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ANALYSIS OF HAULING CHARGES AND PRODUCER MILK BY LOCATION AND SIZE-RANGE OF PRODUCTION

PACIFIC NORTHWEST ORDER

MAY 2006 (with comparison to May of previous years)

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Abstract

Hauling charges were examined for 787 producers in May 2006. The milk represented in this study was producer milk (Grade A) pooled on the Pacific Northwest Order. Hauling charges, stop charges, and milk production were obtained from producer payrolls submitted by handlers to the Market Administrator's office. The terms "milk production" and "producer milk" in this study are synonymous. Hauling charges in this paper are given on a per hundredweight basis. The reference to a particular year refers to May of that year. Some comparisons to previous years are reported, but due to changes in Federal order boundaries and order provisions, these comparisons may be biased.

Major findings of this study include:

1. In May 2006, the weighted average hauling charges on the Pacific Northwest Order was 53.27 cents per hundredweight, up 1.56 cents from May 2005.

2. By state, Idaho had the lowest weighted average hauling charge, followed by Oregon, Washington, and California.

3. In general, hauling charges in the Northwest appear to be determined by the density of farms in a region; and their proximity to metropolitan areas or areas of intense milk processing. Hauling charges per hundredweight appear to have become somewhat less dependent on the volume of milk a producer delivers to the market. The increased use of volume premiums paid to producers who deliver larger quantities of milk instead of lowering their hauling rates contributes to this change.

4. Based on producer milk pooled, the average monthly deliveries per producer for the Pacific Northwest Order was 858,044 pounds, a 121,242 pound increase from May 2005. A large portion of the increase is due to handler pooling decisions.

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PACIFIC NORTHWEST ORDER

MAY 2006 (with comparisons to May of previous years)

Chris Werner [1/]

I. INTRODUCTION

This study analyzes hauling charges and producer milk by location and size-range of production for the Pacific Northwest Order. The order had 836 producers and 717.3 million pounds of producer milk pooled in May 2006. A total of 787 producers had hauling charges and were included in this study. The terms "milk production" and "producer milk" in this study are synonymous. Some comparisons to previous years are reported, but due to changes in Federal order provisions beginning in January 2000, January 2003, and April 2006, these comparisons may be biased. (Please refer to previous years' publications to explain methodology of previous years' data, e.g., in 2004, 2002, and 2001 some eligible milk on the Pacific Northwest Order was not pooled.)

Hauling charges are based on producer payrolls submitted by handlers to the Market Administrator's Office in Bothell, Washington. Several handlers identify a stop charge with, or in lieu of, a hauling charge. Stop charges were converted to a per hundredweight basis and added onto, if any, the normal per hundredweight charge. Producers that hauled their own milk to market, typically large-volume producers, were not included in the analysis of hauling charges but were included in the analysis of producer size.

Hauling charges in this paper are given on a per hundredweight basis. The use of May data provides a standard basis to compare between years. The reference to a particular year refers to May of that year.

II. AVERAGE MILK HAULING CHARGES BY STATE, AND COUNTY

A comparison of average hauling charges between regions in May 2006 tends to reveal the relative efficiency of hauling, as it relates to the density and size of dairy farms and their proximity to milk processors.

Hauling charges for producers associated with the Pacific Northwest Order averaged 53.27 cents per hundredweight in May 2006, up 1.56 cents from May 2005. By state, hauling charges averaged 31.02 cents in Idaho, 32.85 cents in Oregon, 61.81 cents in Washington, and 80.99 cents in California. (See Table 1.)

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Institutional factors aside, average hauling charges have increased from 2005. An increase in fuel prices from early 2005 compared to 2006 may have been a factor in the higher hauling rates. According to the Energy Information Administration, pre-tax diesel fuel prices for the United States in May 2006 ($2.262) increased 68.1 cents compared to May 2005 ($1.581) and increased 105.8 cents compared to May 2004 ($1.204). Idaho hauling rates decreased compared to 2005, while Oregon, Washington, and California increased one to four cents per hundredweight.

Weighted average hauling charges for each state under the Pacific Northwest Order are shown in Table 1. Appendix Table A-1 provides hauling charges by state and county for May 2005 and 2006.

Hauling charges in Washington were lower west of the Cascade Mountain Range. Counties located near Seattle, Washington, and further south, near Portland, Oregon, had the lowest hauling charges. The hauling charges increased with distance from Seattle and Spokane, Washington and Portland, Oregon. This is believed to be due to the location of dairy farms relative to plants and the relative concentration of dairy farms. Washington's weighted average hauling rate increased over four cents compared to May 2005. Most counties in Washington showed an increase in hauling of three to five cents per hundredweight. Only Wahkiakum County showed a decrease in hauling charges compared to May 2005.

Hauling charges in Oregon were lowest in the northwest region of the state. The northwest part of Oregon is where the majority of dairy farms and the largest number of consumers are located. Higher hauling charges occurred in Oregon's eastern counties. The distance from the farms to the nearest handler is the probable cause of the higher hauling charges in eastern Oregon. Dairy farmers in some counties in western Oregon may incur relatively higher hauling charges due to the sparse producer numbers in those particular counties. Oregon's weighted average hauling rate increased one and a half cents compared to May 2005. Four Oregon counties had decreases in hauling rates which offset much of the increases by the other counties.

Table 1
Weighted Average Hauling Charge by State

State	2001	2002	2003	2004	2005	**2006**
	- - - - - - - - cents per cwt. - - - - - - - -					
California	66.51	37.77	71.38	73.90	76.92	**80.99**
Idaho	41.88	56.41	116.69	37.87	39.85	**31.02**
Oregon	32.48	32.26	34.39	31.81	31.36	**32.85**
Utah	43.15	R	N/A	N/A	N/A	**N/A**
Washington	41.53	41.49	44.54	54.61	57.14	**61.81**
Total	40.10	39.71	42.76	49.50	51.71	**53.27**

N/A = not applicable. R = restricted, represents fewer than three producers.

Hauling charges in Idaho were the lowest in the southern part of the state. This area is characterized by many large dairies located relatively close to plants. In northern Idaho, the charge of hauling is much higher due most probably to fewer and much smaller dairies located

further from plants, when compared to southern Idaho. Idaho's weighted average hauling rate decreased over eight cents compared to May 2005.

Del Norte and Siskiyou Counties in California have producer milk historically pooled on the Pacific Northwest Order; only producers in Siskiyou County had hauling charge information. Producers in Del Norte County were not included in the analysis of hauling charges. California's weighted average hauling rate increased four cents compared to May 2005.

Average hauling charges by county are displayed in the Appendix. Selected counties are combined with adjacent counties in order to maintain confidentiality. Table A-1 (on pages 6 and 7) shows weighted average hauling charges by county and state.

Mapping data geographically is an ideal way to present and evaluate hauling charge data. Figure A-1 (on page 11) is a map of hauling charges by county. Figure A-3 (on page 13) is a map to reference county names to the maps that do not provide names and an outline of the Pacific Northwest Order. Figure A-1 shows that hauling charges in parts of northwestern Oregon (Benton, Marion, Polk, Tillamook, Washington, and Yamhill Counties), western Washington (Clark, Cowlitz, King, Pierce, and Snohomish Counties), and southern Idaho (Ada, Canyon, Gooding, Jerome, Owyhee, and Twin Falls Counties) were less than 40 cents. Most of these counties are either in areas characterized by larger volume producers, or a large number of producers located near a plant. Higher hauling charges were generally associated with counties located in more remote areas of the states. In support of the preceding statements, counties located near Seattle and Spokane, Washington, and Portland, Oregon, have lower hauling charges than more distant, surrounding counties.

III. PRODUCER MILK AND PRODUCER NUMBERS

The Pacific Northwest Order's producer milk for May 2006 totaled 717.3 million pounds. Appendix Figure A-2 (on page 12) shows, on a map of the Northwest, current average pounds of milk per producer pooled on the Pacific Northwest Order. Appendix Table A-2 (on pages 8 and 9) provides the pounds of producer milk, producer numbers, and average milk production per producer. Based on producer milk pooled, the average monthly deliveries per producer for the Pacific Northwest Order was 858,044 pounds, a 121,242 pound increase from May 2005. A large portion of the increase is due to handler pooling decisions.

Producer milk originating in Washington totaled 474.9 million pounds in May 2006, an increase of 3.4 million pounds or 0.7 percent compared to May 2005. The county with the most milk pooled was Yakima County, 183.5 million pounds. Whatcom County had the most producers, 153, down 14 compared to May 2005. The county with the second most producers was Yakima County with 72, up five compared to May 2005.

Producer milk originating in Oregon totaled 165.1 million pounds in May 2006 for the Pacific Northwest Order, an increase of 27.0 million pounds or 19.6 percent compared to May 2005. The number of producers pooled on the Pacific Northwest Order in May 2006 was 267 in Oregon, a decrease of 15 producers from May 2005. Comparisons to the previous year are

biased; handler decisions on pooling affected changes from previous year. Tillamook County had the most milk pooled, 47.6 million pounds, and the most producers, 131.

Producer milk pooled on the Pacific Northwest Order originating in Idaho and California was 73.3 million pounds and 4.0 million pounds, respectively, in May 2006. The number of producers in Idaho and California was 59 and five, respectively. In May 2006, the amount of producer milk pooled from southern Idaho increased compared to May 2005, but producer milk pooled from California decreased slightly.

IV. RELATIONSHIP BETWEEN MILK PRODUCTION AND HAULING CHARGES

The data in this study shows that as the milk production of a dairy farm increases, up to 500,000 pounds of milk per month, the weighted average rates charged for hauling decrease. Over 600,000 pounds of milk per month, as milk production increases, hauling rates tend to increase. The expected inverse relationship between milk production and hauling charge rates is not evident across all ranges of milk production. One institutional factor contributing to the deviation from an inverse relationship is the way handlers of milk pay volume premiums instead of decreasing hauling rates to producers with larger monthly milk deliveries. The proximity of larger dairy farms to milk processing and fluid milk outlets may also influence those dairy farms' hauling rates.

Appendix Table A-3 representing 787 producers, shows the number of producers for each range of hauling charges and milk production for the Pacific Northwest Order. Included in the table is a weighted average hauling charge for each size-range of milk production. Appendix Table A-4, shows the percentage of producers for each range of hauling charges and milk production for the Pacific Northwest Order.

In the Pacific Northwest Order, 31 producers were charged over $1.00 per hundredweight for hauling; all of these producers had less than 300,000 pounds of milk production. Only six of the 40 producers with less than 50,000 pounds had hauling charges less than 50 cents. The mid-range hauling charge (20 to 70 cents) is populated by a wide variety of producer sizes. There were four producers with hauling charges less than 20 cents. The average hauling rate for each size-range (Table A-3) decreases as deliveries increase until 600,000 pounds. Above 600,000 pounds, the average hauling charge begins to increase. This increase may be attributable to location or institutional factors that affect charges for hauling as mentioned above.

V. CONCLUSIONS

This study examined hauling charges for 787 producers whose milk was pooled on the Pacific Northwest Order in May 2006.

Hauling rates compared to previous years' studies were higher due probably to higher fuel costs in the year 2006 compared to 2005. In May 2006, the weighted average hauling charges on the Pacific Northwest Order was 53.27 cents per hundredweight.

By state, Idaho had the lowest weighted average hauling charge, followed by Oregon, Washington, and California.

In general, hauling charges on the Pacific Northwest Order appears to be determined by the density of farms in a region; the size of dairy farms; and their proximity to metropolitan areas or areas of intense milk processing. Hauling charges per hundredweight appear to have become somewhat less dependent on the volume of milk a producer delivers to the market. This may be due to the use of volume premiums paid to producers who deliver larger quantities of milk instead of lowering their hauling rates.

Based on producer milk pooled, average monthly deliveries per producer for the Pacific Northwest Order was about 858,044 pounds, a 121,242 pound increase from May 2005. A large portion of the increase is due to handler pooling decisions.

Table A-1
Weighted Average Hauling Charges By State and County
Pacific Northwest Order
May 2005 and 2006 *

State & County	2005	2006	Change
	Cents per Cwt.		
California			
Siskiyou	76.92	80.99	4.07
Weighted Average California	76.92	80.99	4.07
Idaho			
Bonner & Boundary	88.36	99.91	11.55
Idaho & Latah	133.46	139.04	5.58
Southern Idaho	33.07	29.66	(3.41)
Weighted Average Idaho	39.85	31.02	(8.83)
Oregon			
Benton & Lincoln	34.19	38.97	4.78
Clackamas & Multnomah	42.10	49.09	6.99
Clatsop	46.51	46.48	(0.03)
Coos	51.82	n/a	n/a
Crook (& Deschutes in 2005)	47.50	1/	n/a
Josephine	62.20	58.26	(3.94)
Klamath & Jackson	107.61	89.66	(17.95)
Lane (& Deschutes in 2006)	43.08	45.98	2.90
Linn	37.60	41.52	3.92
Malheur & Umatilla (& Baker in 2006)	61.38	69.60	8.22
Marion	27.32	32.47	5.15
Polk	24.33	30.90	6.57
Tillamook	24.30	24.03	(0.27)
Washington (& Yamhill in 2006)	30.88	35.52	4.64
Yamhill	30.63	1/	n/a
Weighted Average Oregon	31.36	32.85	1.49

Table A-1
Weighted Average Hauling Charges By State and County
Pacific Northwest Order
May 2005 and 2006 *

State & County	2005	2006	Change
	Cents per Cwt.		
Washington			
Adams	62.81	66.30	3.49
Benton	74.13	1/	n/a
Clallam & Jefferson	68.79	71.07	2.28
Clark & Cowlitz	14.50	15.38	0.88
Franklin (& Benton in 2006)	65.84	70.58	4.74
Grant & Kittitas	62.80	65.82	3.02
Grays Harbor	46.53	59.21	12.68
Island	44.62	1/	n/a
King	29.66	34.08	4.42
Lewis	41.96	44.25	2.29
Pacific	77.25	80.25	3.00
Pierce	25.54	28.37	2.83
Skagit	45.03	45.04	0.01
Snohomish (& Island in 2006)	34.39	39.23	4.84
Spokane & Lincoln	50.54	59.36	8.82
Stevens	70.83	76.00	5.17
Thurston	32.48	41.93	9.45
Wahkiakum	79.28	73.54	(5.74)
Whatcom	49.91	53.90	3.99
Yakima	73.21	76.82	3.61
Weighted Average Washington	57.14	61.81	4.67
Pacific Northwest Order	51.71	53.27	1.56

* Data obtained from producer payrolls submitted by handlers.
In 2005 and 2006, hauling charges based on milk pooled.
1/ Combined with an adjacent county in 2006 because there were fewer than three producers with hauling in 2006.

Table A-2
Number of Producers, Pounds of Milk, and Average Pounds Per Producer By State and County *
Pacific Northwest Order
May 2005 and 2006

State & County	Number of Producers 2005	Number of Producers 2006	Pounds of Producer Milk 2005	Pounds of Producer Milk 2006	Average Pounds Per Producer 2005	Average Pounds Per Producer 2006
			- - - - - - - - - 1,000 pounds - - - - - - - - -			
California						
Del Norte & Siskiyou	6	5	4,131	4,024	688	805
Total/Average California	6	5	4,131	4,024	688	805
Idaho						
Bonner & Boundary	4	3	646	393	161	131
Idaho & Latah	5	5	689	661	138	132
Southern Idaho	26	51	14,144	72,205	544	1,416
Total/Average Idaho	35	59	15,479	73,259	442	1,242
Oregon						
Baker (& Malheur in 2006)	n/a	11	n/a	2,373	n/a	216
Benton & Lincoln	5	5	3,804	3,659	761	732
Clackamas & Multnomah	10	11	1,275	1,328	127	121
Clatsop	6	6	2,098	2,247	350	375
Coos & Curry	19	9	4,121	2,081	217	231
Deschutes (& Crook in 2005)	7	3	1,328	533	190	178
Josephine	4	3	1,902	1,610	475	537
Klamath & Jackson	10	8	9,503	6,459	950	807
Lane	6	6	4,842	5,136	807	856
Linn	9	8	6,188	6,209	688	776
Marion	34	32	30,050	28,241	884	883
Morrow & Umatilla	n/a	4	n/a	34,700	n/a	8,675
Polk	4	5	8,179	9,003	2,045	1,801
Tillamook	133	131	48,455	47,608	364	363
Umatilla (& Malhuer in 2005)	9	1/ 2/	2,222	1/ 2/	247	1/ 2/
Washington	19	19	5,926	6,171	312	325
Yamhill	7	6	8,208	7,790	1,173	1,298
Total/Average Oregon	282	267	138,100	165,149	490	619

Table A-2
Number of Producers, Pounds of Milk, and Average Pounds Per Producer By State and County *
Pacific Northwest Order
May 2005 and 2006

State & County	Number of Producers 2005	Number of Producers 2006	Pounds of Producer Milk 2005	Pounds of Producer Milk 2006	Average Pounds Per Producer 2005	Average Pounds Per Producer 2006
			- - - - - - - - - 1,000 pounds - - - - - - - - -			
Washington						
Adams	11	11	13,377	13,473	1,216	1,225
Clallam & Jefferson	7	5	1,604	1,206	229	241
Clark & Cowlitz	12	11	8,807	8,322	734	757
Franklin	7	7	17,798	19,017	2,543	2,717
Grant & Kittitas	26	26	24,815	28,020	954	1,078
Grays Harbor	12	11	5,346	2,355	446	214
Island	3	3/	2,194	3/	731	n/a
King	34	32	18,927	25,193	557	787
Klickitat & Benton	5	5	2,724	2,999	545	600
Lewis	38	40	15,381	13,580	405	339
Pacific	9	10	2,951	2,992	328	299
Pierce	7	6	5,323	3,854	760	642
Skagit	47	40	30,788	28,449	655	711
Snohomish (& Island in 2006) 3/	35	37	23,751	25,205	679	681
Spokane & Lincoln	15	14	2,685	2,290	179	164
Stevens	13	12	1,814	1,564	140	130
Thurston	12	9	10,061	7,721	838	858
Wahkiakum	4	4	811	745	203	186
Whatcom	167	153	107,111	104,455	641	683
Yakima	67	72	175,250	183,453	2,616	2,548
Total/Average Washington	531	505	471,519	474,893	888	940
Pacific Northwest Order	854	836	629,229	717,325	737	858

* Data obtained from producer payrolls submitted by handlers.
n/a = not applicable.
1/ In 2006, Baker County, Oregon, had fewer than 3 producers and was included with Malheur County, Oregon.
2/ In 2006, Umatilla County, Oregon, had fewer than 3 producers and was included with Morrow County, Oregon.
3/ In 2006, Island County, Washington, had fewer than 3 producers and was included with Snohomish County, Washington.

Table A-3
Cross Tabulation of Number of Producers Between Milk Production and Hauling Charges
Pacific Northwest Order
May 2006

Milk Production (1,000 pounds)	Hauling Charges (cents per hundredweight): Less than 10	10 to 20	20 to 30	30 to 40	40 to 50	50 to 60	60 to 70	70 to 80	80 to 100	Greater than 100	Total	Weighted Average Rate (cents / cwt.)
	number of producers											
Less than 50				5	1	2	1	5	9	17	40	96.48
50 to 100			7	2		13	12	13	3	6	56	66.55
100 to 200			28	6	17	23	31	13	13	6	137	56.65
200 to 300			22	18	22	34	6	4	4	2	112	46.50
300 to 400			18	11	14	17	5	2	1		68	43.89
400 to 500	1		15	4	6	9	3	2	1		41	41.29
500 to 600			12	10	8	9		4	1		44	42.72
600 to 700			5	6	7	8	3	1	3		33	49.79
700 to 1,000	1		15	16	16	18	3	5	2		76	44.86
1,000 to 3,000	2		17	23	12	30	19	29	10		142	54.37
More than 3,000			8	4	1	2	4	18	1		38	58.50
Total	4	-	147	105	104	165	87	96	48	31	787	53.27

Table A-4
Cross Tabulation of Percentage of Producers Between Milk Production and Hauling Charges
Pacific Northwest Order
May 2006

Milk Production (1,000 pounds)	Hauling Charges (cents per hundredweight): Less than 10	10 to 20	20 to 30	30 to 40	40 to 50	50 to 60	60 to 70	70 to 80	80 to 100	Greater than 100	Total 1/	Weighted Average Rate (cents / cwt.)
	percent of producers											
Less than 50				0.6	0.1	0.3	0.1	0.6	1.1	2.2	5.1	96.48
50 to 100			0.9	0.3		1.7	1.5	1.7	0.4	0.8	7.1	66.55
100 to 200			3.6	0.8	2.2	2.9	3.9	1.7	1.7	0.8	17.4	56.65
200 to 300			2.8	2.3	2.8	4.3	0.8	0.5	0.5	0.3	14.2	46.50
300 to 400			2.3	1.4	1.8	2.2	0.6	0.3	0.1		8.6	43.89
400 to 500	0.1		1.9	0.5	0.8	1.1	0.4	0.3	0.1		5.2	41.29
500 to 600			1.5	1.3	1.0	1.1		0.5	0.1		5.6	42.72
600 to 700			0.6	0.8	0.9	1.0	0.4	0.1	0.4		4.2	49.79
700 to 1,000	0.1		1.9	2.0	2.0	2.3	0.4	0.6	0.3		9.7	44.86
1,000 to 3,000	0.3		2.2	2.9	1.5	3.8	2.4	3.7	1.3		18.0	54.37
More than 3,000			1.0	0.5	0.1	0.3	0.5	2.3	0.1		4.8	58.50
Total 1/	0.5		18.7	13.3	13.2	21.0	11.1	12.2	6.1	3.9	100.0	53.27

1/ Total may not add due to rounding.

FIGURE A-1
Weighted Average Hauling Charges
Pacific Northwest Order: May 2006

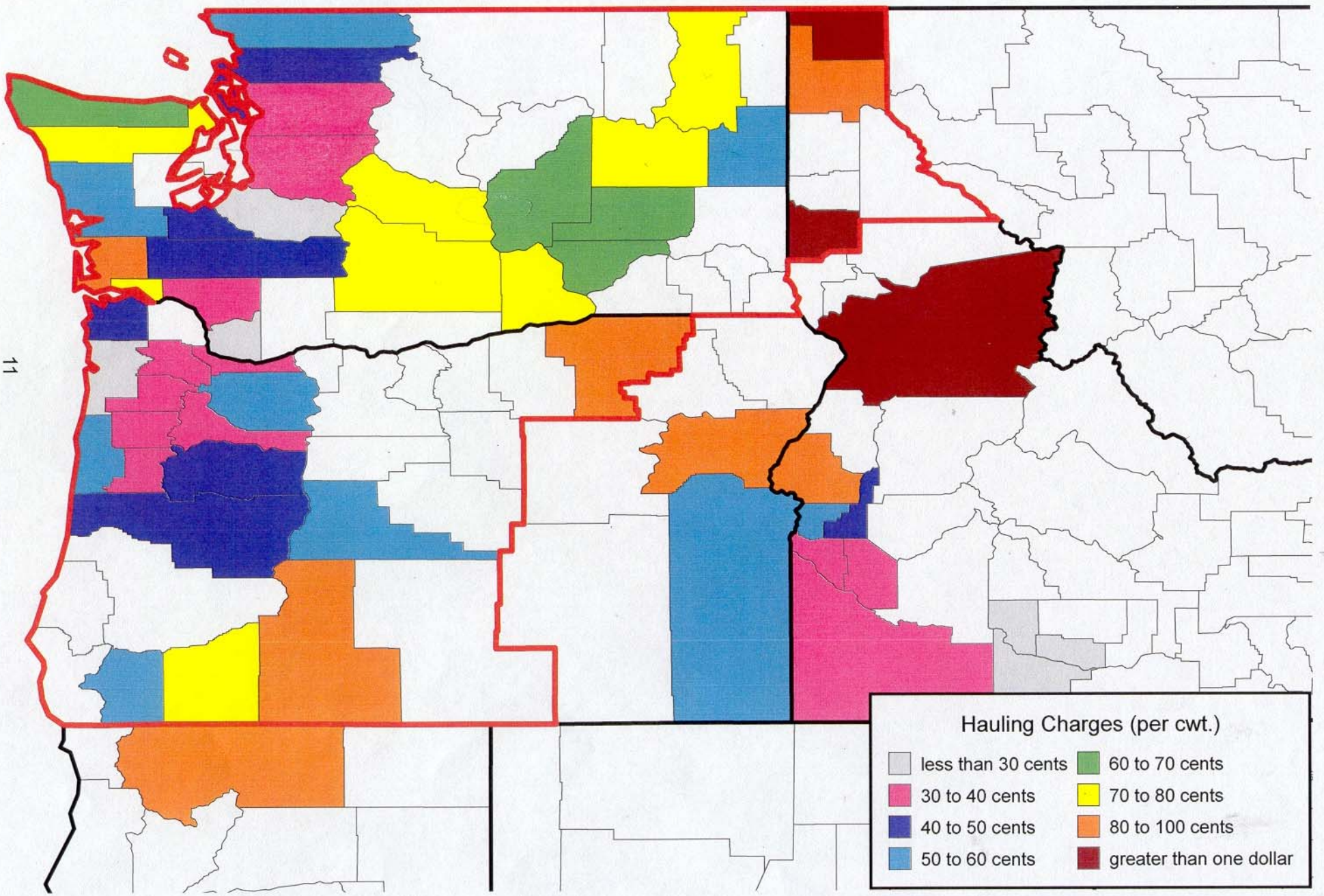

FIGURE A-2
Average Milk Production Per Producer
Pacific Northwest Order: May 2006

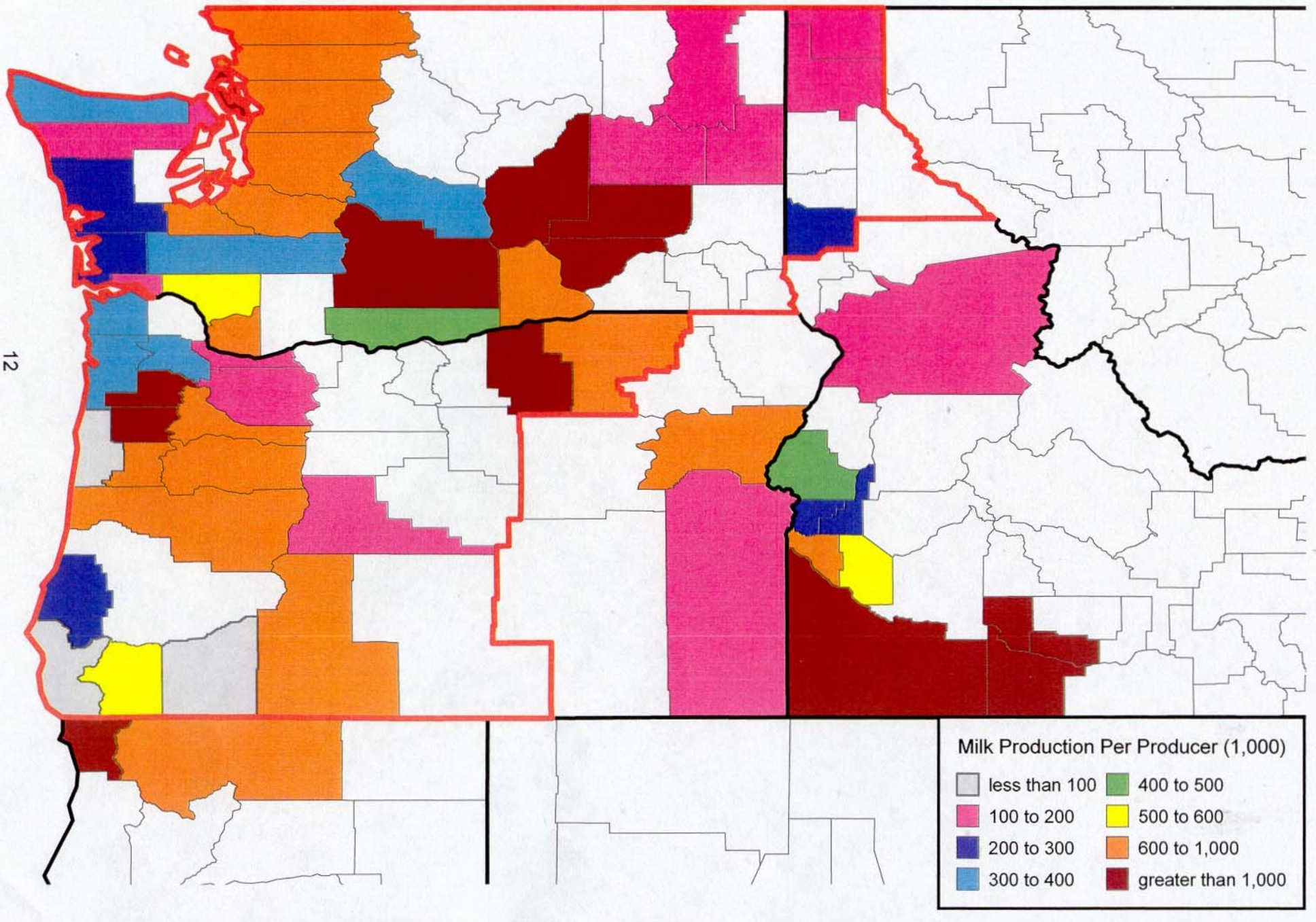

FIGURE A-3
Pacific Northwest Marketing Area