



CLARK COUNTY COMPREHENSIVE PLAN 2016 UPDATE PLANNING FOR GROWTH 2015 – 2035

Clark County Agriculture and Forest Land Supplemental Mapping and Data Analysis – Issue Paper 9

EXECUTIVE SUMMARY

The Clark County Board of County Councilors (BOCC) has developed a preferred alternative for the Comprehensive Plan Update 2016. Within the Preferred Alternative are proposals to modify the minimum lot size of the current AG 20 zone to allow 10-acre lots and an amended zone district of AG 10. Similarly the current Forest 40 would be altered to allow 20-acre lot sizes and an amended zone district of Forest 20.

This Issue Paper 9 examines agricultural and forest land two parts:

I. Agriculture and Forest Land Supplemental Mapping and Data Analysis

II. Literature Review and Example Counties Providing Regulatory Support for Producers

Part I includes supplemental mapping and data analysis addressing new information unavailable at the time of the 2012 Rural Lands Study. Part II also updates the status of rural and resource conservation tools examined in the 2012 study as well as includes a brief literature review regarding urban agriculture trends.

Generally findings show:

- Clark County's numbers of farms declined between 2007 and 2012, but there is still an overall increase since 1997.
- Clark County's median farm size declined between 2007 and 2012. Clark County's median farm size is comparable to other urbanized counties like Pierce, King, and Snohomish.
- The vast majority of farmers live on farm, and likewise most farms are family owned.
- Most AG zoned land contains residences, as does Forest Tier II land.
- The median AG zoned parcel size is 5.1 acres. About two-thirds of AG zoned parcels are equal to or less than 10 acres in size. Farming can and has been occurring on smaller parcels as part of serving an urban market with local food (see discussion of small farms below). Clustering and siting criteria for new buildings could help orient buildings away from productive soils.
- Parcels proposed for Forest 20 zoning are similarly matched to the zone lot size: 89% are less than or equal to 20 acres in size. State rules and programs recognize the value of small forest owners and have programs for owners of 10 or 20 acres in size. Current use criteria allow parcels of a minimum of five acres to apply for a current use tax reduction.
- The County continues to have a uniquely high proportion of ~~non-commercial~~ very small farms (producing values of commodities ~~are far lower than commercial operations~~ at \$10,000 or less) that

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appear to support a local food market. The County has among the highest of farms with direct sales to consumers in the state.

- Most of the urban counties in Washington have implemented a variety of tools to protect both the farmland and farmer by allowing residential uses, while applying lot standards that promote the protection of agricultural activities and prime soils. Urban counties have similar tools for forestland.

I. AGRICULTURE AND FOREST LAND SUPPLEMENTAL MAPPING AND DATA ANALYSIS

1.0 PURPOSE AND BACKGROUND

The Clark County Board of County Councilors (BOCC) has developed a preferred alternative for the Comprehensive Plan Update 2016. Within the Preferred Alternative are proposals to modify the minimum lot size of the current AG 20 zone to allow 10-acre lots and an amended zone district of AG 10. Similarly the current Forest 40 would be altered to allow 20-acre lot sizes and an amended zone district of Forest 20.

A Rural Lands Study (BERK Consulting et al. 2012) provided a market assessment of agriculture and forestry in Clark County. It identified the following findings:

Key Finding #1: Agriculture in Clark County in 2011 is in the midst of a decade's long transition from large scale commodity farming into more intensive, value-added, urban-oriented farming.

Key Finding #2: Large farm and mid-size farms are declining in number, acres, and value. However, they remain a viable enterprise but face a multitude of challenges.

Key Finding #3: A Diverse set of small farms and enterprises are increasingly becoming part of the rural landscape.

Key Finding #4: Timber production is diminished, but retains a productive and uncertain presence in the County.

With the Comprehensive Plan Update, Clark County has examined the amended AG 10 and FR 20 districts and has considered potential clustering or building envelope criteria. The BOCC is considering the application of the new districts without clustering, but potentially with building envelope criteria.

This document provides supplemental mapping and data analysis to address new information unavailable at the time of the 2012 Rural Lands Study, particularly:

- **Census of Agriculture 2012:** Though the Rural Lands Study was conducted in 2012, the Census of Agriculture was conducting its latest census at the same time and results were not available; only 2007 Census information was available. The trends in terms of farm size, commodity value, and operation characteristics can be assessed with 2012 Census results to determine if the above findings are still accurate.
- **Washington State Department of Agriculture Crop Type:** In 2012, the State provided crop information at the section level. Now information at the field level is available and can be included with AG 10 parcel information.
- **The current parcel size pattern underlying the Forest 40 zone was mapped but not quantified.** Given a proposed Forest 20 zone, the lot size pattern is addressed in this supplemental analysis.

2.0 AGRICULTURE AND FOREST LAND MAPPING AND DATA ANALYSIS

This section presents information considered in the 2012 Rural Lands Study and updated with 2012 Census of Agriculture information. An overview of the new information is presented followed by findings and supporting data.

2.1 Changes in Farm Numbers and Type based on Value of Commodities

One of the findings in the 2012 Rural Lands Study was a trend away from large scale commodity farming into more intensive, value-added, urban-oriented farming, evidenced by declines in large and mid-size farms by number, acres, and value. This was based on a review of federal and state data, particularly the 1997, 2002, and 2007 Census of Agriculture data. 2012 information is now added in this section.

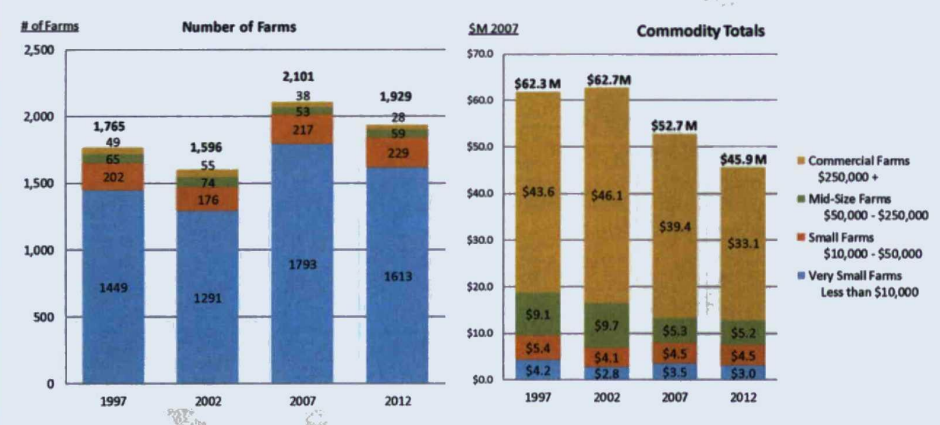
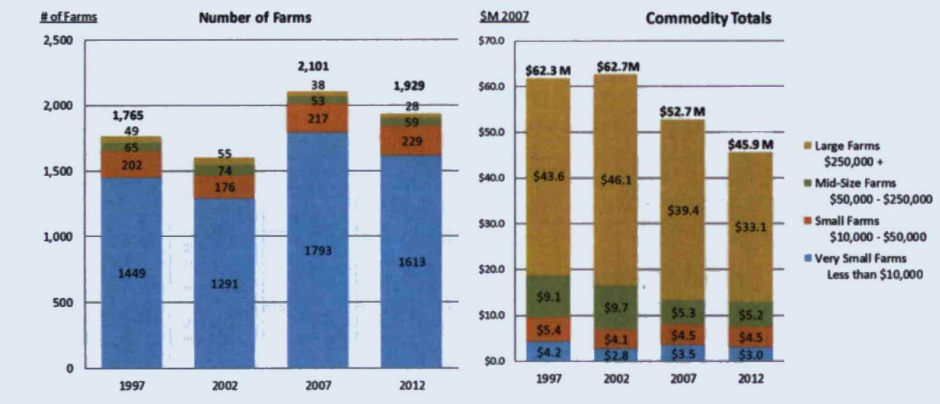
NUMBER OF FARMS: The 2007 Census of Agriculture found a total of 2,101 farms in Clark County. This represents an increase from the 2002 Census of 1,596 farms, as well as from the 1997 Census, which counted 1,765 farms in Clark County. The number of farms equals 1,929 in 2012. This represents a decrease of 172 farms since 2007. Countywide there are still more farms in 2012 than reported in the 1997 and 2002 Census counts. Thus the overall trend of an increase since 1997 or 2002 is still valid in the year 2012.

FARM SIZE BY VALUE OF COMMODITIES: Exhibit A presents agriculture in Clark County in four segments according to commodity totals: ~~commercial-large~~ farms (less than \$250,000), mid-size farms (\$50,000-\$250,000), small farms (\$10,000-\$50,000) and very small farms (less than \$10,000).¹

¹ The first three categories would fall under the definition of "small" farms by the National Commission on Small Farms of all farms with sales less than \$250,000. This definition would miss much of the agricultural activity in Clark County. The USDA Economic Research Service has categorized farms under \$50,000 as non-commercial – meaning farming is not their primary income – but the USDA National Commission on Small Farms (1998) notes "this categorization fails to recognize that for some of these farmers, off-farm jobs are not a choice, but a necessity due to the inability to obtain an adequate return from farming" and that "when a gross sales statistic is used combining all agricultural sectors, it can generate the conclusion that large and super-large farms produce most of the food and fiber in this country, when, in fact, the most critical production occurs at the primary level." Thus, in this Issue Paper farms are described in a range of small, very small, mid-sized, and large based on value. This size range does not imply that very small or small lands are not of long-term commercial significance, which is a Growth Management Act definition.

Exhibit AA. Clark County Farms Size by Value of Commodities (2007\$) (RLS Exhibit 5)

Comment [LG1]: Changed title of commercial farms to large farms. See footnote on prior page.



**"Farms" only include farms having, or usually having, sales of \$1,000 or more in a year. Commodity totals normalized to 2007 dollars using CPI. Since the 2012 Rural Lands Study, the graph has been updated to include 2012 Census of Agriculture data unavailable at the time of the Rural Lands Study preparation. The value of commodities by farm type segment reported in the 2012 Rural Lands Study for the years 1997, 2002, and 2007 are unchanged; however the total of all farm types at the top of the bars has been corrected.

Source: U.S. Census of Agriculture, National Agricultural Statistical Service; BERK, 2012 and 2016.

Some key findings of farm activity in Clark County include:

- The number of farms has increased between 1997 and 2012, though dipping slightly between 2007 and 2012.

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- Clark County had 2,101 farms in 2007, representing the addition of 336 farms since 1997. The number of farms decreased to 1,929 in 2012, a decrease of 172 farms since 2007. The 2012 count is still higher than 1997 which counted 1,765 farms and than 2002 which counted 1,596 farms.
- Based on values of commodities, between 1997 and 2007, the growth in the number of farms was mostly in very small farms with a slight increase in small farms, though some of the increase may be attributed to increased efforts of the USDA to count all small farms in the census.
- Based on value, between 1997 and 2012 the overall pattern shows an increase in very small farms from 1,449 to 1,613.
 - Between 2007 and 2012, there was a loss of very small farms from 1,793 to 1,613 (-180), and a slight increase in small farms from 217 to 229 (+12).
 - On the whole the 2007 results showed 96% of farms were very small or small and similarly in 2012, 95% of farms are small or very small based on value of commodity sales.
- **Commercial-Large farms are declining.**
 - **Commercial-Large** and mid-sized farms both decreased between 1997 and 2007. These two categories represent only 4% of all farms in Clark County in 2007.
 - Between 1997 and 2007, Clark County lost 23 farms that produced over \$50,000 in commodities, an average of two mid-sized and/or **commerciallarge** farms per year.
 - Between 1997 and 2012, Clark County lost 27 farms that produced over \$50,000 in commodities, almost two mid-sized and/or **commerciallarge** farms per year.
 - Between 2007 and 2012 there was a slight increase in mid-sized farms from 53 to 59 (+7) and a loss of **commerciallarge** farms from 38 to 28 (-10).
 - While the number of **commerciallarge** farms has decreased between 1997 and 2012, mid-sized and **commerciallarge** farms' share of total commodity output stayed nearly constant:
 - 1997: 85%
 - 2002: 89%
 - 2007: 85%
 - 2012: 84%
- **Commodity values are declining.**
 - Commercial farms are the most productive farm type, with 38 farms producing \$39.4 Million as of 2007. Put another way, 3% of Clark County farms accounted for 75% of total commodity outputs.

- o Per 2012 results, 1.5% of the farms are commercial large, representing 72% of the total commodity outputs.
- o The loss of commercial large farms corresponds to a loss in commodity totals. In 2007 dollars, the value of agriculture dropped from \$62.3 million in 1997 to \$52.7 million in 2007, and again to \$45.9 million in 2012.

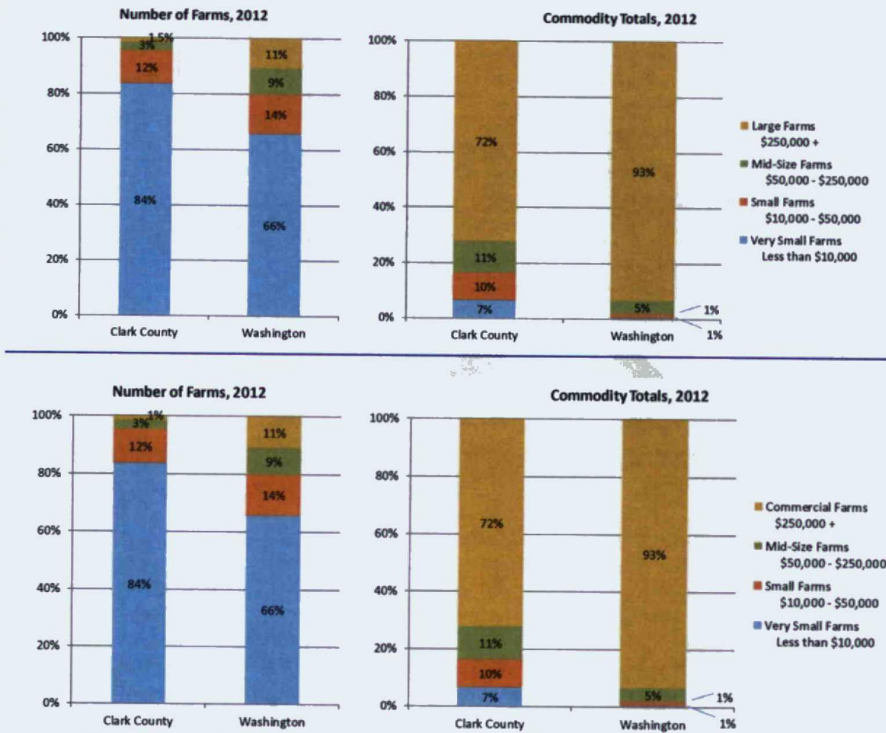
2.2 Trends and Shares in Commodities Values and Acreage

TRENDS IN COMMODITY TOTALS: Commodity totals provide the best measure of farms in terms of economic activity, and trends are examined below. The 2012 Rural Lands Study found that Clark County's prevalence of very small farms producing less than \$10,000 in value of commodities is fairly unique in Washington. The 2012 study found Clark County to have the highest proportion of such very small farms in 2007 in the state; now, Clark County is the second highest as of 2012, only behind Pend Oreille County. Nevertheless, in Western Washington, Clark County has the highest number of farms that are very small as of 2012.

In terms of mid-size farms and commercial large farms, the 2012 Rural Lands Study found they produce the vast majority of commodity values in the county with relatively few farms considering 2007 data. That finding is still true as of the 2012 Census. See Exhibit B Exhibit B Exhibit B. However, there are fewer commercial large farms than in 2007 and the overall commodity values are lower in 2012 than in prior years (values all adjusted to 2007\$).

Exhibit BB. Percentage of Farms by Commodity Total (2007\$) (RLS Exhibit 7)

Comment [LG2]: Changed label of commercial to large



Source: U.S. Census of Agriculture, National Agricultural Statistical Service; BERK, 2012-2016.

- Clark County's has the second highest proportion of farms that are "very small" in Washington State only behind Pend Oreille County.
 - Approximately 84% of Clark County farms earn less than \$10,000 a year, compared to only 66% statewide. Only 4% of Clark County farms earn more than \$50,000 a year, while almost 20% of Washington farms earn at least \$50,000.
 - Grouping **commercial** and mid-size farms together, 4% of Clark County's farms account for 84% of commodity totals, compared with 20% of Washington farms accounting for 98% of commodity totals. Clark County's very small farms account for a total of 7% of commodity totals while Washington's 66% account for less than 1%.
- Though **commercial** farms account for a very small share of total farms, they represent a largest share of commodity totals.

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- In 2012, commercial/large farms only accounted for 1.5% of all farms in Clark County but 72% of all commodity totals.
- In 2012, mid-size and commercial/large farms produced \$38.4 million in commodities, representing 84% of farm production in the County.

SHARE OF FARMS BY ACRE SIZE: In addition to most farms in Clark County (84%) having commodity totals of less than \$10,000, many farms in Clark County are on small acreage. This has become more pronounced in the 2012 Census of Agriculture after the publication of the 2012 Rural Lands Study.

As of the 2012 Census the share of farms sized 1-9 acres has reached 44%, 10% greater than the 34% share observed in 2007. Conversely there has been a decrease in the share of farms sized 10-50 acres, now at 42% of farms rather than the 50% share observed in 2007.

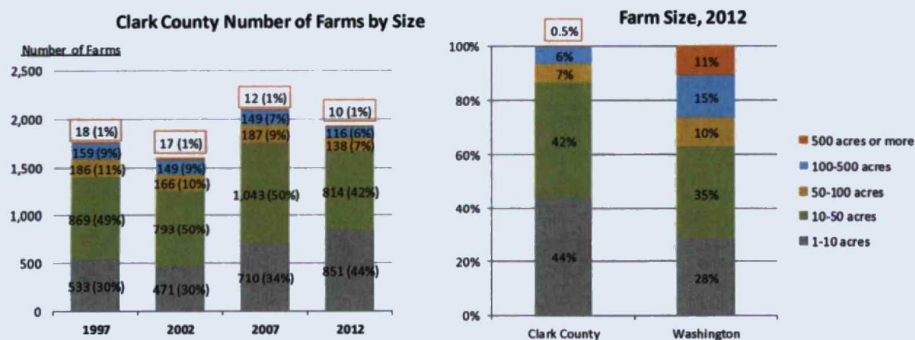
In 2007 the median size of a Clark County farm was 15 acres, compared to the Washington median of 30 acres. In 2012, the median size of a Clark County farm dropped to 10 acres while Washington State's numbers also dropped to 24 acres.

Similar to findings in the 2012 Rural Lands Study Clark County continues to have a greater proportion of small farms compared to Washington State.

The 2012 Census data continue to show a trend towards smaller, urban farms rather than mid-size and larger commercial/large farms.

Exhibit C presents the number and percent of farms by number of acres.

Exhibit C. Percent of Farms by Acres (RLS Exhibit 8)



*Land in farms is based on the number of acres reported by farm operators and includes both owned and leased lands. Total farm land for an operation may not be contiguous.

Source: U.S. Census of Agriculture, National Agricultural Statistical Service; BERK, 2012.

- **Clark County farms tend to be small in terms of acres.**

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- Between 1997 and 2007 the percentage of small farms increased by 4%. The percentage of small farms grew by 14% between 1997 and 2012.
 - The most significant change occurred since 2007, where there has been an increase in the percentage of farms sized 1-9 acres, at 44%, an increase of 10% by 2012.
- About 42% of Clark County farms are between 10 and 50 acres as of 2012, a decrease since 2007 at 50%.
- There has been a decrease in farms greater than 50 acres between 1997 and 2012.
- Growth in farms has been in the lower scale of acres (10 acres or smaller), while larger farms have declined between 1997 and 2012.
- **Clark County has a greater proportion of small farms compared to Washington State.**
 - Clark County has a greater proportion of farms smaller than 50 acres (86%) than Washington (63%), and many fewer farms larger than 500 acres (less than 1%) than Washington (11%).
 - Between 1997 and 2007, the number of Clark County farms with between 50 and 500 acres stayed relatively constant, with a difference of only nine less farms. However, between 2007 and 2012, the number of large farms decreased by 82 to 254.
- **Farm size reflects urban and suburban land use patterns with agriculture dominated by small-scale operations.**
 - The average size of a Clark County farm in 2007 was 37 acres, compared to the Washington average of 381 acres. The Clark County farm average in 2012 was slightly higher at 39 acres as was the average for Washington State at 396 acres.
 - In 2007 the median size of a Clark County farm was 15 acres, compared to the Washington median of 30 acres. In 2012, the median size of a Clark County farm dropped to 10 acres while Washington State's numbers also dropped to 24 acres. Clark County's numbers are comparable to other, primarily urban counties like Pierce (10) and King (8).
 - Both Clark County and Washington farms have experienced declines in farm size since 2002. Clark County's average farm size was 44 acres in 2002 and now is 39 acres as of 2012. Washington's average farm size was 426 acres in 2002, and now is 396 acres.

CROP TYPES AND COMMODITY TOTALS: Based on either 2007 or 2012 data, the type of commodities prevalent in the County continues to include cattle, crops and hay, poultry and eggs, fruit and tree nuts. As of 2012, vegetables and melons have increased their share of crop types. See Exhibit D, part 1.

As of 2012 there has been a marked drop in commodity values to \$45.9 million compared to \$52.6 million in 2007 (all in 2007\$). This continues a decline in commodities values since 1997 at \$62.2 million (similar to 2002 figures). See Exhibit D, part 2 and part 3.

Considering either 2007 or 2012 information, milk and dairy products continue to have the greatest share of commodity values though the number of dairies has dropped from 25 to 9 in that same time

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frame Poultry and eggs are another animal product with a significant share of the commodity value in both periods. However, cattle values have increased by 2012.

Exhibit DD. Crops by Clark County Farms and Commodity Totals (RLS Exhibit 9)

1. Number of Farms by Commodity Type

Agricultural Products	Number of Farms				Percentage Change 2002 and 2007	2007 Percentage of Total	Percentage Change 2007 and 2012	2012 Percentage of Total
	1997	2002	2007	2012				
Cattle and calves	838	502	547	476	-35%	24%	-13%	23%
Crops and hay	-	284	429	368	51%	19%	-14%	18%
Poultry and eggs	113	120	309	260	173%	14%	-16%	13%
Fruit, tree nuts, and berries	103	117	215	217	109%	9%	1%	11%
Horses, ponies, mules, burros, and donkeys	-	142	167	112	18%	7%	-33%	5%
Sheep, goats, and their products	-	105	153	108	46%	7%	-29%	5%
Cut Christmas trees and short term woody crops	-	46	69	58	50%	3%	-16%	3%
Hogs and pigs	38	49	62	68	63%	3%	10%	3%
Milk and other dairy products from cows	32	25	25	9	-22%	1%	-64%	0%
Grains, oilseeds, dry beans, and dry peas	-	17	15	25	-12%	1%	67%	1%
Aquaculture	-	4	7	2	75%	0%	-71%	0%
Other animals and animal products (specialty animal)	-	55	83	72	51%	4%	-13%	3%
Vegetables, melons, potatoes, sweet potatoes	-	45	104	176	131%	5%	69%	9%
Nurseries, greenhouse, floriculture, and sod	-	140	98	107	-30%	4%	9%	5%
Total Farms with Sales - Specified Products	1,124	1,651	2,283	2,058	38%		-10%	
Total Farms with Sales Not Specified	1,765	1,596	2,101	1,929	32%		-8%	

Notes Table 9.A:

Sources are the 2002, 2007, and 2012 Census of Agriculture which compares new year to prior year totals. Thus, 2002 Census compared 2002 and 1997 Census totals, and the 2007 Census compared 2007 and 2002 totals. **Red Text** - The 2012 Census comparing 2012 and 2007 indicated "not available" for these categories in 2007 even though they were reported in the 2007 Census. 2007 Census information is retained.

The total farms with sales of specified products may exceed total farms with sales, not specified, because farms may sell more than one product. Anomalies in 1997 may be expected as this is the first year USDA took over the Census of Agriculture. (Wendy Vance, USDA, Olympia, May 23, 2012).

Reviewing the 1997 Census, the categories were differently titled and led to "not available" or "-" information when 1997 information was reported in the 2002 Census. The total farms with sales in 1997 was originally reported as 1,175, whereas in the 2002 Census the number of farms in 1997 was reported as 1,765

Data is sorted by 2007 number of farms, highest to lowest. In 2012, the order is generally the same except that “vegetables, melons, potatoes, sweet potatoes” appeared to increase above “sheep, goats, and their products.”

2. Commodity Type and Totals in 2007 Dollars

Commodity Totals (in 2007 \$)									
Agricultural Products	1997	2002	2007	2012	Percentage Change*	2007 Percentage	Percentage Change 2007 and	2012 Percentage	
Milk and other dairy products from cows	\$ 18,384,324	\$ 10,965,268	\$ 11,841,000	\$ 13,117,253	-36%	22%	11%	29%	
Poultry and eggs	\$ 7,729,141	\$ 8,103,511	\$ 10,640,000	\$ 7,020,552	38%	20%	-34%	15%	
Fruit, tree nuts, and berries	\$ 5,367,639	\$ 6,680,124	\$ 9,858,000	\$ 6,175,269	84%	19%	-37%	13%	
Cattle and calves	\$ 7,069,006	\$ 5,437,685	\$ 5,439,000	\$ 7,226,455	-23%	10%	33%	16%	
Cut Christmas trees and short term woody crops	\$ -	\$ 1,509,828	\$ 2,976,000	\$ -	97%	6%	0%	0%	
Other crops and hay	\$ -	\$ 1,762,234	\$ 1,798,000	\$ 2,469,927	2%	3%	37%	5%	
Horses, ponies, mules, burros, and donkeys	\$ -	\$ 647,728	\$ 917,000	\$ 676,408	42%	2%	-26%	1%	
Grains, oilseeds, dry beans, and dry peas	\$ -	\$ 212,067	\$ 450,000	\$ 441,607	112%	1%	-2%	1%	
Sheep, goats, and their products	\$ -	\$ 291,593	\$ 342,000	\$ 97,533	17%	1%	-71%	0%	
Hogs and pigs	\$ 117,558	\$ 81,830	\$ 37,000	\$ -	-69%	0.1%	0%	0%	
Other crops	\$ 23,586,606	\$ 27,016,697	\$ 8,393,000	\$ 8,707,507.88		16%	4%	19%	
Total	\$ 62,254,274	\$ 62,708,565	\$ 52,691,000	\$ 45,932,510	-15%	100%	-13%	100%	

Notes Table 9B: Legend “-” = not available. 2002 value for horses adjusted to 2007 dollars to match approach to rest of values.

Source: U.S. Census of Agriculture, National Agricultural Statistical Service; BERK, 2012 and 2016.

3. Commodity Type and Totals in 2007 Dollars

Commodity Value per Farm (in 2007 \$)					Percentage	Percentage
Agricultural Products	1997	2002	2007	2012	Change 1997-2007*	Change 2002-2012
Milk and other dairy products from cows	\$ 574,510	\$ 438,611	\$ 473,640	\$ 1,457,473	-18%	232%
Poultry and eggs	\$ 68,399	\$ 67,529	\$ 34,433.66	\$ 27,002	-50%	-60%
Fruit, tree nuts, and berries	\$ 52,113	\$ 57,095	\$ 45,851	\$ 28,457	-12%	-50%
Cattle and calves	\$ 8,436	\$ 10,832	\$ 9,943	\$ 15,182	18%	40%
Cut Christmas trees and short term woody crops	\$ -	\$ 32,822	\$ 43,130	\$ -	31%	0%
Other crops and hay	\$ -	\$ 6,205	\$ 4,191	\$ 6,712	-32%	60%
Horses, ponies, mules, burros, and donkeys	\$ -	\$ 4,561	\$ 5,491	\$ 6,039	20%	10%
Grains, oilseeds, dry beans, and dry peas	\$ -	\$ 12,475	\$ 30,000	\$ 17,664	140%	-41%
Sheep, goats, and their products	\$ -	\$ 2,777	\$ 2,235	\$ 903	-20%	-60%
Hogs and pigs	\$ 3,094	\$ 1,670	\$ 597	\$ -	-64%	0%
Total	\$ 35,271.54	\$ 39,291.08	\$ 25,079.01	\$ 23,811.57	-29%	-39%

Notes Table 9.C: *Percentage change is between 2002 and 2007 when there is no 1997 data. Legend "—" = not available.
 Source: U.S. Census of Agriculture, National Agricultural Statistical Service; BERK, 2012 and 2016.

- **Many Clark County farms have livestock of some sort.**
 - Cattle and calves are the agricultural product found on the largest number of Clark County farms. 23% of Clark County farms produce cattle and calves.
 - The number of farms with Poultry and egg products more than doubled between 1997-2007. Though it has dropped by 49 farms, in 2012 it was still more than twice the 1997 or 2002 total.
- **Fruit, tree nuts, and berries and cut Christmas trees make up the largest non-livestock portion of Clark County farms.**
 - The number of Clark County farms growing fruit, tree nut, and berry products has doubled since 1997. The number of farms growing cut Christmas trees and short term woody crops has grown by 26%.
- **Milk products make up the greatest commodity totals of Clark County farms.**
 - Despite making up only 1% of Clark County's farms, farms that produce milk and other dairy products from cows brought in almost \$13.1 million, or 29% of 2012 commodity totals (in 2007\$) .
 - The total is down substantially from 1997, though there were 23 additional farms producing milk in 1997. The commodity total figure has grown slightly from 2002 though there are now fewer farms.
- **Other livestock-related products (cattle and calves and poultry and eggs) brought in approximately 31% of Clark County's commodity totals in 2012.**
 - Poultry and eggs contributed \$7 million in value in 2012 (in 2007 dollars), or 15% of 2012 commodity totals (and make up only 13% of farms). Similarly cattle and calves are at just over \$7.2 million (in 2007 dollars), or 13% of 2012 commodity totals (making up 23% of Clark County farms).
- **Fruit, tree nuts, and berries contribute 13% of commodity totals despite only representing 11% of farms.**

2.3 Farm Composition and Tenure

The Census of Agriculture provides information about the composition of farms – family versus corporate owned, as well as demographic characteristics such as age, sex, and income sources.

- There is a continuing trend of farms being family owned – over 90% in both 2007 and 2012. There is a very small percentage that are corporate owned in either period. See Exhibit E.
- Reflecting a family-operated trend in farming, a high proportion of farmers live on farm at about 90% in either 2007 or 2012.

- There is a greater reliance of farmers to have non-farm jobs. Though about one-third solely rely on their on farm income in both 2007 and 2012 periods, about 48% of farmers worked more than 100 days off farm in 2007, rising to 52% in 2012.
- The proportion of farmers over 55 years of age has increased from more than half to two-thirds between 2007 and 2012.

Exhibit EE. 2007 and 2012 Farm Typology (RLS Exhibit 13)

Type of Farm	2007				2012			
	Farms	Percent	Acres	Percent	Farms	Percent	Acres	Percent
Land in Farms	2,101	100%	78,359	100%	1,929	100%	74,758	100%
Family or individual	1,896	90%	67,185	86%	1,678	87%	60,254	81%
Partnership	107	5%	6,668	9%	117	6%	8,191	11%
Corporation \ Family-held	70	3%	3,022	4%	71	4%	2,966	4%
Corporation \ Other than family held	3	0.1%	-	-	9	0%	917	1%
Other - cooperative, estate or trust, institutional, etc.	25	1%	-	-	54	3%	2,430	3%

Source: U.S. Census of Agriculture, National Agricultural Statistical Service; BERK, 2012.

- **Most farms in Clark County are family- or individual-owned.**
 - Approximately 93% of Clark County farms are family farms (e.g. owned by families, individuals, or family-held farm corporations). In 2012, only nine farms were owned by non-family-held corporations.
- **Most operators have their place of residence on farm:**
 - 2007: 89%
 - 2012: 90%
- **Farm operators tend to be older.**
 - As of 2007, more than half of farm proprietors are 55 years or older (1,136 farms, 54%), with 18% (377 farm operators) being older than 70 in 2007. Only 4% (85 operators) of farm operators were younger than 35 in the same year.
 - By 2012, the percentage of farm operators that were 55 years or older has risen to about two-thirds (1,261, 65%). About 21% of operators are 70 years or older (404 farms), while 4% of farmers were less than 35 years old (78 farms).
- **Clark County farmers typically have off-farm jobs.**
 - That farmers tend to have non-farm occupations as their primary has been fairly consistent since 1997. In 1997, 67% of Clark County farmers had a non-farm primary occupation. In 2007, 61% of farmers had a primary occupation other than farming while 65% of farmers have a non-farm primary occupation as of 2012.

- Only 32% of Clark County farmers did not work any days off their farm in 2007 rising slightly to 35% by 2012. Those working up to 99 days off-farm included 19% in 2007 falling to 13% in 2012. 48% of farmers worked more than 100 days off farm in 2007, rising to 52% in 2012.
- In 2012, Statewide, 47% of farmers are principally engaged in farming, which is slightly higher than 46% in 2007.
- **Farmers tend to be male, though the number and percentage of female farm operators is growing.**
 - In 2007 and 2012, about 23% of all farm operators were female. The number of female farm operators has increased 75% between 1997 and 2007 while the number of male farm operators has increased 9% over the same period. By 2012, the number of either male or female operated farms dropped, but the proportion of female operators is essentially the same as 2007.

2.4 Location and Spatial Patterns of Agriculture

Both the USDA Agriculture Census and Clark County Assessor's data do not provide geospatial specific locations of the actual land being farmed and the nature of the farming. The best information about the location of farming (and type) can be gleaned from a synthesis of the Current Use Taxation Program and Washington State Department of Agriculture's (WSDAs) Crop Use data (

Exhibit F

Exhibit F (Exhibit F). This location-specific mapping of farm fields and crop type is new since the 2012 Rural Lands Study.

PREVALENT CROP TYPES: The Census of Agriculture 2012 reported Clark County had a total of 74,758 acres in farms. WSDA maps the extent of agriculture based on field visits and aerial photography, identifying more exact boundaries of fields and facilities that are independent of parcel lines. WSDA's detailed and local inventory dated 2015 found about 27,443 acres in agriculture in Clark County. This is similar to the 2012 Census report of total cropland at 28,986 acres.

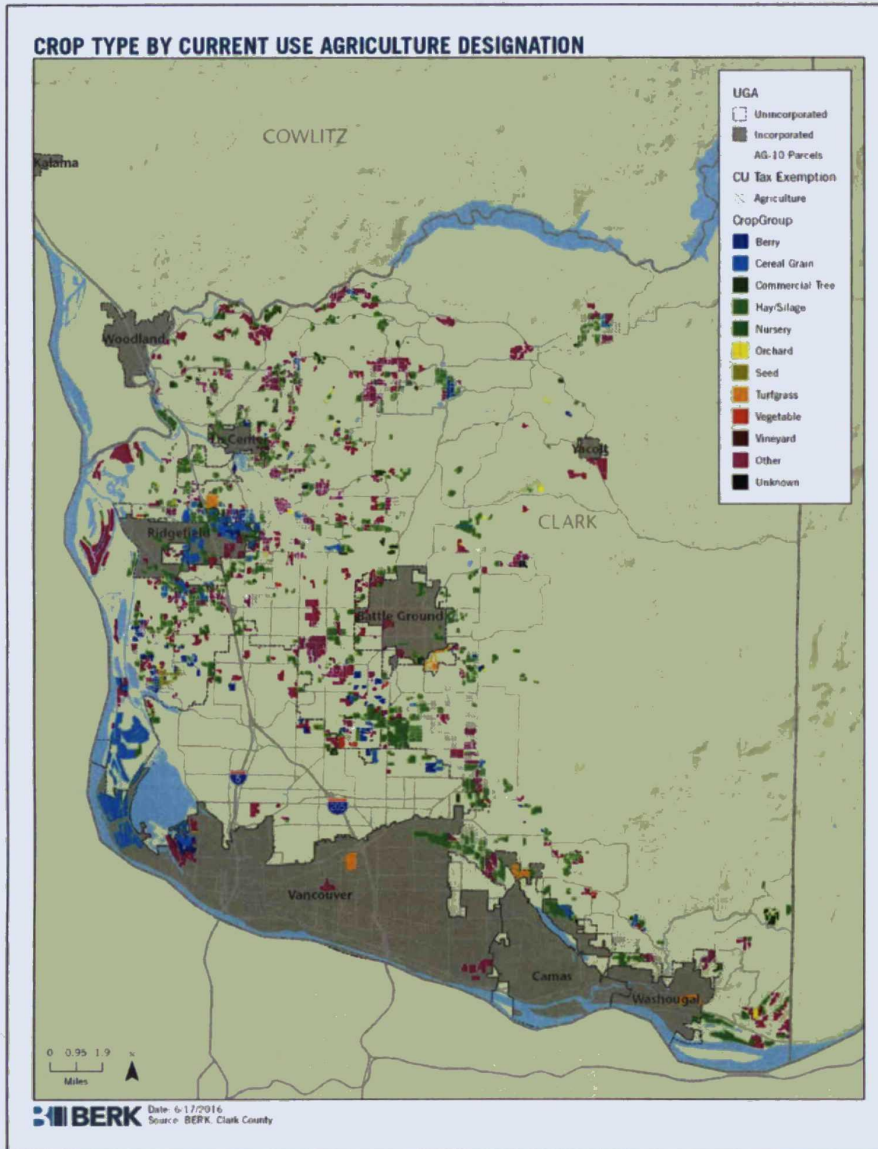
The mapped WSDA information shows hay/silage, cereal grains, and "other" (pasture, fallow, commercial trees, etc.)² are the predominate crops in Clark County by section acreage. Per Exhibit F, much of the land in active agricultural use is located in unincorporated areas and is zoned Rural as well as AG (currently AG 20, proposed AG 10).

This pattern of small farms being found in both the Rural and AG zoned areas is similar to findings in 2012 Rural Lands Study. That study identified the diversity in location and type of agriculture across the County, and found that a diverse set of small farms and enterprises are increasingly becoming part of the rural landscape. Per the Census of Agriculture results, very small and small farms that produce little income, are mostly supported with non-farm income. Many farmers in this category farm for non-market reasons and may be willing to farm at a loss, given unpaid farm labor within these households.

² Other includes: Pasture, Market Crops, Fallow, Silviculture, Christmas Trees, Wildlife Feed, CRP/Conservation, and Developed.

The growing demand for local produce and increasing market share of CSAs presents farms in these categories with opportunities to generate additional income. Many of these farms also host other co-located rural business that may, or may not, be related to agricultural production.

Exhibit FF. Crop Type by Current Use Agriculture Designation (RLS Exhibit 16)



Source: BERK, 2016.

AG 10 AND WSDA AGRICULTURAL INVENTORIES: Given onsite development or other non-productive rural uses (e.g. dwellings, manicured lawns associated with dwellings, etc.) there is a greater area zoned AG and a lesser area inventoried by WSDA in agricultural use. WSDA inventoried acres make up between 15-27% of the AG 10 zone area. See Exhibit G.

Exhibit GG. AG 10 Zone, State Agricultural Inventory Acres

AG Zone Parcel Size Range	Number of Parcels	Percent of Total Parcels	AG Zone Parcel Acres	Housing Units	WSDA Agriculture Inventory Acres	Percent WSDA Agricultural Inventory of Parcel Acres
<=5 Acres	1,152	44%	3,138	858	461	15%
5-10 Acres	609	23%	4,021	443	729	18%
10-20 Acres	432	16%	7,049	288	2,070	29%
20+ Acres	447	17%	17,902	284	4,890	27%
Total	2,640	100%	32,111	1,873	8,150	25%

Source: WSDA 2015, Clark County Assessor 2016, BERK Consulting 2016

PREVALENT LOT SIZES AND HOMESITES: Most AG zone parcels are less than 5 acres in size (44%). About 67% are less than 10 acres in size. There are properties in contiguous common ownership, which would contribute to effectively larger parcels than considering parcels individually. However, many of the lots in common ownership have homes, and likely house family members or may be sold individually. See Exhibit H and Exhibit J illustrating acres and contiguous ownership.

Exhibit HH. Parcels Less than 20 Acres – Contiguous Ownership (RLS Policy Table 2)

Parcel Size Range	AG Zoned Parcel Count	AG Zoned Acres	WSDA Agriculture Inventory Acres	Sum of Dwelling Units	Percent of Lots with Dwelling Units
<=5	1,152	3,138	461	858	74%
-	863	2,413	315	759	88%
Contiguous	289	725	146	99	34%
10-20 Acres	432	7,049	2,070	288	67%
-	295	4,821	1,315	235	80%
Contiguous	137	2,228	755	53	39%
20+ Acres	447	17,902	4,890	284	73%
-	291	11,426	3,127	233	90%
Contiguous	156	6,476	1,762	51	27%
5-10 Acres	609	4,021	729	443	64%
-	443	2,909	444	398	80%
Contiguous	166	1,112	285	45	33%
Grand Total	2,640	32,111	8,150	1,873	71%

Source: Clark County GIS; BERK 2011

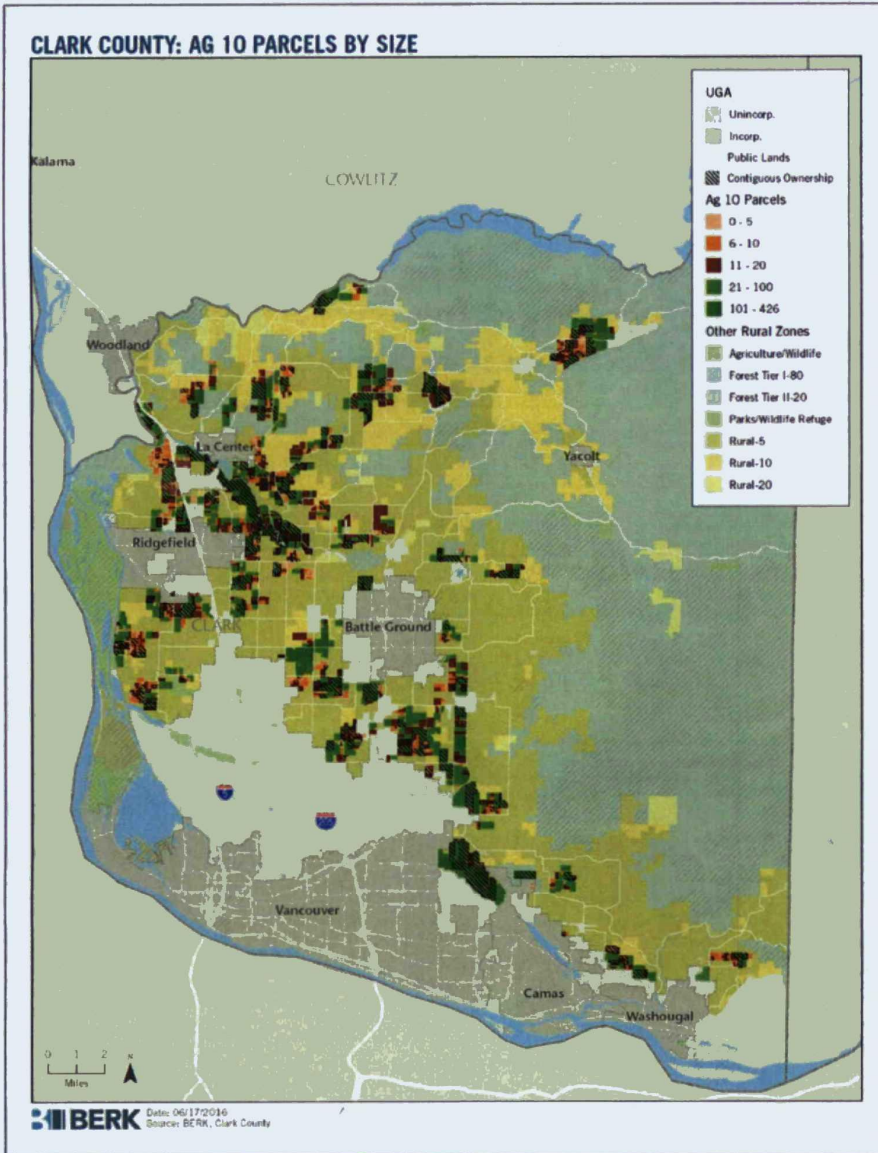
Similar to findings in the Rural Lands Study, the median parcel size in the AG zone is 5.1 acres. The median parcel size for properties in current use taxation is 18.9 acres, smaller than estimated in the Rural Lands Study, which was 21.4 acres. See Exhibit I.

Exhibit II. Median Parcel Sizes in Agriculture Zone (RLS Policy Table 1)

Size	# of Parcels	Acres	Median Parcel Size
Total Parcels/Acres	2,640	32,111	5.1
In Current Use Agriculture	819	17,002	18.9

Source: Clark County 2011

Exhibit J. AG Zone Parcel Size Map (RLS Policy Appendix B)



Source: Clark County Assessor, BERK Consulting 2016

2.5 Agricultural Criteria

Clark County designated agricultural lands of long-term commercial significance in 1994 and revisited the designations in 1998 making some adjustments of properties called Agri-forest at the time. The County's designation of AG was upheld by the Growth Management Hearings Board. The Growth Management Act provides guidelines for classification of resource lands in RCW 36.70A.050, and the Washington State Department of Commerce further defines them in Chapter 365-190 WAC. A summary of the criteria is shown in Exhibit K, along with a broad summary of conditions in the AG 10 zoned properties.

Exhibit K. Agricultural Criteria – Lands of Long-Term Commercial Significance for Agriculture

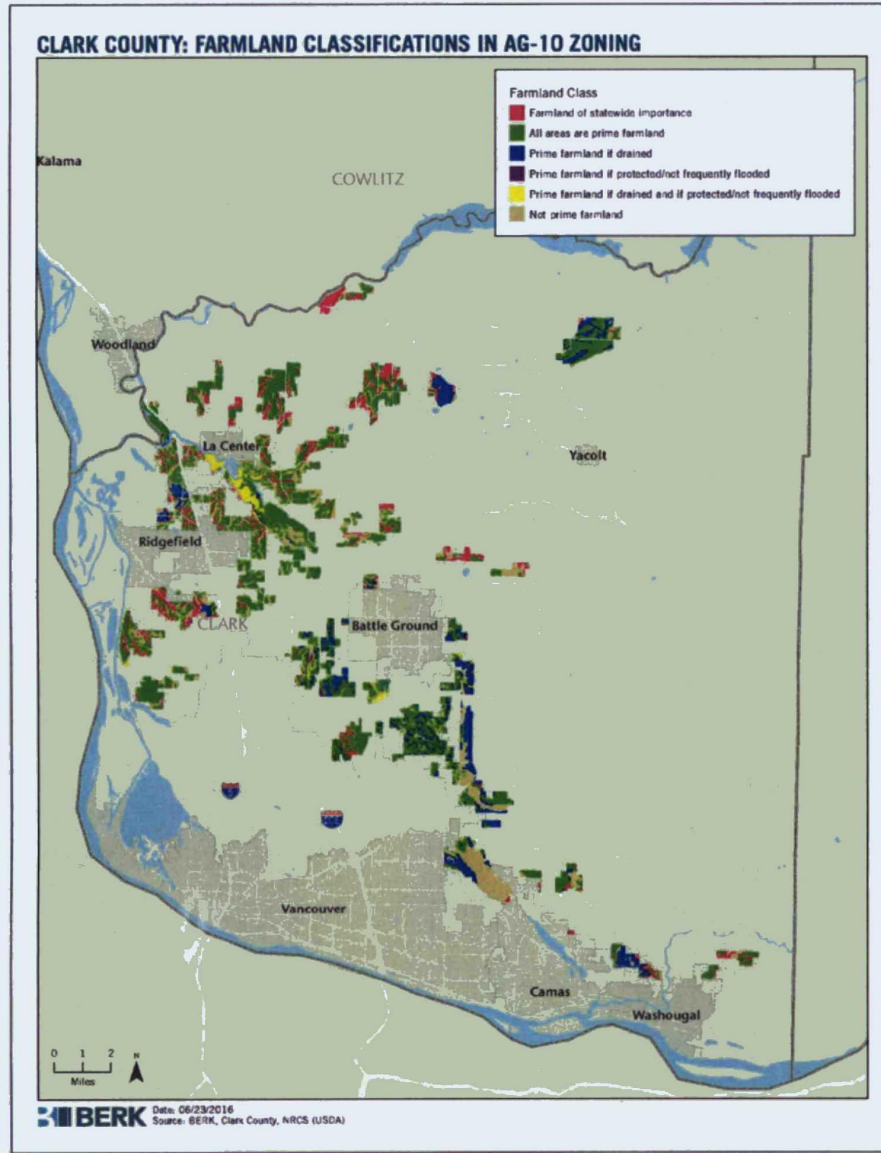
WAC 365-190-050 Criteria Summary	AG 10 Zone Characteristics																																	
Areawide analysis conducted	The County conducted an areawide analysis in 1994 and 1998.																																	
Regulations conserving agriculture adopted	Regulations allow agriculture in all zones and conserve AG designated lands.																																	
Not already characterized by urban growth	Clark County has a prevalence of family owned farms on AG properties of 5-20 acres in size or larger. Most farmers live onsite and produce agriculture onsite based on 2012 Census of Agriculture information. The lands are not developed at an urban density.																																	
Used or capable of being used for ag. production	Indicators of agricultural use include the WSDA inventory showing that half to a third of AG zoned sites have inventoried fields. More than half of the AG acreage is in current use taxation (see Exhibit I).																																	
Land-capability classification	<p>About two-thirds of the AG 10 land is in land capability classes of 1, 2, or 3. Some of the other lower capability classes are found, but are actively being farmed (e.g. Anderson dairy east of Vancouver located in floodplain). Acreages below are a little smaller than the total AG zone since it is based on parcels and exclude water or roads.</p> <p>Ag-10 Zoning: Non-Irrigated Soils (Parcel Acres)</p> <table border="1"> <thead> <tr> <th>Non-Irrigated Soils</th> <th>Acres</th> <th>Percent</th> </tr> </thead> <tbody> <tr> <td>Non-Irrigated Class 1</td> <td>2,121</td> <td>7%</td> </tr> <tr> <td>Non-Irrigated Class 2</td> <td>6,918</td> <td>22%</td> </tr> <tr> <td>Non-Irrigated Class 3</td> <td>10,764</td> <td>35%</td> </tr> <tr> <td>Non-Irrigated Class 4</td> <td>1,328</td> <td>4%</td> </tr> <tr> <td>Non-Irrigated Class 5</td> <td>242</td> <td>1%</td> </tr> <tr> <td>Non-Irrigated Class 6</td> <td>7,833</td> <td>25%</td> </tr> <tr> <td>Non-Irrigated Class 7</td> <td>1,388</td> <td>4%</td> </tr> <tr> <td>Non-Irrigated Class 8</td> <td>153</td> <td>0%</td> </tr> <tr> <td>Non-Applicable</td> <td>220</td> <td>1%</td> </tr> <tr> <td>Total (Parcel Acres)</td> <td>30,968</td> <td>100%</td> </tr> </tbody> </table>	Non-Irrigated Soils	Acres	Percent	Non-Irrigated Class 1	2,121	7%	Non-Irrigated Class 2	6,918	22%	Non-Irrigated Class 3	10,764	35%	Non-Irrigated Class 4	1,328	4%	Non-Irrigated Class 5	242	1%	Non-Irrigated Class 6	7,833	25%	Non-Irrigated Class 7	1,388	4%	Non-Irrigated Class 8	153	0%	Non-Applicable	220	1%	Total (Parcel Acres)	30,968	100%
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Classification of prime and unique farmland soils	About two thirds of the AG property are prime farmland or prime farmland if drained or protected from flooding. Another 10% is farmland of statewide importance. See Exhibit L.																																	
Availability of public facilities, including roads used in transporting agricultural	AG zoned properties lie along roads that may be used to transport goods. See Exhibit J.																																	

WAC 365-190-050 Criteria Summary	AG 10 Zone Characteristics
products	
Tax status, including current use tax assessment	More than half of the AG acreage is in current use taxation (see Exhibit I).
Availability of public services	AG zoned properties have access to police, fire, parks, and schools across the county. Response times for emergency services are potentially greater in the further reaches of the county.
Relationship or proximity to urban growth areas	The AG zoning is applied to properties surrounding urban growth areas, particularly LaCenter, Ridgefield, Battleground, and Vancouver. See Exhibit J .
Predominant parcel size	The median parcel size is 5.1 acres. About 44% of parcels are less than 5 acres and another 39% are 5-20 acres in size. Some land is in contiguous ownership. See Exhibit G and Exhibit H .
Land use settlement patterns and their compatibility with agricultural practices	Typically AG zoned property abuts Rural zoned property. Per the current use taxation program and the WSDA inventories, agriculture is often occurring in Rural zoned land as well as AG zoned land, which is compatible in use. See Exhibit F . In some cases AG land directly abuts UGAs where there would be a greater intensity of use in UGAs.
Intensity of nearby land uses	See land use settlement criteria above.
History of land development permits nearby	Based on a review of Clark County GIS information online, building, site plan, and subdivision permits are more prevalent in UGAs than in unincorporated lands due to the greater population and parcels with the UGAs. (http://gis.clark.wa.gov/maponline/)
Land values under alternative uses	Land values for non-agricultural uses are greater than for agricultural uses. Thus, more than half of the AG zoned property owners participate in the current use taxation program (see Exhibit I).
Proximity to markets	AG zoned properties lie in proximity to several communities including Vancouver, Battleground, LaCenter, Ridgefield, and others. See Exhibit J .
May consider food security, local food, artisans	In Clark County the number of small farms has been increasing over time, and represents more intensive, value-added, urban-oriented farming. The Clark County Food System Council addresses food security in the County and is promoting the use of locally grown food. As noted in Section 3.2, Clark County has high numbers of farms participating in CSAs and selling directly to consumers. Clark County had 39 farms that marketed products through community supported agriculture (CSA). This is the second highest in the state after King County with 46 farms marketing through CSAs. Clark County had 141 farms that produced and sold value-added commodities, third highest in the state after Yakima (187) and King (163).
Designating agricultural resource lands sufficient to maintain and enhance the economic viability of the ag. industry in County over long-term	The number of Clark County farms has increased since 1997. While most farms in Clark County are small in terms of value of output or size, they represent a local food network. See food security discussion above. Measures to address the needs of farmers (e.g. access to farmland and homes) while protecting the land base (e.g. clustering or building envelope criteria) would help retain agriculture uses on the land. See Sections 3.1 and 3.2 for more information.

Source: BERK Consulting 2016

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Exhibit L. Prime Farmland – AG 10 Zone



Source: Clark County Community Planning, NRCS USDA, BERK Consulting 2016

2.52.6 Trends in Forestry

The location of forestry can be gleaned from a synthesis of the Current Use Taxation Program and the County's forest land use designation ([Exhibit N](#)~~Exhibit M~~~~Exhibit L~~). Most of the County's designated land of long-term commercial significance is identified as Forest Tier I and has a zoning standard of 80-acre lots.

Most of the County's Forest Tier II – currently 40 acres and proposed at 20 acres in the Forest 20 zone – applies to properties with smaller lot size. Most of the Forest 20 lots are less than or equal to 20 acres in size (89%), and most of the Forest 20 lots have homes on them. See [Exhibit M](#)~~Exhibit L~~~~Exhibit K~~.

Exhibit ~~M~~~~L~~~~K~~. Distribution of Parcel Sizes in Forest 20 Zones

Size	Number of Parcels	Percent of Total Number Parcels	Parcel Acres	Percent of Total Parcel Acres	Housing Units	In Current Use Timber	In Current Use Designated Forest Land
<=5 Acres	2,514	63%	3,056	10%	1,312	54	48
5-10 Acres	640	16%	4,214	13%	432	178	57
10-20 Acres	417	10%	6,543	21%	227	187	64
20+ Acres	446	11%	17,980	57%	227	98	182
Total	4,017	100%	31,792	100%	2,198	517	351

Source: Clark County Assessor, BERK Consulting 2016

There is limited information about the size of a commercially viable forest holding. The State of Washington Department of Natural Resources and Department of Revenue tracks revenues on stumps from forest harvest and considers small private holdings to be less than 5,000 acres. The Washington State Department of Natural Resources notes that small forest landowners own 3.2 million acres of Washington forests³ – about half the private forestland in the state. The State has a program for Small Forest Landowners that have produced less than average timber volume of two million board feet per year stumps over a 3-year period. Access to programs that offer funding require a property of at least 10 acres in size for stewardship activities or more than 20 acres for the forestry riparian easement program.

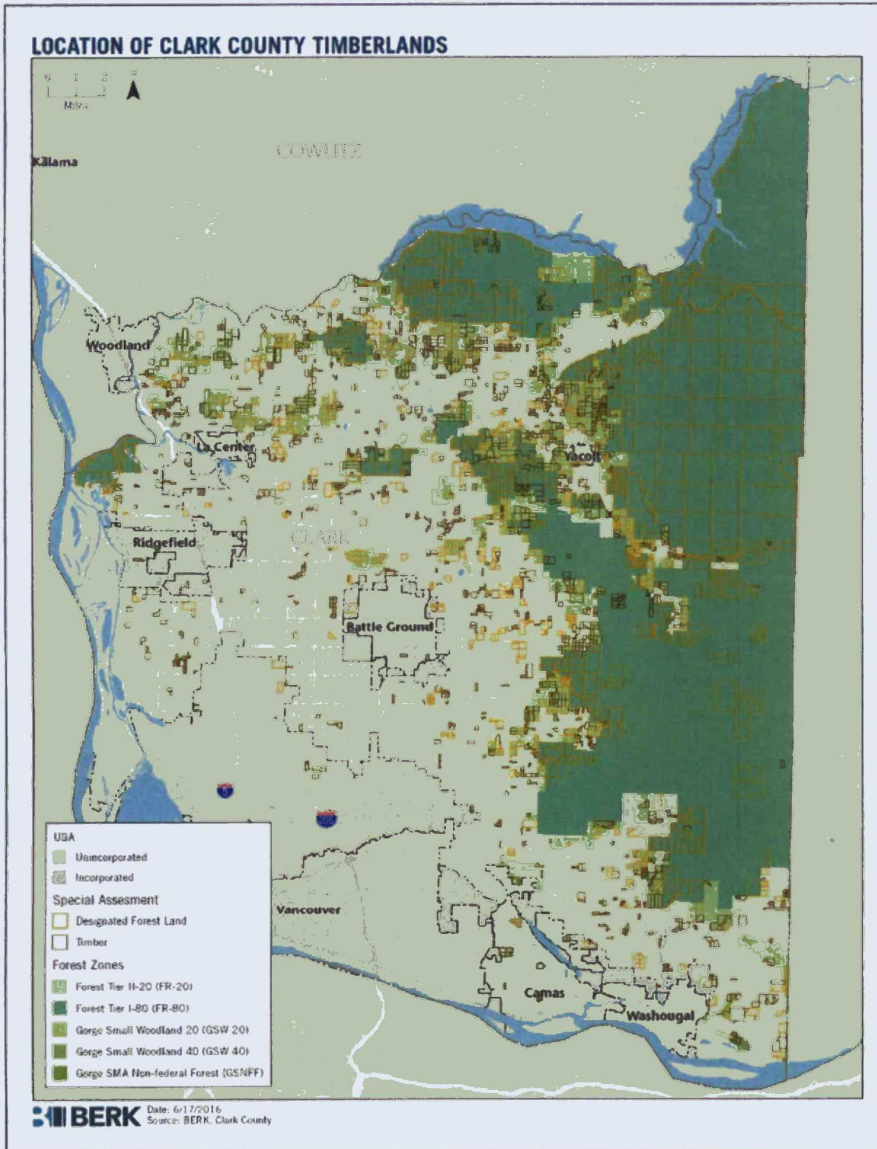
About 22% of all Forest 20 parcels are in current use taxation, per [Exhibit M](#)~~Exhibit L~~, allowing lower taxes for maintaining the land in forestry; per [Exhibit N](#)~~Exhibit M~~, the parcels in current use taxation that are designated as forest lands are extensive.

The current use taxation program criteria for either timberland or designated forestland is based on the following size and character of forest lands: Have a minimum of 5 contiguous acres in the same ownership, not including any residential home sites, be actively growing timber for commercial harvest, and be compliant with forest practice laws and regulations.

The minimum current use taxation program acreage is 5 acres. It was reduced from 20 acres to 5 acres in 2014 legislation.

³ See website: <http://www.dnr.wa.gov/sflo>.

Exhibit NML. Location of Clark County Timberlands (RLS Exhibit 22)



Source: Clark County Assessor, 2016; BERK, 2016.

There are criteria for designation of forestland as of long-term commercial significance under State rules (WAC 365-190-060).

The other criteria include, in summary:

- In classifying and designating forest resource lands, counties must approach the effort as a county-wide or regional process.
- Lands should be designated as forest resource lands of long-term commercial significance based on three factors:
 - The land is not already characterized by urban growth.
 - The land is used or capable of being used for forestry production.
 - The land has long-term commercial significance; this includes determining which land grade constitutes forest land of long-term commercial significance, based on local physical, biological, economic, and land use considerations. However, the presence of lower private forest land grades within the areas of predominantly higher grades need not preclude designation as forest land.
- Counties and cities must also consider the effects of proximity to population areas and the possibility of more intense uses of the land:
 - The availability of public services and facilities conducive to the conversion of forest land;
 - The proximity of forest land to urban and suburban areas and rural settlements: Forest lands of long-term commercial significance are located outside the urban and suburban areas and rural settlements;
 - The size of the parcels: Forest lands consist of predominantly large parcels;
 - The compatibility and intensity of adjacent and nearby land use and settlement patterns with forest lands of long-term commercial significance;
 - Property tax classification – current use assessment;
 - Local economic conditions which affect the ability to manage timberlands for long-term commercial production; and
 - History of land development permits issued nearby.
- Counties and cities may also consider secondary benefits from retaining commercial forestry operations. Benefits from retaining commercial forestry may include protecting air and water quality, maintaining adequate aquifer recharge areas, reducing forest fire risks, supporting tourism and access to recreational opportunities, providing carbon sequestration benefits, and improving wildlife habitat and connectivity for upland species.

A primary criteria is related to soil capabilities. Much of the County has the appropriate ratings for forestland. See Exhibit O. About 20% of parcels representing significant acreage is in current use taxation (see Exhibit M~~Exhibit L~~ and Exhibit N~~Exhibit M~~). Much of the designated forest land is located further east of the settled areas of the county. Regarding parcel size, the County is retaining larger parcel sizes for Tier I land, and is considering changing the Forest 40 to Forest 20. This acreage size is in the range considered by other counties, as described further in Section 3.3. Some counties address clustering and other techniques to allow the continuation of forestry activities. As described above, the State offers assistance to smaller forestry owners to encourage stewardship. The combination of criteria in the rules led to the designation of forestland in the Comprehensive Plan in 1994 as updated in 1998, and conditions are similar today.

Exhibit O. Soil Capabilities for Forest Use



Source: Clark County Comprehensive Plan Update, Final SEIS, April 2016

II. LITERATURE REVIEW AND EXAMPLE COUNTIES PROVIDING REGULATORY SUPPORT FOR PRODUCERS

3.0 PURPOSE AND BACKGROUND

The Rural Lands Study also included an analysis examining the County's rural and resource lands policy objectives, Growth Management Act (GMA) parameters, and other planning examples that, together with the market assessment offered some possible policy and code development options. Policy options included a variety of tools such as homesteading, clustering, and others.

Part II of this supplemental analysis updates the status of rural and resource conservation tools by example counties. This part of the issue paper also involves a brief review of existing reports or literature regarding the economic need to support agriculture with a resident population (residents on the agricultural land); and the relationship of smaller agricultural operations and proximity to urban markets (farm to market, etc.).

3.1 Agriculture-Agricultural Zoning

Example Counties in Washington State

Western Washington Counties addressing agricultural activities are highlighted below in [Exhibit P](#) [Exhibit M](#). All counties have a median farm size of 20 acres or less, with particularly populous counties such as Pierce, King, and Snohomish having median farm sizes of about 10 acres similar to Clark County. These latter counties have minimum agricultural zone parcel sizes of 10 acres. All but Skagit County allow residential uses. Most have lot or building standards designed to protect agricultural soils and agricultural activities (King, Snohomish, Skagit, and Whatcom Counties) such as through building siting standards, lot depth/width standards, land use restrictions, or lot aggregation requirements. Pierce, Skagit, and Whatcom Counties allow or require clustering.

Exhibit P [PNM](#). Example County Regulations in Agricultural Zones – Western Washington

County	2012 Median [Average] Farm in Acres	Agricultural Zoning– Min. Lot Size (Acres)	Dwellings Allowed	Lot / Building Standards Promoting Farming	Clustering
Clark County 2015 Pop: 451,820	10 [39]	20	Yes	Not required. Building envelope siting criteria are under consideration.	Clustering not allowed on Resource Lands. Reconfiguration of nonconforming lots is allowed on AG zoned land but is not required.
Pierce County 2015 Pop: 830,120	10 [33]	10	Yes	Not required. Policies call for reduced or eliminated processing fees for subdivisions for the purpose of recombining substandard lots.	Clustering allowed on most ARL lands. Residential density may be increased to a max. of 1 DU / 5 acres on properties of 20 acres +. Max 10 lots per cluster; only 1 lot may be greater than 1 acre (limited to 10% impervious).

County	2012 Median [Average] Farm in Acres	Agricultural Zoning– Min Lot Size (Acres)	Dwellings Allowed	Lot / Building Standards Promoting Farming	Clustering
King County 2015 Pop 2,052,800	8 [25]	10, 35	Yes	Standards include a Maximum Lot Depth/Width Ratio of 4 to 1 to promote farming and avoid homes on long narrow lots	Clustering not allowed on AG Resource Lands
Snohomish County 2015 Pop 757,600	10 [49]	10	Yes	New lot can be less than 10 acre standard if exclusively agriculture use. New dwellings on existing legal lots within farmlands or on parcels adjacent to farmlands allowed, require a resource protection area easement on balance. Lot consolidation required for three or more contiguous lots created prior to 1957	Clustering not allowed on AG Resource Lands. Required on Rural lands adjacent to designated local or commercial farmland
Skagit County 2015 Pop 120,620	20 [99]	40	No, unless certified as a legal lot prior to 2005	Siting criteria required in Agricultural zone. Addresses onsite and offsite compatibility. Limits development to 1 acre in extent	Clustering allowed
Whatcom County 2015 Pop 209,790	16 [68]	Agriculture 40 Agriculture Protection Overlay 5, 10, 20	Yes on lot of record	Required to consolidate adjacent tracts in same ownership. APO has onsite siting criteria for clustered lots	Clustering required on Rural lands with Agriculture Protection Overlay (cluster on 25% of land). Clustering under consideration on Resource lands. Homesteads allowed on AG 40 properties. A farmstead parcel between 1 and 3 acres in size can be established by boundary line adjustment or agricultural short plat to recognize an existing home, plus accessory structures. There can be no increase in allowable density and the remaining non-residential lot cannot be further subdivided (a note must be recorded)

Source: Code Publishing Co. or County-published Codes, BERK Consulting 2016

Some of the example counties are in the midst of addressing agricultural resource lands policy and zoning issues, including

- In 2016, the Pierce County Council authorized funding a study of agriculture and ARL “conducting an evaluation and providing a report on agricultural land in Pierce County that has long-term significance for the commercial production of food or other agricultural products.” It may lead to remapping of ARL land since tasks include looking at the County’s mapping criteria that address

parcel size and yield. It also includes elements similar to the Clark County Rural Lands Study in terms of looking at the market economics and conducting qualitative outreach with farmers.

- Much of Whatcom County's resource land base is designated for AG-40, allowing 40 acre lots. However, to achieve the County's goals of an agricultural industry of 100,000 acres or more, the County has protected agriculture on smaller Rural zoned lots through an Agricultural Production Overlay (APO) zone. Recently, the County has been considering whether to rezone these Rural / APO zoned lots to Agriculture zones allowing smaller lot sizes more consistent with the patterns observed in the area. In 2015 and 2016, Whatcom County evaluated these as Rural Study Areas (RSAs). The County may consider rezoning these RSAs (comprising 21,950 acres) from their respective Rural Districts (R-5A and R-10A) to Small Lot Agriculture Districts (Ag-5 or Ag-10) at densities higher than the County's current Agriculture Zone (Ag-40). The Small Lot Agriculture District is anticipated to add heightened protection to these productive agricultural areas by: 1) reducing the types and number of non-agricultural uses and increasing the types and number of permitted agricultural uses in these areas; and 2) reducing the likelihood of the affected parcels being taken out of agricultural use by rezoning them to increase residential density in the future.

Other National Examples

The issue of balancing an allowance for home sites and agriculture is a common one across the country. Two examples of how that balance is achieved are presented below.

WISCONSIN. The [Wisconsin Farmland Preservation Program](#) is designed to help local governments and landowners preserve agricultural land, minimize conflicting land uses, and promote soil and water conservation. Owners of farmland who participate in the program receive an income tax credit incentive. Model zoning ordinances identify how a local government can craft regulations that are certified to meet the provisions of the state program. Generally, the model ordinances allows residences for farmers, and restrict nonfarm residences by requiring a conditional use permit for either a single nonfarm residence or a cluster of nonfarm residences. The new state standards encourage smaller residential lots that convert less farmland. There are siting standards for nonfarm residences to avoid converting active farmland or prime soils.

KALASKA COUNTY, MICHIGAN COMMUNITY CENTER, 2003 [Zoning Techniques for Farmland Preservation](#): Information about land use planning including protecting resource lands was made available to the community, and was adapted from "Watershed Resource Papers" developed for the Dowagiac River Watershed Project by Langworthy, Strader, LeBlanc, & Associates, Inc. Various techniques are summarized that protect agriculture while accommodating housing, including: 1) Exclusive use zoning with limitations on new non-farm residences and other provisions such as a maximum lot to depth ratio of 1:3 and large minimum lot widths and setbacks; 2) Sliding scale zoning that limits the number of times that a parent parcel (a parcel existing on the date of ordinance adoption) can be split, based on its size but that does not require special land use permits; 3) "Quarter/quarter zoning" where a limited number of non-farm homes are allowed for every 40-acres of land; and 4) Cluster development that provides for a denser concentration of development in a limited area, with no increase in the overall, or "gross density" of the site.

3.2 Agricultural Literature Review

Supporting Agriculture with a Resident Population

More recently farmland preservation advocates and governmental agencies have identified the need to both protect farmland and support the farmers that farm the land.

NEW FARMS – BARRIERS AND GAPS, AMERICAN FARMLAND TRUST: Given an aging farmer population (more pronounced in Clark County as of 2012 similar to other counties), a recent paper examined how to help attract new farmers. The paper identified a gap for new farmers – gaining access to land particularly infrastructure and housing to support a new operation. Some solutions include farm link programs that list land offers, consulting services, transfers, and agreements from retiring farmers, etc. plus private land trusts.

- Freegood, Julia and Jennifer Dempsy, American Farmland Trust, 2014, [Cultivating the Next Generation: Resources and Policies to Help Beginning Farmers Succeed in Agriculture](#):

WHATCOM COUNTY – FINANCING OF HOMES: Whatcom County explored amending its homesteading rules (onsite homes used by farmers or their heirs), building site location requirements to protect agricultural operations and prime soils, and allowing for newer forms of clustering without adding density:

- [Presentation from Initial Review Team Meeting - February 2012 \(PDF\)](#)
- [Project Fact Sheet \(PDF\)](#)
- [Situation Assessment and Recommendations - May, 2012 \(PDF\)](#)
- [Supplemental Analysis - August, 2012 \(PDF\)](#)

A focus group was convened with farmers, lawyers, and finance professionals to discuss current and potential regulations to support farmers and protect the land.

Finance professionals indicated that farmland owners enrolled in a current use tax deferral program can have trouble getting financing in the secondary market, and they expected that this problem would drive down the size of homestead sites. It is easier to obtain a loan to build a home for the farmer if smaller homesites are allowed (either traditional parcel or homestead parcel) because it allows the bank to consider a greater pool of comparable properties and more readily determine the loan cost. The banks would also be more assured as to the individual homesite access to utilities.

Whatcom County's proposed 2016 Comprehensive Plan Update includes policies advancing the code changes proposed in the study.

Relationship of Smaller Agricultural Operations to Urban Markets

More recent research has been compiled by the Congressional Research Service and USDA on smaller agricultural operations in urban markets:

- Johnson, Renee, et al. Congressional Research Service, 2013: The Role of Local Food Systems in U.S. Farm Policy, <https://www.fas.org/sgp/crs/misc/R42155.pdf>.

- Martinez, Steve, et al. Local Food Systems: Concepts, Impacts, and Issues, ERR 97, U.S. Department of Agriculture, Economic Research Service, May 2010, available: http://www.ers.usda.gov/media/122868/err97_1.pdf

Research highlights are excerpted and focus on the growth in the value and extent of local food, the significant share of farms that are located in metropolitan areas, and the potential benefit of small farm proximity to urban areas in terms of customers as well as a source of labor and location of like-minded farmers to form coops to help support small farms' marketing efforts.

- In 2007, there were about 859,300 metropolitan farms in the United States, accounting for about 40% of all U.S. farms and about 40% (\$115.7 billion) of the total value of U.S. agricultural production, according to USDA.
- Most farms (81%) engaged in direct-to-consumer sales are "small" farms, with annual farm sales under \$50,000, totaling an estimated 86,700 farms in 2008. For smaller farms, direct marketing to consumers accounts for a higher percentage of their sales than for larger farms. Small farms with direct sales often engage in other entrepreneurial activities.
- The leading states with direct-to-consumer marketing sales in 2007 were California, New York, Pennsylvania, Michigan, Oregon, Ohio, Washington, Wisconsin, Massachusetts, and Texas.
- USDA reports that the value of direct-to-consumer food marketing increased in all U.S. producing regions from 1997 to 2007.
- Among the reasons cited for the increasing popularity of local foods are perceived higher product quality and freshness of local food; a desire to provide social and political support for local farmers and the local economy; farmland preservation; and others related to environmental and equity concerns. A desire to support nearby small and medium-sized farms is also a motivation for consumers.
- About four out of five respondents to a 2006 national survey said they purchased fresh produce directly from growers either occasionally or always (Keeling- 2 Local Food Systems: Concepts, Impacts, and Issues / ERR-97 Economic Research Service/USDA Bond et al., 2009).
- USDA reports that small farms rely more on direct-to-consumer marketing channels (farmers' markets, on-farm sales, roadside stands, CSAs, etc.) as compared to larger farms.
- Metropolitan farms are reported to have a different product mix than farms in non-metro areas, and consist of mostly high-value crops, such as fruits and vegetables, and also livestock and dairy products.
- Significant costs of direct marketing and on-farm processing, especially those related to time and labor, can present obstacles to expansion of local food sales. This may be partially alleviated by proximity to metro areas and farmers markets. Other solutions are to pool resources through coops, training of new farmers, and other techniques.

- Most policy issues facing farmers' markets develop at the local level because farmers' markets are a local activity (Hamilton, 2005). The most commonly encountered local policy issues relating to farmers' markets are operational questions, such as where the market can operate, parking, security, and conflicts with adjacent businesses. These policies can be significant factors. Farmers' markets have been found to have positive impacts on local economies.

Within the literature cited, maps identified Clark County as having 20-40% of farms with direct sales in 2007. More recent Census of Agriculture 2012 information shows:

- Clark County had 39 farms that marketed products through community supported agriculture (CSA). This is the second highest in the state after King County with 46 farms marketing through CSAs.
- Clark County had 141 farms that produced and sold value-added commodities, third highest in the state after Yakima (187) and King (163).

Combined with the trend information in Section 2.0 regarding the prevalence of very small farms by value and the relatively small agricultural parcels found throughout the AG zone and Rural zoned areas, this information on direct sales and entrepreneurship shows that Clark County is an example of the local food movement and is benefiting by having farms in proximity to urban markets to meet customer preferences. Clark County's agriculture continues to reflect the findings of the 2012 Rural Lands Study:

Key Finding #1: Agriculture in Clark County in 2011 is in the midst of a decade's long transition from large scale commodity farming into more intensive, value-added, urban-oriented farming.

Key Finding #2: Large farm and mid-size farms are declining in number, acres, and value. However, they remain a viable enterprise but face a multitude of challenges.

Key Finding #3: A Diverse set of small farms and enterprises are increasingly becoming part of the rural landscape.

3.3 Forestry Zoning

Western Washington Counties have a range of lot sizes for forest lands, from 20 to 80 as shown in Exhibit Q. Clustering is allowed in Pierce, Skagit, and Snohomish Counties, in whole or in part.

Exhibit Q. Example County Regulations on Forestry Lands – Western Washington

Policy Topic	Forestry Lot Sizes	Residential Allowances	Clustering
Clark County	40, 80	Allowed.	Not allowed on Resource Lands – under consideration.
Pierce County	80	Allowed.	Residential density may be increased to a max. of 1 DU / 5 acres on properties of 20 acres +. Max 10 lots per cluster; only 1 lot may be greater than 1 acre (limited to 10% impervious).
King County	80	Allowed. However,	Not allowed on Resource Lands

<u>Policy Topic</u>	<u>Forestry Lot Sizes</u>	<u>Residential Allowances</u>	<u>Clustering</u>
		<u>disturbance is limited to 3 acres.</u>	
<u>Snohomish County</u>	<u>20, 80</u>	<u>Allowed only on Local Forest.</u>	<u>The county shall not approve subdivision of land designated Commercial Forest beyond the 1/du/80 acres, except for subdivision to allow installation of communication and utility facilities. Land designated local forest shall not be divided into lots or parcels of less than 20 acres in size except through a rural cluster subdivision.</u> <u>500 foot setback to structures on commercial forest land.</u>
<u>Skagit County</u>	<u>20, Secondary Forest</u> <u>80, Industrial Forest</u>	<u>Yes, subject to onsite location requirements</u>	<u>Yes, on Forestry and Rural Resource lands.</u>
<u>Whatcom County</u>	<u>20, 40</u>	<u>Allowed only on Rural Forest land not Commercial Forest Land. Lot width/depth standards apply.</u>	<u>No.</u>