1950’s

Type of Farms	Amount	Percent of Total
Field Crop	0	0.0
Vegetable	5	0.3
Fruit and Nut	60	3.9
Dairy	80	5.2
Poultry	120	7.7
Livestock	40	2.6
Miscellaneous	1,241	80.0
Total	1,550	100.0

Source: 1956 Kitsap County Agricultural Report

Agricultural Demographics and Trends

A changing demographic profile and economic conditions has shifted the once dominant rural dairy, poultry and fruit farming production efforts into a small farming food network. A look at trends in farming and the food system since the 1970s also provide a glimpse of future possibilities. This review of the regional and local trends include population and income, employment and farm presence, sizes and sales information (see Appendix C). An emerging trend – to consider farming in the context of a food system - promises to heighten awareness of farming and farmland preservation.

Population and Income

Kitsap County’s population has grown an annual rate of 2.2 percent since 1960. This is well above the statewide annual average of 1.7 percent. Today, Kitsap County is the sixth most populated county in Washington State with 251,133 people. It has been among the fastest growing central Puget Sound counties and predicted to grow at 1.18 percent per year through 2030; a net gain of 66,300 additional residents for a total of nearly 315,000 people.

As the population rose, so has income, shown in Figure 1. Between 1999 and 2010, Kitsap County’s median household income increased an

average 2.43 percent a year, compared to the national inflation rate of 2.2 percent

for other counties. By 2008, median household income in Kitsap County surpassed Washington State median household income for the first time.

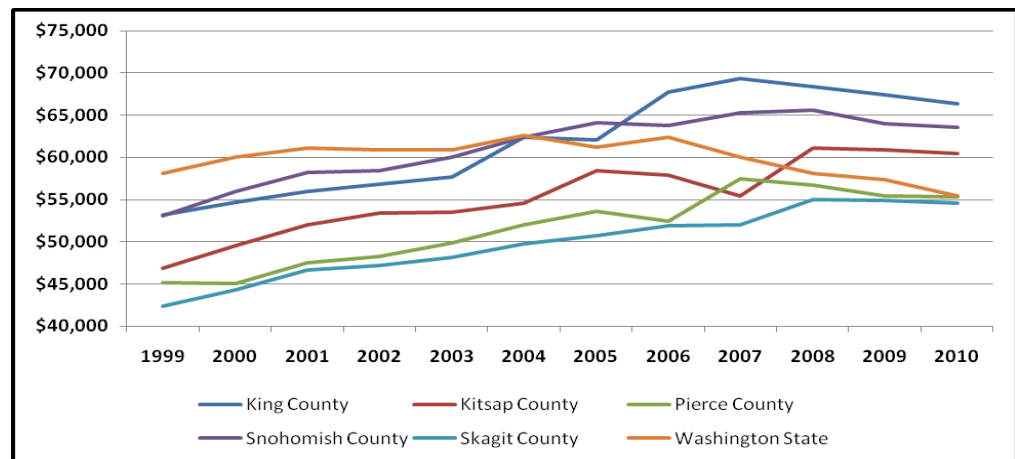


Figure 1. Median household income, Kitsap and other central Puget Sound counties, 1999-2010

Sources: US Bureau of Economic Analysis; Chase Economics.

Employment

Kitsap County is home to the Puget Sound Naval Shipyard, Bangor Submarine Base, and the Keyport Undersea Warfare Research Station. During the height of the Cold War in 1970, these United States government facilities accounted for more than half of Kitsap County’s total employment of 45,200. By 2009, these facilities employed one of every five workers in the county workforce. This employment shift has redirected household efforts toward a new era of employment types.

Local employment nearly tripled between 1970 and 2009 (see Figure 2). Total employment in 2009 was 129,113, a slight decline after a decade of growth. Since

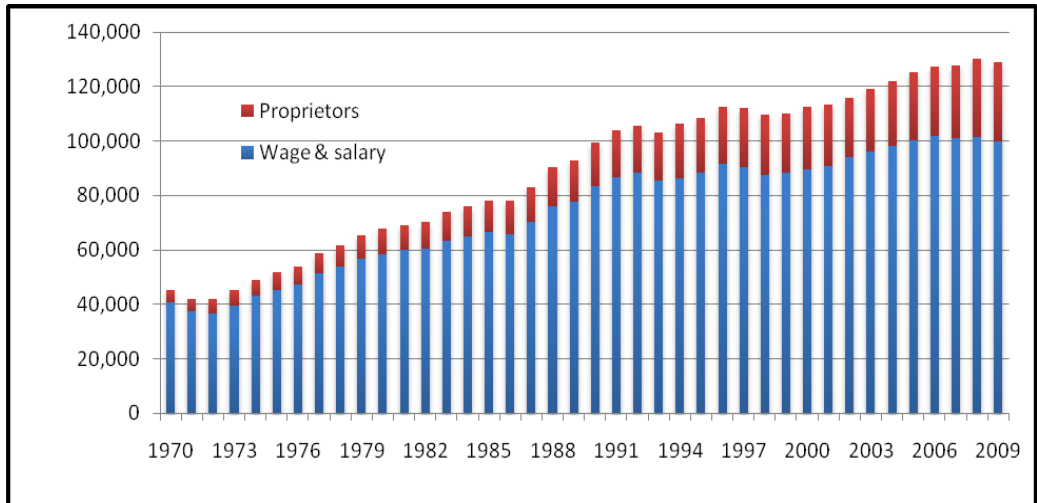


Figure 2. Total employment in Kitsap County, 1970-2009

Sources: US Bureau of Economic Analysis; Chase Economics.

1970, the growth has averaged 2.6 percent per year; with growth in proprietors (particularly non-farm) more rapidly at 4.8 percent annually.

Significant structural changes have occurred within the Kitsap County economy, along with those of federal government enterprises. As the federal employment growth languished, it impacts demands for other employment sectors. Private sector businesses added employment at 4.3 percent annually. In particular, services and finance, insurance and real estate registered strong annual gains of 5.0 percent and 4.3 percent, respectively. Many of the military's auxiliary employers are experiencing an increased need for services.

Figure 3 shows the distribution of total employment across nine industries between 1970 and 2009. Health care and professional services are the dominant drivers within the services sector. Trade, construction, and finance, insurance and real estate groupings grew slightly in proportion over the time period. Natural

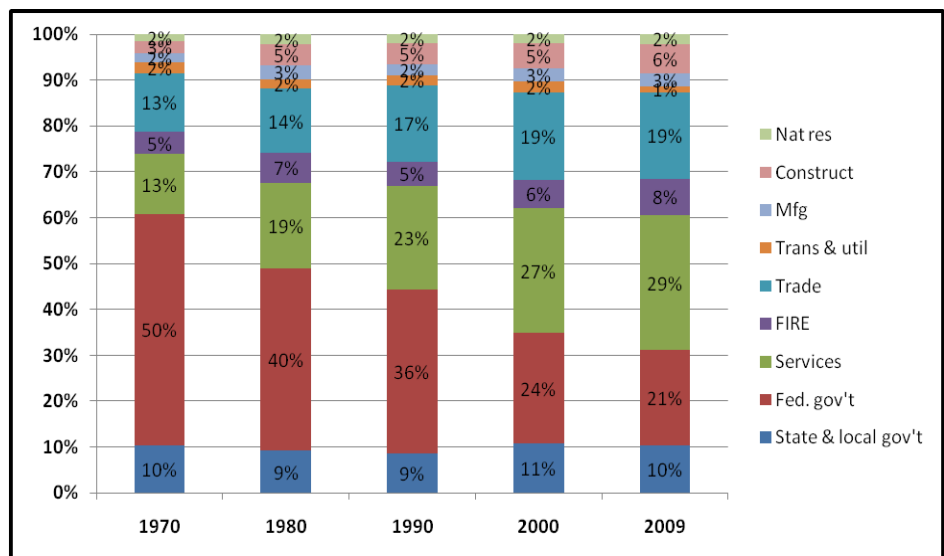


Figure 3. Distribution of Kitsap County employment by broad sector, 1970-2009

Sources: US Bureau of Economic Analysis; Chase Economics

resources (containing agriculture, forestry, fishing and mining) and manufacturing maintained a small share of Kitsap County employment.

It remains to be seen if this is a sign of Kitsap County’s economy again shifting from government centric to a more diversified employment base – and the impacts to the agricultural system.

Overall farm employment tends to be modest but trending upward in Kitsap County. Wage and salaried workers (i.e., hired laborers, no proprietors) in agricultural production and support activities numbered around 100 each year between 2001 and 2009.

Farm employment is comprised of proprietors and hired workers. Nine out of every ten Kitsap farm workers are farm proprietors—of the 2008 total farm employment of 667 workers, 618 were proprietors and 59 were hired laborers (Figure 4). Farm operators in Kitsap County need fewer year-round hired hands as the shift from livestock to crop production occurs.

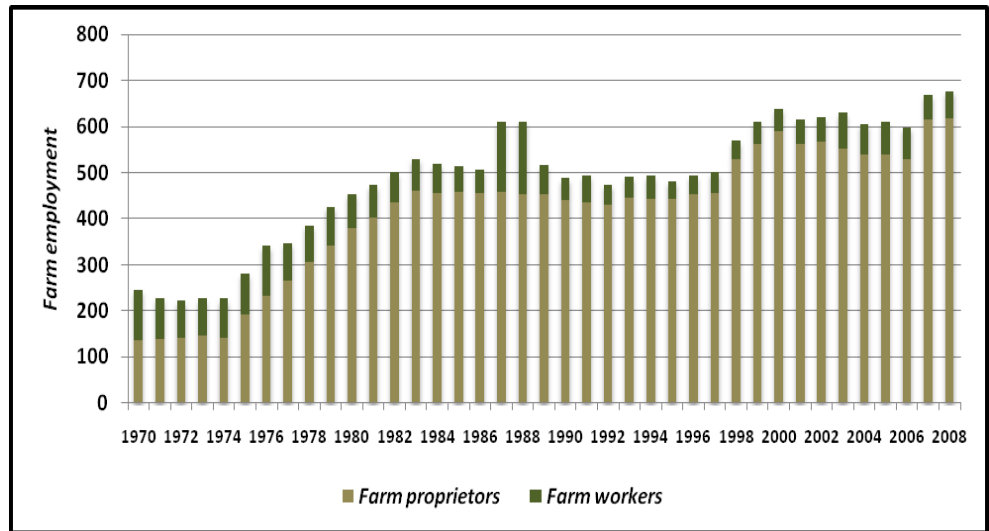


Figure 4. Farm employment in Kitsap County, 1970-2008
Source: U.S. Bureau of Economic Analysis.

Ancillary and value-added agricultural activities are limited in Kitsap County at this time. These include, for example, farm implement suppliers, food and beverage processors and farm supply and grocery wholesalers. Other than grocery wholesalers, these ancillary businesses lack a critical mass of agricultural producers to flourish.

Farms

The 2007 *Census of Agriculture* reported 664 farms in Kitsap County, representing a 61% increase from the 404 farms reported in 1987. A steady decline in farm numbers from 1987-1997 was followed by a rapid gain from 1997 to 2007 (see Figure 5). This may relate to the growing employment opportunities with military facilities that started in the 1970s.

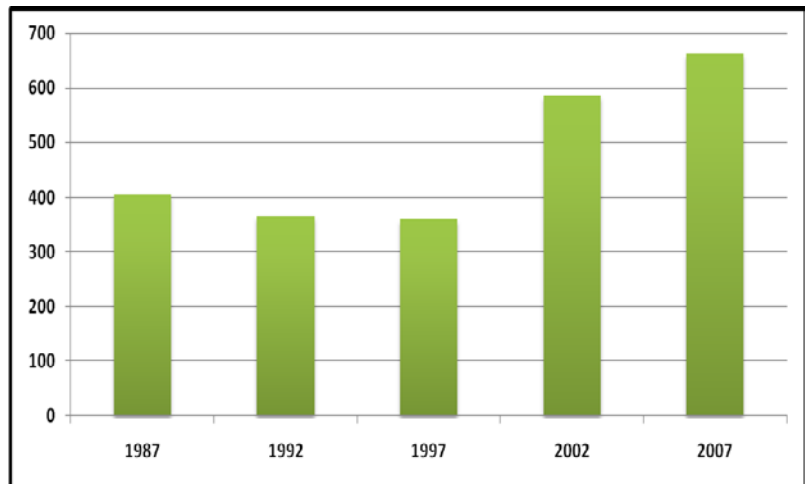


Figure 5. Kitsap County farms, 1987-2007
Sources: *US Census of Agriculture*, 1987, 1992, 1997, 2002, 2007

As stated, Kitsap County is dominated by small farms. Table V illustrates that nine out of every ten farms in Kitsap County average less than 50 acres. The statewide picture is different with six of every ten farms smaller than 50 acres.

Virtually all local growth in farm numbers between 2002 and 2007 was small farms. This trend may

Table V. Farms and farm size, 1987-2007

Kitsap County	1987	1992	1997	2002	2007
Farms (number)	404	366	359	587	664
Land in farms (acres)	9,576	10,302	19,129	16,094	15,294
Average size (acres)	24	28	53	27	23
Farms by size grouping					
1-9 acres	164	143	136	291	315
10-49 acres	193	184	168	235	291
50-99 acres	34	24	28	34	33
100-259 acres	11	12	22	23	22
260-499 acres	2	2	3	1	1
500 acres or more	0	1	2	3	2
Puget Sound Region	1987	1992	1997	2002	2007
Farms (number)	4,603	3,901	3,578	5,183	5,572
Land in farms (acres)	204,285	185,495	172,238	183,699	189,093
Average size (acres)	44	48	48	35	34
Farms by size grouping					
1-9 acres	1,560	1,320	1,190	2,012	2,303
10-49 acres	2,078	1,786	1,640	2,340	2,498
50-99 acres	468	373	349	419	355
100-259 acres	369	293	286	311	304
260-499 acres	91	81	71	63	68
500 acres or more	37	48	42	38	44
Washington State	1987	1992	1997	2002	2007
Farms (number)	33,559	30,264	29,011	35,939	39,284
Land in farms (acres)	16,115,568	15,726,007	15,179,710	15,318,008	14,972,789
Average size (acres)	480	520	523	426	381
Farms by size grouping					
1-9 acres	6,040	5,408	5,195	7,482	9,211
10-49 acres	11,362	10,115	9,727	13,187	14,790
50-99 acres	4,070	3,721	3,564	4,213	4,147
100-259 acres	4,714	4,183	3,990	4,420	4,603
260-499 acres	2,228	1,968	1,834	2,029	2,036
500 acres or more	5,145	4,869	4,701	4,608	4,497

Note: The Central Puget Sound region is comprised of King, Kitsap, Pierce and Snohomish Counties.

Sources: US Census of Agriculture, 1987, 1992, 1997, 2002, 2007

reflect the growing Kitsap County government sector employment compared to the region and its salary base.

Farms over 500 acres in size have grown slightly over the last decade (2 new farms), though the number of farms from 50-499 acres has decreased sharply. It follows that farm acreage size does influence income. Table VI shows how much small and large farms in Kitsap County differ in commodity income, comparing farm size categories according to annual market sales in 1997, the last year the *US Census of Agriculture* reported this statistic.

Table VI. Farm size and commodity sales in Kitsap County, 1997

Farms by size	Sales of \$10,000+		Sales of - \$10,000		Total farms
	Farms	% of total	Farms	% of total	
1 to 9 acres	25	18.4%	111	81.6%	136
10 to 49 acres	29	17.3%	139	82.7%	168
50 to 69 acres	3	25.0%	9	75.0%	12
70 to 99 acres	2	12.5%	14	87.5%	16
100 to 139 acres	3	25.0%	9	75.0%	12
140 to 179 acres	2	25.0%	6	75.0%	8
180 to 259 acres	2	100.0%	0	0.0%	2
260 to 499 acres	2	66.7%	1	33.3%	3
500 acres or more	2	100.0%	0	0.0%	2
Total	70	19.5%	289	80.5%	359

Source: *US Census of Agriculture, 1997*

While most farms are in the rural parts of the County, 20% are in urban or suburban areas; 14% are inside a city boundary and 7%, on a city lot or backyard. For two-thirds of the operations, at least one owner works full-time away from the farm. This employment is often necessary for additional income and health care insurance.

Based upon the 2007 Census of Agriculture, most local farmers raise both crops and livestock. 73% raise animals

for personal or commercial use: 48% raise poultry, 24% horses, 18% goats, 17% ducks, 17% sheep, 16% beef cattle; 14% bees, 14% llamas, and 12% raise pigs. Over half (58%) grow fresh produce for sale, trade, or processing (nearly 100 different crops are cited) and 22% process their produce (cider, pickles, salsa, etc.). 42% grow non-food crops, like hay, nursery stock, or Christmas trees.

A range of venues is used to connect products to customers. 43% of Kitsap farmers sell directly from the farm. Other popular methods include sales to other farmers (24%), farmers markets (23%), festivals & events (17%), restaurants (13%), Internet (13%), community supported agriculture (12%), U-Pick from the field (12%), and at auction (10%).

Three-fourths of those with a farm or ranch follow organic practices, although only a few are “certified” organic. Nearly all who raise poultry say the birds are cage free and half say the eggs they sell are organic. There are other examples of farmers’ concern for health in this report, both in the environment and their long-term farming operations. A large number of farmers would like to see their property continue as a farm after they retire. This long-term vision promotes practices that preserve and even

enhance the soil quality and protect the environment. The farmers express a strong interest to improve their knowledge of soil management and sustainable farming and ranching practices.

The Kitsap 20/20 Action Plan identifies local agriculture as a key economic sector. The route to achieving success coincides with the goals of many individual farmers, and especially commitments to healthy food and care of the land. Kitsap’s farmers want greater public awareness and promotion of local foods and broader opportunities for the future of agriculture.

Kitsap County has a market for over one billion dollars in purchased food, and less than .1% of that is locally grown. A modest increase in this percentage would mean millions of additional dollars to local producers and County’s agricultural economy. Strategies to expand processing, distribution, access and composting are key to the achievement of this goal.

The Emerging Subject of Food Systems

A movement has emerged in recent years to improve the food system. Whether considered “slow food,” a “food chain,” “food security” or “buy local,” an emphasis is placed on a broad view of food and the relationships along the way, from growers to eaters. This food system maximizes community self-reliance and involves the interrelated qualities of producers, processors, distributors and consumers of food.

While producing food is essential, it joins with the other important functions to make up the complex food system shown in Figure 6.

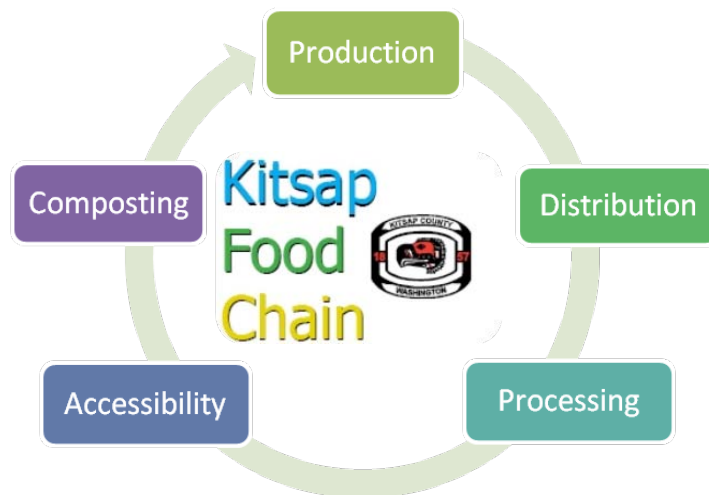


Figure 6. Kitsap Food Chain

The interlaced aspects of the food system help Kitsap County better understand and promote land preservation’s role. Production must be located, sized and networked adequately with facilities that process, distribute, and connect food to diverse consumers of the community. This synergy is needed for a community such as Kitsap to sustain an agricultural system that benefits the county as a whole.

Some of the small farm operators have voice concerns about land use issues beyond production, as the suppliers and agricultural support services have waned in recent decades. Similar concerns are also documented nationally (see, for example, Sarah Hackney’s *Community Food Assessment* and Jennifer Curtis’s “From Farm to Fork: A Guide to Building North Carolina’s Sustainable Local Food Economy”.)

Production

Nature and humans work together to produce abundant agricultural yields. Production depends on land availability to grow crops or plant products and/or raise livestock or other animals. Agriculture also needs full or partial growing/raising cycles for the product being cultivated (e.g. seeds to starts, seeds to crop, newborn to adult). Human research and analysis must consider the impacts of governmental regulation, labor, and farming infrastructure, and diverse advocates are vital to shape successful production.

Land Availability. The subdivision of rural lands in the 1970s and 1980s opened the potential to use agricultural lands for alternative purposes like low-density residential subdivisions. These options dramatically increased the price of acreages, making it harder for farmers to continue or expand their operations. The 2009 survey found that 25-35% of farmers say this is an obstacle.

Limits of Small Farming. As farms become smaller, they lose certain economies of scale that benefit larger operations. Not only are farmers’ resources tested for dealing with such circumstances as weather and poor growing seasons, but also their abilities to acquire new equipment as technology evolves, or to expand their operations with new land and infrastructure.



Agriculture can be facility and equipment intensive, depending on the product and the size of operation, and ownership – either by individual farmers or a group of farmers in a cooperative arrangement. In a recent survey, farmers responded that they plan to grow their operations over the next few years; nearly half plan to purchase equipment to increase production.

New facilities and equipment offer the potential to increase the efficiency of farm operations. They may enable year-round farming or the processing of raw farm goods into value-added products with greater sale value. Examples include:

- Greenhouses, hoop houses & high tunnel houses: Over half of farmers have considered or are currently implementing expansion plans to obtain additional covered structures whether on-site or as part of a community co-op.
- Produce processing facilities & equipment: Local farmers are interested in produce washing lines and strongly encourage a centrally-located cold storage facility for produce.

- Animal processing facilities & equipment: While quite costly, local farmers and agricultural groups are exploring a livestock slaughter facility, an increase in the number of rental options for mobile poultry scalders/pluckers and/or a local mobile poultry slaughter unit.

Small farming is unique. A strong knowledge of soil science, livestock husbandry, pest management, environmental protection and machinery is crucial. As business owners and entrepreneurs, farmers must understand the regulatory environment and learn sales and marketing techniques. Farmers must know the relationship between the elements of the food system to manage their production activities and also be familiar with aspects of processing and distribution.



Advocacy. Organizations have formed in recent years to address local issues. For example, the Kitsap Community and Agricultural Alliance, Kitsap Poultry Growers Association, Puget Sound Meat Producers Cooperative, and community supported agriculture (CSA) efforts have helped many small farms coordinate farm activities, as well as sharing equipment and information on market demand and sales opportunities. However, these efforts need to be promoted through increased farmer participation and funding.

Regulations. A range of government rules impact what farmers grow and where they grow it. State and federal regulations guide how products are processed, packaged, labeled, and sold. The regulations exist to protect the environment and consumers, but nearly 40% of survey respondents say small farmers need less onerous rules that are more sensitive to small operations.

One example of this conflict is local production and sale of meat. Only meat slaughtered and cut at a USDA inspected facility can be retailed by the cut. Such products are preferred by the consumers and more profitable to the farmers than the whole animal. Yet the regulations required of such a facility necessitate substantial financial capital and guaranteed levels of meat to be processed. A streamlined regulatory environment that acknowledges the limits of small farms may allow local farmers to ramp up production of chickens, pork and beef, and supply enough to make a processing facility financially viable -- which, in turn, promotes increased meat production. They would welcome a similar flexibility in permitting mobile processing units for poultry, pork and beef to that currently shared by six counties in the region.

Other regulations and licenses that can benefit distribution and sale of local farm products are organic certification licenses for egg handlers and milk producers. Education and training may encourage farmers to obtain appropriate licenses and thus allow these sectors of the agricultural economy to thrive.

Labor. Many Kitsap farms are run by property owners or proprietors as a second source of income, which limits the size and scale of their operations. The ability to find trained staff for farm work is

limited in Kitsap County and the salaries are unlikely to be cost-effective for a small farm. Over a quarter of survey respondents feel this is an obstacle to farm expansion. While some local farms are using interns, greater coordination with workforce development and educational outlets may provide additional seasonal labor opportunities.

Processing

Value-added products are an increasing market for Kitsap County. Over 20% of survey respondents process their produce into baked goods, preserves, cider, dried or frozen fruit, dried herbs, sauces, salsas, and vinegars, for example. Such products increase the value of the crops or animals raised locally, and in some cases boost agricultural productivity during the non-growing months.

Processing produce, meats and dairy can be complicated due to health and safety regulations if they are to be sold to the public. Unless an approved facility is built on the farm, a commercial kitchen or other approved processing plant must be used. Locating such functions in rural areas requires additional water capacity for processing and cleaning, which may also require a public water right from Washington State (which can be a decade-long, arduous process for a farmer to pursue on his/her own). Fortunately, Kitsap County has multiple water providers throughout the rural areas with existing water rights that the farmers or cooperatives can obtain at a fraction of the time and cost.

Another viable option currently being offered in Kitsap is the use of temporary processing facilities for cleaning and packaging produce and animal products. These opportunities such as mobile poultry processing units are limited but provide farms the option to process on-farm, reducing transportation costs and often increasing the value of the products (a goat may be worth less than the goat milk, or cheese produced from it). Currently, per local regulations, temporary processing facilities are only allowed to serve the farm where they are located. A shared facility would be a valuable tool, particularly for small farms that do not produce enough to justify locating it on their own property.



Farmers can also cultivate relationships with local restaurants, colleges or other community facilities to use their commercial kitchens. Location, however, is key for the utility of these kitchens. Interest is especially high in the South Kitsap area extending to Belfair and Gig Harbor. A thorough survey of local commercial kitchens is underway by the WSU Kitsap Extension Small Farms Team, and will provide a useful source of information to the agricultural community.

Additionally, producers must work with composters and waste management operations to address the byproducts of processing their crops and animals. Many waste products can be easily composted nearby. Others such as grape residues from winemaking are not as easily composted and must be carefully disposed of at special facilities. Often this efficiency of waste reuse can assist a farm in reducing its ongoing operation costs.

Distribution and Sales

Marketing the products to customers either directly or indirectly provides a monetary return to the producers and processors. Distribution can occur through multiple wholesale or retail avenues from on-farm sales to bulk distribution to grocers.

Most producers sell their own products and cite nearly 20 sales methods for delivering their goods to consumers (KEDA Community Agricultural Survey, 2008-2009). Farmers typically use more than one method and each approach offers its own challenges.

Much could be done to help farmers understand the nuances of marketing to different outlets, and the following examples shown an estimated availability for each:



On-Farm (almost 50%)

Almost half of all respondents sell their produce, meats or value-added products directly out of the home. Meat sales often use this method due to current regulations. Customers include the public as well as other farmers and ranchers. This is preferred as the primary sales avenue for beginning farmers and will likely continue after farm expansion due to the loyal customer bases.

Farmers Markets (almost 25%)

Kitsap County has eight farmers' markets -- in Bainbridge, Bremerton, Kingston, Olalla, Port Orchard, Poulsbo, Silverdale and Suquamish. Farmers' markets offer a cost-effective point of sale to the local community, stimulate networking between producers and increase their product exposure. Almost a quarter of survey respondents use local and regional farmer's markets to sell their products, especially produce. Market vendors encourage more promotion (road signs, newspaper advertising and flyers) and covered sales areas to help combat the consequences of uncertain weather. A permanent year-round facility would also increase farmer's participation in local markets.



Wholesalers or Distributors (8%-16%)

Few Kitsap farmers sell to wholesalers or distributors. The percentage is slightly higher (16%) among those that limit their business to animals, where success is often based on volume of product and limited by the small farm nature of Kitsap.

Local Restaurants/Hospitals/Schools (13%)

Chefs are most concerned with the quality, availability, appearance, safety and price of the products they use. Some want local products on their menus to enhance a “local/fresh” image, or just to find fresher products from a local source. Rather than purchasing staple items they use every day, they tend to feature specific items. Farmers’ success in selling to restaurants requires close communication to determine and predict their seasonal needs and building a partnership with the buyer or chef.

Online (12.5%)

Online sales are a growing opportunity for small farmers and survey respondents indicated a significant interest in this method. While some farmers have their own websites for sales, most use existing sales forums such as Craigslist to sell meat or livestock.

Community Supported Agriculture (CSA) (10%)

The local community supported agriculture programs allow small farmers to pre-plan seasonal crops and even coordinate with each other. Non-farmers can participate in the agricultural economy through subscription payment or labor in exchange for food shares they receive at regular intervals. The CSA model is attractive for small farm communities like Kitsap. About a fifth of survey respondents are interested in training on establishing a CSA either through formal outlets or online.

Grocers (less than 10%)

The grocers who tend to buy local products are health food stores, food cooperatives, and specialty stores. Grocers look for high-quality attractive products but cannot pay retail prices to include them in their stores. They also expect consistent on-time delivery, dependable supplies of product and reasonable shelf life. As unique customer markets and the slow food movement continue to grow, their interest may increase. Locally-based grocers such as Town & County would view their farm products as an attractive option if Kitsap entrepreneurs organized a cooperative for cold storage, cleaning, packaging and distribution. Town & Country representatives have expressed interest in working with Kitsap farmers to create such a cooperative.

Composting

The unused food byproducts (e.g., manure, compost or excess crop materials) can be recycled. This practice is efficient, reduces costs to farmers and benefits the environment. Recycling activities can be conducted on-farm or through centralized storage and distribution facilities.



A growing composting community in Kitsap County networks through community associations, individual farmers and commercial topsoil companies. For example, Emu Topsoil started out by using the manure from their emus to produce topsoil, but now has grown to accept waste from multiple farms throughout Kitsap. The Kitsap County Solid Waste division has established multiple partnerships with local and

regional operations for the composting of agricultural materials and yard waste. This program, in concert with the Kitsap Conservation District, is a component of the County's WasteWise program. Increased networking opportunities between producers, processors and distributors are necessary county- and region-wide to expand the responsible disposal and reuse of agricultural products.

Energy Efficiency in the Food System

With the size of farms in Kitsap, efficiency in operations is an important factor in current activities and expansion plans. Regardless of their location of the food chain, all activities are dependent on some form of energy and resource consumption. The convenience and cost of electrical power, fossil fuel needs and water usage drives the activities' financial bottom lines. Improvements in farming equipment and structures such as tractors, barns, greenhouses, irrigation systems, processing facilities and planting machinery can greatly increase a farm's productivity while reducing its energy consumption.



Kitsap County currently provides funding for energy audits of farms, processing facilities, sales outlets food banks and other elements of the food chain. These assessments can improve existing operational energy efficiencies and propose options for future expansion. Additionally, Kitsap has funded no-till farm equipment for rental to farmers and use on County facilities. Educational opportunities for using this equipment will highlight the resource conservation benefits of this technology.

Summary: Food Chain Trend Evaluation

Kitsap County's agricultural framework is transforming. This is influenced by a shift in local employment emphases, increased population density countywide, and declining large-scale farm activities. Half of the farms are smaller than five acres; the average is around ten. Although many are small, their collective impacts – the number of people employed, what they produce, the goods and services bought from local suppliers, and the taxes they pay – are a significant segment of the local economy.

Kitsap County's systemic approach considers community sustainability – for the economy, environment and people. These trends are basic to design strategies for farmland preservation:

- Retain available land for agricultural uses.
- Share information about sources of support for farmland preservation and the food system.
- Encourage new farmers, including youth.
- Emphasize economies of scale for businesses as well as individuals occur by expanding food system sectors.
- Increase technical assistance opportunities in multiple areas of farm management and connect with all food system sectors.

- Provide nutritious products and services tailored to the growing local community food system, which can easily be done by small farms.
- Extend availability of foods with value-added products and modest processing operations.

The food system approach helps specify strategic areas for action to strengthen farmland preservation and farming in Kitsap County. The following ideas are for production, processing, distribution, access and composting:

Addressing the land available for farming is a chief goal to promote Kitsap production. It is also important to review local access to supportive facilities and equipment as well as potential barriers such as governmental regulations and labor. Encouraging advocacy actions can assist in raising awareness of local farming and foods.

To encourage processing to add value and even shelf-life to products, there needs to be clarity about conveniently located spaces and processing requirements. Research is underway to determine where existing commercial kitchens are in the County. More communications about processor needs and legal requirements for food handling, cleaning, and waste management are recommended.

Kitsap producers rely the most on on-farm sales to distribute the foods they produce, followed by farmers markets. The distribution arena has many more promising opportunities. Training opportunities, workshops and new collaborations offer great potential to increase market share of local foods in Kitsap County.

Kitsap has many consumers for locally grown products. These consumers include multiple socio-economic groups and multiple ages. Making these local foods available through the school system, food banks, elderly support groups and other organizations will improve access to local foods and increase the opportunities for local food producers.



To increase the capacity for our prime farmlands to produce local foods, composting must be encouraged and opportunities improved, both on-farm or through a centralized operation. Kitsap County through its Solid Waste division and local agricultural organizations must educate and network with the food producers, processors and consumers to expand the local composting connection.

The themes of education and training run through all aspects of the farming, farmland preservation and their interrelationship with the food system. Therefore, they are called out here as a key for advancing the understanding of each sector and how to connect them.

Kitsap County offers multiple avenues for education through Washington State University Extension, agriculture associations, the Kitsap Conservation District, online and via governmental agencies. Local farmers are also interested in informal learning options such as mentors, periodicals and guidebooks.

Farmers express a strong interest in education and training for land maintenance and operation (best management practices for soils, produce and livestock, pest control and water quality), expanding capacity (extending crop seasons, value-added processing, interfacing with farmers markets, restaurants and grocery stores, agri-tourism and forming CSAs), business strategies (marketing and promotion, accounting, online sales and estate planning) as well as internships and organic certification. New opportunities in these sectors should be a priority for expanding the local food economy.

Relevant courses are on the rise. For example, courses are available through school districts and institutions such as Washington State University, Bainbridge Graduate Institute, South Kitsap School District and Western Washington University. Nonprofits like the Kitsap Community and Agricultural Alliance, Kitsap Economic Development Alliance, Kitsap Visitor and Convention Bureau and the Kitsap Conservation District offer on-site training and conferences. And the Kitsap Food Chain organizes workshops and brochures at festivals and conferences. One example includes the *Kitsap Celebrates Local Foods* conference in December 2010 that included panel discussions of the food system with topics of Fair Food for All, Observations of a Delegate to Terra Madre 2010, Native and Heritage Foods, From Production and Distribution, West Sound Small Farms Expo and Slow Foods.

REGIONAL STRATEGIES FOR FARMLAND PRESERVATION

Jurisdictions within the Puget Sound region use a number of strategies to protect agricultural lands from pressures of conversion. Every jurisdiction is unique and local circumstances influence the success of these measures. A brief description of the methods employed in the region explains each strategy, how it is used locally and the potential to be effective in Kitsap.

Transfer or Purchase of Development Rights (TDRs and PDRs)

Transfer of Development Rights (TDR) is an innovative tool that is commonly used regionally to preserve resource, agricultural and rural lands. Generally, a development right is the number of housing units allowed to be constructed on a specific property under current zoning (e.g. a 10-acre parcel in a 5-acre zone would have two development rights). The TDR programs allow the sale of development rights from a site designated for preservation (sending area) to another intended for higher density or intensity of use (receiving area). Once a right is sold, a conservation easement (a legal restriction on the allowed uses of a land parcel) is often placed on the property in perpetuity. Jurisdictions can designate specific sending areas based on their conservation goals (e.g. ecological functions, wildlife habitat, agriculture, forestry). Receiving sites are usually located in urban areas where developers can apply the rights for predetermined values – such as additional housing units, increased building heights, reduced parking requirements or other flexibility. After a jurisdiction creates the regulatory structure for the program,

property transactions are generally negotiated directly between private landowners and developers for issues such as price and other agreement terms.

The Purchase of Development Rights (PDR) concept is similar. Sometimes known as Purchase of Conservation Easements (PACE), the PDR/PACE programs are voluntary, and a conservation group, land trust or local government purchases the development rights on a parcel. A permanent deed restriction is placed on the property after an agreement is made, limiting the allowed uses to conservation or agriculture. The purchasing entity then holds the rights, which cannot be transferred to any other location. The jurisdiction must have funding available through grants or other revenues for property purchases to maintain a successful PDR or PACE program.

Such a program benefits agricultural property owners with a near-term financial incentive for the sale of the right. Long-term savings are in the form of reduced state and local property taxes from the reduced development potential of the property, assuring that the property will remain in agriculture after their sale.

King County Program: King County adopted a pilot TDR program in 1998, making it permanent in 2001. King protected rural and urban separator lands from encroaching development. Since the pilot program began, 455 TDRs were sold in 48 private market transactions as of February 2007; and a total 92,000 acres have been preserved.

Additionally, King County initiated a PDR program in 1979 to preserve farmland through a voter-approved bond measure. The program prioritizes land based upon parcel size, soil quality, history of agriculture and proximity to other preservation areas. As of 2011, the County has spent over \$60 million to purchase development rights on farmlands protecting 13,020 acres, including donated conservation easements. This successful program has a current backlog of interested property owners and suitable sites.

Table VII. Comparison of Transfer of Development Rights Programs

County	TDR Program	PDR Program	ILAs with Cities	Sending Areas	Receiving Areas	TDR Bank
King County	Yes	Yes	Yes	Urban separators	Specific incorporated cities	Yes
Snohomish County	Yes	Yes	Yes	All natural resource lands	Arlington and urban areas in SW Snohomish County	No
Thurston County	Yes	Yes	No	Agricultural lands	Unincorporated urban areas	No
Kitsap County	Yes	No	No	All rural lands	Unincorporated UGAs	No

Interlocal agreements (ILAs), a formal agreement between two or more jurisdictions) and the establishment of a TDR bank are two key features that contributed to the program’s success.

King County established relationships with the urban jurisdictions of Seattle, Black Diamond, and Issaquah to direct the purchased development rights. These ILAs (a formal agreement between two or more jurisdictions) allowed the urban areas to intensify while agricultural areas are preserved. For example, such agreements allowed Issaquah to accept up to 75 density rights, and protected 10 acres in 2008, the first year of the agreement. King County also encourages the receipt of development rights through the use of “amenity funds,” a form of compensation to municipalities.

King County operates a bank for their TDRs, where the County purchases development rights and “banks” them for later sale and use in receiving sites established through the ILAs. The TDR bank removes the requirement for concurrency between the desire to sell from the sending property and need to buy rights from the receiving property. A right can be bought in one year and transferred in subsequent years as development proposal arise. The TDR bank was created in 1999 with an appropriation of \$1.5 million by the Metropolitan King County Council. With the bank’s limited funds, acquisitions are prioritized on the public benefits of a property’s preservation.

Snohomish County Program: Snohomish County adopted a similar TDR program in 2005 that designated rural sending sites in natural resource lands and receiving sites in the City or Arlington as well as multiple unincorporated areas. Snohomish also oversees a PDR program created in 2004 to acquire agricultural lands.

The TDR program also used interlocal agreements to establish relationships with incorporated urban areas, but the primary target was unincorporated urban areas in southwest Snohomish County. The Snohomish program did not create a TDR bank, instead relying on the existing real estate market to process development rights purchases guided by County-prescribed guidelines.

Snohomish has worked with the Cascade Land Conservancy to acquire and market these development rights. Through their efforts, the Washington State legislature has approved a regional TDR system that can function between jurisdictions to preserve resource lands as well as increase densities and reduce infrastructure costs in the region’s urban areas.

Thurston County Program: Thurston County launched their TDR program in 1995, after originating as a PDR program. Thurston completed a one-time purchase of 940 acres of high-value agricultural lands, but was unable to secure funding for 12,000 others deemed “significant, sensitive agricultural lands.” The County developed a TDR program to conserve these remaining acres. The program was met with reluctance by the rural residents and disinterest by Thurston’s cities and developers. These issues, paired with a lack of program development and marketing, have stunted the success of the program.

Kitsap County Program: Kitsap adopted a TDR program in 2006 that was not necessarily focused on preserving specific resource areas, but to remove development potential from the rural area as a whole. Kitsap designated its entire rural area as sending sites and all of its unincorporated urban areas as potential receiving sites. The concept was to create a market by requiring TDRs for any rezone requests or Comp Plan amendments that increased densities or higher land use intensities (commercial). This has been hampered by limited program development and marketing as well as the downturn in the economy, specifically in the areas of new construction. Kitsap is currently participating with the City of

Port Orchard to market this program and develop an interlocal agreement to send TDRs to the incorporated City.

Considerations for Kitsap County:

The examples show the pros and cons of various TDR strategies. A TDR bank can be an important component of a robust program. It provides guidance to the market and can remove timing obstacles from transactions. As shown in the *Kitsap County Agriculture Sustainability Analysis*, the growth rate of unincorporated areas is greater than in incorporated areas (Chase Economics, 2011). A TDR mechanism could be key in abating this pattern.

However, a TDR bank is complex and requires staff experience in real estate markets. It also requires substantial seed money up front for acquisition, and clear agreements with city jurisdictions to receive the development rights. As some of Kitsap’s cities seek TDR programs, a future bank could be feasible with adequate capitalization.

The successful Snohomish model can accomplish similar goals with substantially less capital and ongoing operation costs. Developing working relationships with local cities to designate receiving sites will further the program beyond Kitsap’s existing unincorporated urban areas. To avoid the pitfalls that Thurston County experienced, any TDR program must be clear and outline all of the necessary requirements, forms and documents made easily available to the public. The real estate community needs to understand the TDR mechanism and its potential benefits to their customers. Additionally, potential purchasers must perceive that the benefits (density bonuses, flexibility) are significant enough to fuel interest in the program.

Acquisition

A straightforward yet financially-constrained strategy is acquisition of farmlands by local government or non-profit conservation groups. Required to remain in farmland for the long term, the lands can be acquired through fee simple ownership, to be resold to future agricultural land users or as conservation easements. This method requires for-payment property transfers that are capitalized by the purchasing jurisdiction.



King County: King County established an acquisition program in 1979 in which the County is authorized to acquire “developmental rights, full ownership, or any lesser interest”. King County focuses full fee-simple ownership on “first priority” lands. This land is then resold to private property owners with the covenant that the property be used for agricultural purposes. The program has historically received funding from the sale of county bonds as well as county appropriations and funds from the Federal Farmland Protection Program.

Clark County: Clark County adopted Conservation Areas Acquisition Plan in 2004 that identifies priority conservation areas, including agricultural lands. The phase 1 acquisition target included 1,750 to 2,400 acres through conservation easements as the primary tool.

Considerations for Kitsap County: Kitsap County has acquired lands for long-term open space, parks and public works purposes for decades, but has not focused on agricultural lands. This strategy is limited by the County’s available revenue streams, eligible grants, conservation futures and other sources. Current nonprofit community efforts such as the Peterson Farm in Central Kitsap are underway. Kitsap County should explore a partnership with nonprofit organizations such as the Cascade Land Conservancy, Great Peninsula Conservancy or Trust for Public Lands to develop an acquisition program for these limited resource lands.

Right to Farm Protections

A nationally-accepted approach to farmland preservation is the adoption of local Right to Farm ordinances. Washington State RCW 7.48.300 includes provisions to protect farms in urbanizing areas for nuisance lawsuits, which may force the premature removal of these lands from agriculture uses.

Pierce and Thurston Counties: Thurston and Pierce Counties adopted Right to Farm Ordinances in 1997. Nuisances, notification, and complaints are addressed within the ordinances. The law serves the dual purpose of encouraging long-term commercial agriculture in designated areas, while promoting public health, safety, and welfare.

Under the ordinance, agricultural operations that are conducted according to best management practices (accepted methods for maintaining farmland through soil science, fertilizer limitation, waste removal and water usage) and predate surrounding nonagricultural activities, are presumed to be “reasonable” and shall not be found to be a nuisance. Thurston also established a notification system to inform residents about the importance of farm activities to the community. Additionally, all properties with 2,500 feet of designated agricultural lands are notified of the nuisance regulations.



Considerations for Kitsap County: Farmers have highlighted the need for a Right to Farm ordinance in unincorporated Kitsap for many years. Most recently in 2010, Kitsap County completed “The Year of the Rural” outreach process to review rural, forestry and agricultural land uses in the rural areas. The agricultural policies are being discussed by the Kitsap County Food and Farm Policy Council for 2011 recommendation to the Board of County Commissioners. This ordinance is likely to include many of the nuisance and notification components of the Pierce County model with enhanced public outreach and information. It may also refer back to the policy recommendation unanimously agreed to by the large Rural Policy Roundtable group in 1992, which was been overlooked at the time. The recommendation says:

“Agricultural activities are allowed and encouraged in the rural areas and therefore shall not constitute a nuisance within rural areas if conducted within generally accepted management practices and in compliance with applicable laws which regulate such activities.”
--*Recommended Land Use Policies, 1992*

Agricultural Zoning

The establishment of zoning specific to agricultural uses is another commonly-used strategy. Under the Washington State Growth Management Act (GMA) of 1990, counties are required to designate resource lands and to develop regulations for their preservation. The main objective is to focus on agricultural lands of long-term commercial significance. All of the Central Puget Sound counties have some form of zoning protective of long-term agriculture.

Snohomish County: Snohomish County has an “Agricultural-10-Acre Zone” which focuses on only agricultural land uses and activities that support infrastructure for farming.

Thurston County: A “Long Term Agriculture District Zone” names agriculture is the primary use and all other uses must minimize their impact on and conflicts with surrounding agricultural uses.

Pierce County: The purpose of “Agricultural Resource Land Zones” is to preserve limited supplies of farmland in specific locations and to encourage environmentally sound agricultural production.

King County: Like Pierce, “Agricultural Zones” also preserve farmlands in specific locations and to encourage environmentally sound agricultural production.

Considerations for Kitsap County: In February 1992, Kitsap County adopted “Strategies for Resource Land Designations and Interim Development Regulations” regarding forestry and agricultural land uses. Within this report, Kitsap County elected not to classify agricultural lands or create agricultural zoning due to the County’s limited agricultural areas of commercial significance. This determination strongly depended upon the large-scale farming model of other Puget Sound jurisdictions and may not have adequately considered the strong small farming economy that existed in Kitsap. Numerous studies conducted since 1992 suggest that the concept of commercial agriculture in Kitsap County should be reexamined. Depending on the results of this updated assessment, agricultural zoning could be a large part of future local farm preservation.

Current Use Tax Incentives

A current use tax incentive reduces the tax burden of agricultural property owners through a reduction in their local and state property taxes. Under Washington State Law RCW 84.34, property owners may have their farm and agricultural lands valued at their current use rather than at their highest and best use. This program is available generally to properties greater than five acres in size that meet specific criteria regarding the intensity of their agricultural activities.

Puget Sound Counties: King, Pierce, Snohomish, and Kitsap Counties all participate in the Current Use Taxation programs. These programs are initiated through their respective Assessor’s office.

Considerations for Kitsap County: This program is currently available in Kitsap County as implemented by the Assessor’s Office. Currently, over 100 properties utilize this program for agricultural preservation.

The enrollment in this program could be increased with flexibility in the rigorous reporting requirements of the program. Any such change would need to occur through Washington State legislative action, but similar efforts have recently been proposed by other local jurisdictions.

Other Regional Incentive Programs

There are four incentive programs recommended for Kitsap County to consider in the future. This list may not be exhaustive of every option available to Kitsap County, but includes prominent incentive programs used across the country today. Further evaluation and consideration is needed to identify actual benefits and costs for Kitsap County.

Protective Easements: A conservation easement is a deed restriction voluntarily placed by land owners on their property to protect resources such as productive agricultural land. The easements may cover the entire property, or just a portion. The owner typically dedicates this easement to a land trust or conservation group. Such easements are held in perpetuity with all agricultural operations conducted consistent with a soil and water conservation plans. The easements benefit the property owner by significantly reducing state and local property taxes on the land and ensuring that the property remains in agriculture into the future.

Buy Local Initiatives: Buy local programs are expanding throughout the country. The chief goal is to encourage keeping local funds in the community because locally-owned businesses invest back into the community. This method enhances the local economy and introduces local agriculture to local residents, schools, businesses, and restaurants – and provides local fresh and health foods. The benefits to the public and local farmers include:

- Improved health and nutrition from fresh local food. Less travel time for food means more vital nutrients are retained.
- Supports local family farms. Local businesses are owned by citizens that live and work in Kitsap County. These farms support and encourage Kitsap County’s economy and quality of life.
- Creates local jobs. Supporting local businesses bolsters their business and is an incentive to reinvest in creating ancillary jobs.
- Increased environmental stewardship. Buying locally reduces gas consumption and the food system’s carbon footprint.
- Citizen’s confidence from knowing where their food comes from and how it is grown.



Agriculture District Program: Agricultural district programs allow farmers to rely on areas where commercial agriculture is encouraged and protected. While not the same as zoning, the districts help develop tailored land use regulations for the area. Nationwide, these districts have protected farmland from annexation and eminent domain and created a secure climate for agriculture by preventing local

governments from passing laws that restrict farm practices. Districts are typically formed where there is a concentration of commercial agricultural activity.

Technical Assistance to Farmers: The Chase Economics Analysis (Appendix C) identifies the trend of declining agricultural technical expertise in Kitsap County. This loss of technical expertise is part of a larger, region-wide even national and international) trend of declining support for agricultural infrastructure.

The need for technical assistance has been expressed for decades as global food corporations have gradually displaced family and community farms. The skills of long-time farmers are diminishing as they leave the workforce due to age and diminished access to suitable farm equipment. Kitsap farmers echoed the message in the 2010 *Community Agriculture Survey*. 39% of respondents felt overlapping federal, state and local regulations were an obstacle to agriculture. They believe technical assistance from the County, WSU Extension or other organization can help existing and start-up farming operations address the real and perceived barriers posed by government requirements. While some opportunities exist through WSU Kitsap Extension, expanding technical assistance in farm management, particularly in sustainable farming methods, and in methods to extend the growing season, is also needed.

Examples of technical assistance include local educational classes and forums, farm plan development and online guidebooks which should be tailored to the local Kitsap County climate and farming conditions.

Summary of Regional Strategies

The assessment of agricultural strategies from other jurisdictions presents Kitsap County with options from which to select the most effective and applicable to local conditions. This is particularly beneficial when pursuing complex and labor intensive strategies such a transfer of development rights, agricultural zoning or acquisition programs. These tools may benefit from either countywide application or a geographic focus based upon the specific benefits to the farming community.

AGRICULTURE AND KITSAP COUNTY CODE

Kitsap County government’s involvement and support is important in achieving and maintaining a robust agricultural community – and particularly through legislative efforts regarding zoning, permitting, regulation and incentive programs.

Kitsap County Code has multiple sections that regulate agriculture and related operations. Agricultural uses are permitted outright in nearly every rural and urban zone and the definition is broad. Kitsap County Code section 17.110.050 defines these uses as:

“Agricultural uses” means the use of the land for agricultural purposes, including farming, dairying, pasturage, agriculture, horticulture, wholesale nurseries, floriculture, viticulture and wineries, apiaries, and animal and poultry husbandry, and the necessary accessory uses; provided, however, that the operation of any such accessory use shall be incidental to that of normal agriculture

activities, and provided further, that the above uses shall not include slaughter houses and meat packing or commercial feed-lots.

This language allows significant potential for farming opportunities throughout Kitsap County. However, other Code sections impact the potential for conversion to pastureland, accessory uses, agricultural building construction, setbacks for pastureland and allowed animal densities. Each creates specific challenges that would benefit from future consideration to resolve. Many of these challenges are detailed below with additional review in Appendix D.

Conversion to Pasture Land

A common conflict between County Code and agricultural activities is when converting forestland and critical areas into pasture land. The lands classified as prime for farmland are often constrained by wetlands, streams and their required buffers.

Kitsap County codes on stormwater and critical areas address the requirements to protect critical areas and to mitigate stormwater impacts from development. These sections limit the conversion of forested land to other uses in order to protect water quality and quantity as well as wildlife habitat. Property owners who wish to convert are asked to mitigate any impacts to critical areas or their buffers. This mitigation can occur by improving other wetlands and/or buffers on-site. Off-site mitigation may even offer a better alternative. Larger areas of high priority wetlands in another area of the watershed may provide greater ecological value for such mitigation. Additionally, the use of best management practices can provide an alternative in addressing many of the environmental and health issues discussed above.



Future Considerations: To address the issue of conversion to pasture land, Kitsap County may consider:

- Encouraging wetland mitigation banks for future agricultural uses in areas prime for farming.
- Using best management practices to provide flexibility in mitigation requirements.
- Providing information and technical assistance regarding the code provisions, best management practices and potential site-specific solutions.

Accessory Uses

Limits are placed on the types and sizes of accessory uses that are allowed throughout Kitsap County. Many of these accessory uses are necessary for the maintenance and expansion of existing agricultural operations especially for modest processing and farm sales. Examples include:

- Sales of crops or products that are not grown on site to expand the farm's draw to the public.
- Temporary processing of produce and meat (e.g. mobile processing units).

- Value-added processing of materials grown or raised on site, such as goat’s milk into goat cheese.
- Sale of gift items that are not agricultural but often paired with agricultural products e.g. wine glasses at wine or baskets of crackers with goats-milk cheese.

Future Considerations: To address the issue of accessory uses, Kitsap County may consider:

- Define and expand allowed accessory uses for agricultural properties countywide.
- Allow processing operations in designated agricultural areas or zones that are appropriately scaled.
- Expand allowed temporary uses of properties for produce or meat processing in designated agricultural areas.

Agricultural Building Location and Construction

Another common issue is the construction of agricultural buildings that require building permits or specific setbacks. Such buildings can include barns, paddocks, horse shelters, arenas, chicken coops, greenhouses, silos and/or stables over 200 square feet in size.

Agricultural uses often require multiple buildings or buildings of significant size. When multiple buildings are proposed, they are located in the areas specific to the farm product being grown or animal being raised. However, these buildings must meet specific setbacks (between 50 and 100 feet) from property lines and adjacent residences to minimize any impacts from dust or odor. These setbacks and the appropriate location of these structures often conflict.

The size of agricultural structures may also increase the building code requirements based on the buildings use. These additional requirements may not be specifically relevant to agricultural uses but may be required due to their perceived similarities. For example, fire code may require sprinkler systems and fire separation, and building codes call for American’s with Disabilities Act (ADA) access. These can greatly increase the costs of construction to a point where it is not financially realistic for the farm owner.



Future Considerations: To address this issue, Kitsap County may consider:

- Information and outreach materials to rural property owners regarding these requirements
- Technical assistance to farmers interested in constructing new agricultural buildings.
- Assess flexibility in required setbacks from property lines and adjacent residences for farms in specific agricultural areas.
- Review of Building and Fire Codes for potentially unnecessary impacts to agricultural construction.

Agricultural Use Setbacks

Similar to the issues of agricultural buildings, farm uses also have required setbacks from property lines and adjacent dwellings on neighboring properties. Kitsap County Code, areas such as paddocks and other open livestock and poultry pens less than a specific size (generally, 20,000 square feet) must maintain a setback of 50 feet from all property lines and a minimum of 100 feet from any dwelling on adjacent properties. These setbacks are intended to address any issues of noise, odor or dust created by the agricultural use.

Small farm agricultural activities such as for crops, paddocks or pens are located based on the features of the land. Best management practices can alleviate nearly all potential issues without the use of a generic bulk setback.

Future Considerations: To address this issue, Kitsap County may consider:

- Review setback requirements within designated agricultural areas.
- Review setbacks countywide for agricultural activities using best-management practices prescribed by Conservation District Farm Plans.
- Provide public information and outreach regarding code requirements and technical assistance to farmers interested in best management practices.

Animal Densities

Animal density issues are the most common conflict between agriculture and other rural uses. County Code limits the numbers of livestock and poultry raised on individual properties less than five acres in size. These limits are a rigid standard intended to reduce issues of noise, dust, odor and erosion, and to assure humane animal care.

As many of the concerns to be addressed by this regulation are site-specific, best management practices offer the potential for an increased number of livestock or poultry raised on the site.



Future Considerations: To address this issue, the County should consider:

- Review standards for animal density limits within designated agricultural areas.
- Review density limits based on use of best-management practices prescribed by Conservation District Farm Plans – with an expectation that the Farm Plan will be reviewed periodically.
- Establish public information formats regarding Code requirements and technical assistance to farmers interested in best management practices.

Summary of Agriculture and Kitsap County Code

Kitsap County Code defines “agricultural uses” broadly, and they are permitted in many locations, though there are here are some challenges in terms of land conversions, agriculture-related buildings,


and animal density standards. Each bears a review and clarity about reasonable farm practices and issues of public health, safety and welfare.


AGRICULTURAL LAND MAPPING AND INVENTORY


LAND MAPPING OF EXISTING DATA AND DESIGNATION OF FARMLANDS

Kitsap County has an appealing rural landscape, and a goal to preserve agricultural activities countywide. It is important to focus our efforts on prioritizing significant areas with existing or historical agricultural presence.

Kitsap County has gathered substantial data over many years regarding local agricultural activities, and these multiple sources have been used to develop mapping layers for agricultural land analysis. These layers geographically delineate agricultural information, and include:

 **Farm Businesses:** These advertise as a farm or agriculture-related business and may have a current use tax assessment. More than 150 properties were identified through this method. This category is growing as properties in the Farm/Agricultural Land or Agricultural Support categories are re-classified.

 **Farm/Agricultural Land – Current Use:** These properties have a current use tax classification but the details of the commercial activity are unknown. More than 100 properties were identified through this method.

 **Agricultural Support Sites:** The County found more than 1,400 additional properties through the Kitsap Conservation District Agricultural Land Inventory (2010) to identify potential agricultural use. This inventory included properties with several agricultural site characteristics but did not include comprehensive information regarding the nature of the agricultural use. Thus, they are listed

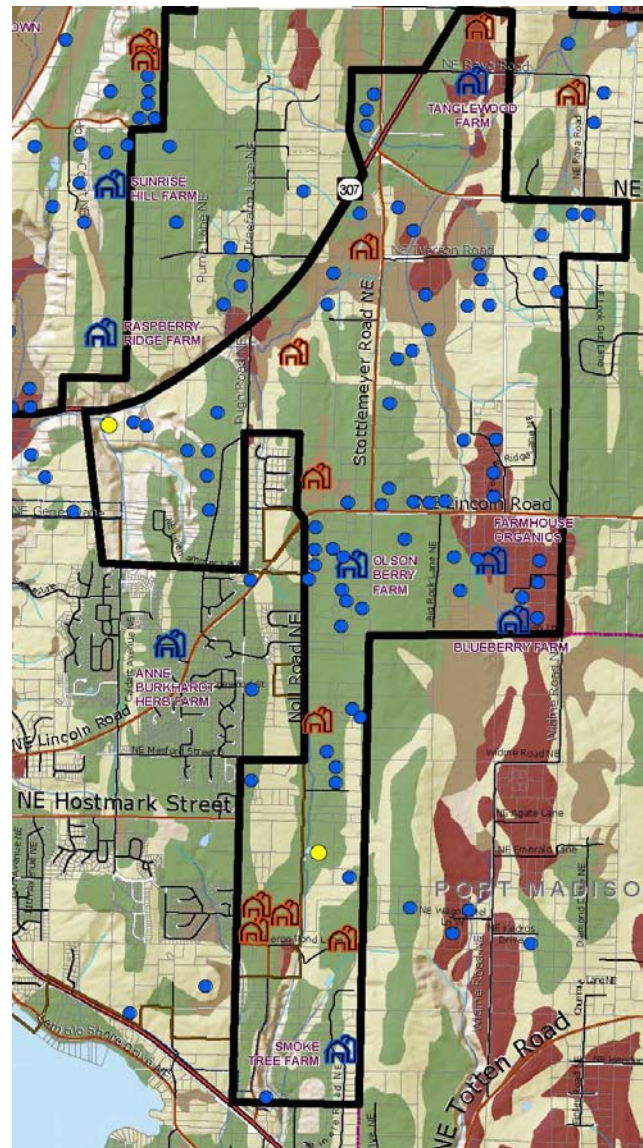



Figure 7. Sample Mapping of Agricultural Data

as “agricultural support sites” for the purpose of this strategic plan, indicating their varied involvement in the agricultural economy. This Inventory is still under construction and will focus on West Kitsap and the Olalla area in the near future. Thus, some data is lacking in these areas.

Soil Types – Prime Farmland: The Soil Conservation Service Soil Survey of Kitsap County Area, Washington (1980) was used to map prime soils for agricultural uses. These soils may promote the location or expansion of existing and future agricultural uses. Soils rated “Prime Farmland” and Prime Farmland, if irrigated” were considered high value for agricultural activities. Other soils, “Soils of Statewide Significance” and “Prime Farmland, if drained” were mapped but given less consideration due to the various impediments to their development further discussed below. A limitation of this data is that much of the prime farmland is wetlands and future use may be significantly impacted by the requirements of the Kitsap County Critical Areas Ordinance (KC Title 19).

 Open Space Land – General: A number of properties previously in agriculture are in this classification having moved over from Current Use Agriculture. A limitation of this data was that it includes sites other than historic agriculture including habitat and wildlife easements. These properties were left in as a point of reference as they pertain to the other data above.

These geographic layers provided the core of our effort and were mapped to establish patterns of uses and soil types. From this mapping and analysis, boundaries were established around significant concentrations and combinations of these features. These boundaries formed 46 Farming Areas in the County.

Agricultural businesses and properties with agricultural tax status were considered anchor properties for these Farming Areas. These businesses have a commercial presence and may have interests in future expansion based upon the market, adequate soils and other strategies that promote agriculture in Kitsap. Other agricultural uses depend on them for products or services locally and throughout the County.

The agricultural support sites are considered where closely clustered or located in close proximity to farm businesses and properties. They are key components to the agricultural economy and may receive products or services from these farm businesses or provide them to them. Also, these concentrations often show agricultural communities in need of long-term preservation.

Some hesitance toward government assistance exists in the agricultural community, which may affect the reporting their activities. This has improved over the last decade and the breadth of the mapping is quite comprehensive. But, as many of these barriers are removed and the County and agricultural property owners partnership grows, many additional sites will be reported. The County expects that this may create other Farming Areas but most likely will further populate the Farming Areas already included with additional information.

The mapping efforts for these areas are included in Appendix E separated by regions (North, Central, West and South Kitsap). These mapping efforts lead to a full inventory of agricultural activities and include site addresses, business names, farm product information and other information, where

available (Appendix F). Additional information including specific characteristics of each Farming Area can be found in the Farming Area Ratings Matrix (Appendix G).

CHARACTERISTICS OF FARMLANDS BY REGION

South Kitsap Farming Areas

The South Kitsap region contains sixteen Farming Areas including Belfair Valley, Sunnyslope, Dickenson, County Line, Bethel-Burley, Glenwood/Sidney, Berry Lake, Bandix, Salmonberry, Olalla Valley, North Banner, South Banner, Long Lake Valley, Woods, Clover Valley and Locker. These Farming Areas include 10 farm businesses and 12 properties in agricultural property tax status. South Kitsap includes the largest concentrations of agricultural support sites clustered around these farm businesses and agricultural lands. All but one Farming Area are located in rural areas. Soil types vary widely between Farming Areas. As discussed above, further study of the Olalla Valley area by the conservation district will likely expand the documented agricultural uses in the area.



West Kitsap Farming Areas

West Kitsap is largely forested with few documented agricultural activities spread out throughout the region. Forestry and forest preservation is a large component of the vacant, undeveloped lands. The area contains one Farming Area located in Hintzville, which includes the Rock Nest Ranch and Happy Harvest Farm. A greater number of agricultural activities are expected to be documented in this area as the Conservation District concludes the inventory efforts. This will likely grow the number and intensities of Farming Areas in West Kitsap, especially in the areas of Anderson Hill and Willamette Meridian.

Central Kitsap Farming Areas

Central Kitsap's agricultural activities are largely located north and east of Silverdale. The area is largely urbanized with multiple commercial cores and low to high-density residential developments. Central Kitsap includes four Farming Areas including Westgate, Central Valley, Brownsville and South Clear Creek. All but one of these Farming Areas is located in rural areas. These Farming Areas include 10 farm businesses and 11 properties in agricultural property tax status. Agricultural support areas are largely clustered in Westgate and around the farm businesses in Central Valley. Soil types in these areas are largely prime.

Bainbridge Island Farming Areas

Bainbridge Island includes the most concentrated areas of agricultural activities in the County. Bainbridge contains 10 Farming Areas, which include NE Bainbridge, Manzanita, Day, Island Center, Battle Point, High School Road, Rolling Bay, Sportsman, Lynwood Center and Eagle Harbor. These Farming Areas includes 46 farm businesses and 9 properties in agricultural property tax status.

Compared to the large number of large-scale agricultural activities, the area includes the fewest number of documented agricultural support sites in the County. Soils are largely prime farmland, but are lesser in some Farming Areas.

North Kitsap Farming Areas

The North Kitsap area include the largest number of Farming Areas (14) which include North Clear Creek, Finn Hill, Pioneer Way, Big Valley, Noll/Stottlemeyer, Gunderson, Minder, Indianola, Jefferson/Tulin, West Kingston, Parcell, 288th, Eglon and Hansville. North Kitsap also includes a substantial number of key agricultural activities. Its Farming Areas include 27 farm businesses and 33 properties in agricultural property tax status. Additionally, a large number of agricultural support sites are clustered around these businesses and properties. Soil times are predominantly prime farmland.

CRITERIA TO RATE AND PRIORITIZE FARMLANDS

Following the delineation of Farmlands, each was rated based upon the criteria below. These measures were applied subjectively to each area in the following hierarchy from highest value to lowest.

1. Concentrations of farm businesses and properties in agricultural tax status
As described above, these properties provide a commercial agricultural focus to the Farming Area. These businesses regardless of size have the ability to expand under the attractive market and regulatory conditions and attract other like or complimentary businesses over time. Farming Areas including these businesses and properties rate higher than those without.
2. Concentrations of agricultural support sites
The quantity of these sites in an area can indicate an agricultural emphasis for the local community. These sites especially when located near farm businesses may provide services to the businesses or purchase goods and services from them. They can provide a synergy that can greatly impact the local economy as well as that of the County. Farming Areas with a high concentration of agricultural support sites surrounding farm businesses and/or properties in agricultural property receive higher ratings followed by isolated concentration of these sites.
3. Soil types
Soils designated “Prime Farmland” or Prime Farmland, if Irrigated” may provide opportunities for locating agriculture in an area or expand the activities already there. These soils may not require draining or other cost-prohibitive efforts to use. However, any use of these areas as commercial agriculture will need to address any limitations of Kitsap County Code regarding critical areas. Farming Areas with a predominance or “Prime Farmland” or “Prime Farmland, if Irrigated” receives a higher rating than other soil types.
4. Inclusion in water districts or service areas
Water provision is a key component to many agricultural activities, especially those requiring irrigation, some form of processing or value-added production. Obtaining individual water rights can be time-consuming and cost-prohibitive. Obtaining these rights from an existing water district or other service providers reduces cost and delays in pursuing farm expansions or alteration. A Farming Area included or partially included within a water service area receives a higher rating than those outside of such an area. A map of local water services areas are shown in Appendix H.

5. Lot sizes within the area

While Kitsap County includes primarily small farms and will continue to attract them in the future, the sizes of lots in the Farming Area will affect the cost of property as well as the number of competing uses that may be interested in locating within them. Areas with a larger quantity of larger lot sizes (5 acres or greater) are more likely to maintain their agricultural nature while reducing other uses that may not be complimentary with them. Farming Areas featuring a predominance of larger lot sizes receives a higher rating than those with smaller lot sizes.

6. Proximity to Pollution Incident & Correction (PIC) areas

Numerous rural uses have impacted the water quality of Kitsap County streams primarily where they outlet to Puget Sound. While agricultural activities may be a component of this issue, agriculture using best management practices can ensure healthy water quality of a watershed. A Farming Area's proximity to a PIC area would provide targeted incentive and technical assistance programs to focus in specific geographic areas. A map of PIC areas are shown in Appendix H.

7. Amount of a watershed included in a Farming Area or multiple Farming Areas

Watershed planning is simplified by encouraging homogeneous uses using similar best-management practices for development. The concentration of agricultural uses in a watershed can allow natural resource staff to focus on the benefits and potential impacts of such uses without addressing a host of confounding variables created by other incompatible uses. A Farming Area split amongst multiple watersheds receives a lower rating that one encompasses all of one or more watersheds. All Farming Areas were mapped by watershed and are shown in Appendix I.

These criteria may be expanded in the future as these issues are further explored.

PRELIMINARY PRIORITIZATION OF FARMLANDS

From the delineation of the Farming Area boundaries and ratings of each shown in the Ratings Matrix (Appendix G), the substantial capacity of multiple agricultural communities throughout Kitsap was inventoried. Using the subjective ratings system described above, each Farming Area was prioritized; either scoring a 1 or 2. Each priority is described below:

Priority 1 Areas

Farming Areas rated Priority 1 are the primary focus of transfer of development rights, acquisition, agricultural zoning, and other farm preservation efforts. These areas should also receive priority attention for grant programs or other incentives.

Priority 2 Areas

Farming Areas rated Priority 2 will receive further analysis as to their capacity for farming. After a strategy focused on Priority 1 areas, Priority 2 areas will receive attention for grant funding and technical assistance efforts. Any further preservation or assistance efforts that do not apply to Priority 1 areas, should be directed first to Priority 2 areas before being made available countywide.

CONCLUSIONS

SUMMARY OF FINDINGS

Kitsap County has a significant farming community that greatly benefits the local economy and food system. Farming has changed over the last century, and today is primarily of small farms ranging from one to fifteen acres. The trends point a direction for future strategies that will enhance farming and farmland preservation that include:

- Retain available land for agricultural uses.
- Share information about sources of support for farmland preservation and the food system.
- Encourage new farmers, including youth.
- Emphasize economies of scale for businesses as well as individuals to expand food system sectors.
- Increase technical assistance opportunities in multiple areas of farm management and to connect all food system sectors.
- Provide nutritious products and services tailored to the growing local community food system, which can easily be done by small farms.
- Extend availability of foods with value-added products and modest processing operations.

Table VIII. Strengths and Weaknesses of Kitsap Agriculture

Strengths	Weaknesses
<p>Diversity of farms: Most raise both crops and animals, which spreads the risks and creates efficiencies that reduce costs e.g. crop waste feeds animals and/or plants and animal waste ‘feeds’ crops.</p> <p>Product variety: Over 100 different crops are grown and available locally.</p> <p>Awareness of agricultural trends: Knowledge of the benefits of organic, local, healthy food.</p> <p>Price of food distribution: Rising transportation costs are reducing the price difference between locally-grown and mass produced foods.</p>	<p>Limited infrastructure for crops and livestock.</p> <p>Limited distribution infrastructure locally and out-of-County.</p> <p>Few large-scale areas of prime farmland. Historic subdivision patterns have increased the potential conflicts between agriculture and other rural uses.</p> <p>High average age of farmers.</p> <p>High capital costs of starting a farm and the rising costs of agricultural land.</p> <p>Government assistance is a limited for small farming operations. Only 3-5% of federal grants target small farms and local farmers lack the knowledge of even these few opportunities.</p>

This Agricultural Plan and Inventory is a valuable step in the process of rejuvenating the food and farming industries in Kitsap County. Future efforts to improve the economy are to update the comprehensive plan and to adopt training and networking goals.

RECOMMENDED STRATEGIES FOR CONSIDERATION

A look forward for 20, 50 or more years can help determine a future for local agriculture. Kitsap County will pursue this support through multiple avenues, which may include countywide efforts as well as for specific agricultural areas. The following strategies are recommended for countywide use to assess viable ways to preserve farmland and bolster the food chain.

Retain available land for agricultural uses

- Expand Comprehensive Plan policies regarding local farming and agriculture the food system.
 - Expand or refocus the Transfer of Development Rights program on agricultural lands.
 - Enhance the Current Use – Agriculture tax program by championing streamlined application and annual reporting requirements.
 - Adopt countywide right-to-farm provisions.
 - Define and expand allowed accessory uses for agricultural properties.
 - Address issues such as farm building construction and on-site processing and sales.
- Further refine mapping and inventory of countywide agricultural uses.



Share information about sources of support for farmland preservation and the food system.

- Partner with local agencies (e.g., WSU Extension, Conservation District, Health District, and Farm Bureau) that have related expertise.
- Facilitate coordination between the farming community and the seasonal and year-round workforce and educational internships.
- Expand access for local foods to schools, food banks, grocers and restaurants.

Encourage new farmers, including youth

- Increase knowledge of support network for farmers and the food system.
- Provide technical assistance for start-up farms.

Emphasize economies of scale for businesses as well as individuals to expand food system sectors.

- Assist in application and receipt of grant funding for shared farming infrastructure such as no-till equipment and mobile meat processing units. Review Kitsap County codes regarding temporary processing of crops and animals.
- Review Kitsap County codes regarding temporary processing of crops and animals.

Increase technical assistance opportunities in multiple areas of farm management and connect with all food system sectors.

- Provide technical assistance to farmers in best management practices, product branding, marketing and technology.
- Coordinate opportunities for responsible composting of agricultural waste products.

Provide nutritious products and services tailored to the growing local community food system, which can easily be done by small farms.

- Expand the marketing and application of Buy Local provisions to grow the local market for crops and animal products
- Support farmers' markets and other local sales outlets



Extend availability of foods with value-added products and modest processing operations.

- Encourage collaboration with agricultural associations and producers on processing infrastructure.
- Review Kitsap County codes regarding on-farm processing of crops and animals.
- Coordinate a survey of local commercial kitchens.

Due to farmers' apprehensions about regulatory requirements and the government agencies responsible for them, grassroots efforts to develop strategies are needed as well. When they are geographically centered and promoted by property owners within the specific farming areas, the best knowledge of the local geography and practices evolve. They can be condition-sensitive, tailored to an area's agricultural needs, and the application of these strategies may differ between individual farming areas. Some examples include adopting agricultural zoning, acquiring land or agricultural conservation easements, exploring financial incentives (such as farm energy audits, tax incentives) and /or considering other regulatory reform (e.g., animal densities or setbacks).

Through collaborative efforts with Kitsap County, community members can learn and work through the facets of each strategy, ensuring their effective implementation. Once prepared, these concepts would be considered by the Board of Commissioners for consistency with countywide goals, impacts to other uses in the area, benefits to the agricultural economy and the public health, safety and welfare.

Once instituted, these strategies and their benefits may provide a cooperative example for other farming areas, encouraging similar efforts in their communities.

NEAR-TERM KITSAP COUNTY EFFORTS

To balance the grass-roots and countywide efforts, Kitsap County will use this Plan as a foundation for its efforts making progress towards select strategies in 2011. These should include formalizing the County’s commitment to farmland preservation and farming’s importance to the local economy in governing plans and codes to include:

- Expand agricultural Comprehensive Plan policies consistent with the contents of this Plan.
- Develop a right-to-farm ordinance for unincorporated Kitsap.
- Update and refine the mapping of agricultural areas to complete a comprehensive picture of farming in Kitsap.

With the Plan and completion of these projects, geographically-specific efforts of farm preservation may be promoted to address the barriers to farming for each area individually.

PROGRESS INDICATORS FOR PRESERVATION

Kitsap County will work towards preservation goals over the next ten years. Using the Washington State Farmland Preservation Indicators prepared by the Washington State Conservation Commission, progress will be measured by increases in the metrics delineated in Table IX.

Table IX. Farmland Preservation Indicators

Indicator
<ul style="list-style-type: none">• Number of acres dedicated to long-term farming.• Number of commercial farms.• Number of properties utilizing the Current Use – Agriculture property tax program.• Percentage of prime farmland used for farming purposes.• Quantity of value-added products processed and sold.• Quantity of crops grown and animals raised.• Number of farms achieving organic certification.• Number of processing opportunities either centralized or on-farm.• Number and size of Community Supported Agriculture programs.• Quantity of local foods sold in Kitsap’s farmers markets.• Training opportunities for farmers and other members of the food chain.

Kitsap County will coordinate with farmers and related agencies to collect appropriate data on a regular basis and measure this progress.

Using multiple approaches to farmland preservation promises to create a farming renaissance in Kitsap County. It can develop community consensus and limit conflicts while greatly expanding the local agricultural economy.