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May 1, 2019

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The Honorable Troy D. Jackson, President MAINE STATE SENATE 3 State House Station Augusta, Maine 04333

The Honorable Sara Gideon, Speaker MAINE HOUSE OF REPRESENTATIVES 2 State House Station Augusta, Maine 04333

The Honorable Erin Herbig, Senate Chair
The Honorable Matthea Daughtry, House Chair
COMMITTEE ON INNOVATION, DEVELOPMENT, ECONOMIC ADVANCEMENT AND
BUSINESS
100 State House Station
Augusta, Maine 04333

The Honorable Mark Lawrence, Senate Chair
The Honorable Seth Berry, House Chair
COMMITTEE ON ENERGY, UTILITIES AND TECHNOLOGY
100 State House Station
Augusta, Maine 04333

Re: 2017/2018 Attorney General Report to the Legislature Under the Petroleum Market Share Act

Dear President Jackson, Speaker Gideon, Senators Herbig and Lawrence, and Representatives Daughtry and Berry:

I am pleased to submit this report in accordance with the Petroleum Market Share Act (PMSA), 10 M.R.S.A § 1677. The PMSA requires the Attorney General to make a report to the Legislature describing the concentration of retail outlets in the State, including a recommendation as to whether additional legislation is needed to further limit or curtail the activity of refiners operating retail outlets.

Letter from Attorney General Frey to Legislature May 1, 2019 Page Two

Enclosed is a report describing concentration of retail outlets in the State. The report, which is based on data collected from wholesalers of both motor fuel oil and home heating oil, includes maps depicting relative concentration in designated markets throughout the State. This report is also available on the Attorney General's website at: http://www.maine.gov/ag/docs/PMSA%20Report%202017-2018.pdf.

Since no refiners of petroleum products operate retail outlets in this State, we recommend no legislation to limit or curtail such operations.

I appreciate this opportunity to provide this information and hope it is useful.

Sincerely,

Aaron M. Frey

ATTORNEY GENERAL

Enclosure

cc: Grant T. Pennoyer, Executive Director, Maine State Legislature
John R. Barden, Director, Maine State Law and Legis. Reference Library
Jamie Py, President, Maine Energy Marketers Association

STATE OF MAINE OFFICE OF THE ATTORNEY GENERAL

Aaron M. Frey, Attorney General



PETROLEUM MARKET SHARE ACT

REPORT OF THE ATTORNEY GENERAL TO THE MAINE LEGISLATURE PURSUANT TO 10 M.R.S. § 1677

FOR THE REPORTING PERIOD 2017 – 2018

May 2019

Retail Petroleum Outlets Concentration 10 M.R.S.A. § 1677 April 2019

I. INTRODUCTION

This report is provided by the Attorney General to the Legislature pursuant to Maine's Petroleum Market Share Act ("PMSA"), 10 M.R.S.A. § 1677. As required by the statute, the report describes the concentration of retail petroleum outlets. The concentration levels described in this report reflect conditions in Maine as of the end of May 2018. The statute also requires the Attorney General to make "a recommendation to the Legislature as to whether additional legislation is needed to further limit or curtail the activity of refiners operating retail outlets." The Attorney General does not recommend any legislative changes at this point.

The report focusses on markets for home heating oil and motor fuel oil. In general, the geography of petroleum markets is local. In the case of home heating oil, the market may encompass an urban area or a segment of a county. Motor fuel markets tend to be smaller, in some instances limited to a single neighborhood or one side of a busy street. For continuity purposes, our analyses retain the longstanding geographic markets developed by the Attorney General in the 1990s, when the PMSA reporting first began. The state is divided into 33 home heating oil ("HHO") markets and Maine's 16 counties are used as the motor fuel oil ("MFO") markets.

As required by the PMSA, home heating oil and motor fuel oil wholesalers submit data annually to the Maine Attorney General indicating the annual

gallons supplied to each home heating oil and motor fuel retailer located in Maine. Using this data, the Maine Attorney General is able to determine the number of retail competitors and their percentage market shares within the predefined geographic markets. 10 M.R.S.A. § 1673. Those figures, in turn, allow us to calculate where each of the HHO and MFO markets falls on a concentration index widely used by federal and state antitrust agencies to assess competitive conditions (usually in the context of proposed mergers and acquisitions). The Appendices to the Report show the concentration levels, and corresponding maps depicting those levels, for each pre-defined market. The tables in the Appendices also show concentration numbers for the same markets for the past ten years for comparison purposes.

II. LEVELS OF CONCENTRATION

A. Methodology

The methodology employed by the Maine Attorney General to assess levels of concentration in Maine's retail petroleum markets, as reflected in this report, is essentially the same methodology used by the U.S. Department of Justice, the Federal Trade Commission, and other state Attorneys General in evaluating the legality of a given merger or acquisition under applicable antitrust law. The Maine Attorney General has employed a similar analysis

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¹ It should be noted that the Attorney General collects neither retail nor wholesale price information under the PMSA. Moreover, the data collected from individual wholesalers, which is confidential by statute, is aggregated and not identifiable by wholesaler or retailer in this report. 10 M.R.S.A. § 1675.

enforcing Maine's merger law for more than thirty years. 10 M.R.S.A. § 1102-A.

The most important factor affecting competition in a particular market is the level of concentration (how many sellers and the size of their market shares). The retail level sales volume data the Maine Attorney General receives annually from home heating oil and motor fuel oil wholesalers allow us to calculate market shares of retailers within a defined geographic area.

1. **Market Definition.** The first step in a concentration analysis is to determine the relevant product and geographic markets. This report focusses on two product markets, home heating oil and motor fuel oil. Home heating oil is defined as "#2 fuel oil sold for heating residential, industrial or commercial space or water." 10 M.R.S.A. § 1672(3). Motor fuel "means internal combustion fuel sold for use in motor vehicles," as more fully defined in 29 M.R.S.A. § 101(42). 10 M.R.S.A. § 1672(4).

Determining geographic markets for this report is less straightforward. For the purposes of this report, we are not looking to identify the geographic area within which two merging companies operate, as we would if we were reviewing a proposed merger. Rather, we are dividing the state into a series of geographic markets to obtain a very broad snapshot of competition in the petroleum industry and trends across the entire state.

The Maine Attorney General has taken different approaches to defining geographic markets for home heating oil and for motor fuel oil. At the time the Attorney General initially began preparing these reports, we conducted a series of interviews with a number of persons knowledgeable in the petroleum industry in Maine. On that basis, we divided the state into 33 separate geographic markets intended to approximate economic and competitive circumstances relative to home heating oil sales. Motor fuel markets are generally more localized than home heating fuel markets. However, since our task is not to analyze a specific local merger, but rather to portray broad trends in levels of concentration across the state, we use county-wide markets. Markets are not static, of course, and economic and competitive factors over time might lead to slightly different geographic market selections today. Nonetheless, we have retained the original geographic markets to be able to compare concentration trends over time within consistent geographic areas.

Importantly, these geographic market depictions are not used to analyze individual mergers or acquisitions in Maine. Each individual merger or acquisition proposal will require an evaluation of the unique competitive and economic circumstances in the areas within which both companies operate.

2. Herfindahl-Hirschman Index. Market concentration is a well-accepted tool for evaluating competitiveness within identified markets. As a general rule, the fewer the competitors, and the higher those competitors' market shares, the more concentrated (and less competitive) the market. Federal and state antitrust agencies (including the Maine Attorney General) employ the Herfindahl-Hirschman Index ("HHI") to measure market concentration.² The

² DOJ/FTC Horizontal Merger Guidelines (rev. ed. 2010)(available at https://www.justice.gov/atr/horizontal-merger-guidelines-08192010).

HHI concentration index is arrived at by squaring the market shares of all the competitors in a given market. This simple mathematical device expresses the insight that market power increases exponentially in proportion to market share. Federal antitrust guidelines used by the Maine Attorney General in merger enforcement indicate that a market with an index of 1000 or less should be viewed as unconcentrated (and therefore likely to function competitively).³ A market with an index between 1000 and 1800 is described as moderately concentrated; while any index over 1800 is termed highly concentrated.⁴ A market in the highly concentrated category is subject to a high degree of market power, unless the effects of high concentration are mitigated by other factors, such as ease of entry for a new competitor.

Our analysis of levels of concentration in home heating oil markets tracks the categories reflected in federal guidelines. Thus, a home heating oil market with an index below 1000 is "unconcentrated," 1000-1800 is "moderately concentrated," and 1800-2500 is "highly concentrated." Markets above 2500 points are referred to as "extremely concentrated."

For our designated motor fuel markets, we have adjusted the concentration index to reflect the fact that the large, county-level geographic markets inevitably understate levels of concentration. Thus, for motor fuel, an index below 500 is "unconcentrated," 500-1000 is "moderately concentrated,"

 $^{^{3}}$ For example, ten firms with market shares of 10% each would yield an index of 1000 (10 squared x 10).

⁴ For example, a market comprising five firms with market shares of 20% each would yield an index of 2000 (20 squared x 5).

and 1000-1800 is "highly concentrated." Markets above 1800 points are referred to as "extremely concentrated."

Appendix A lists the geographic markets within which we measure concentration at the retail sales level for both home heating oil and motor fuel oil. The HHO markets map depicts the relative concentrations in the 33 designated home heating oil geographic markets, based on the latest analysis of data from wholesalers. The MFO markets map depicts the relative concentrations based on the latest analysis of county-wide retail motor fuel markets. Again, these geographic market depictions are not used to analyze individual mergers or acquisitions in Maine. The tables in Appendix B contain the latest HHI concentration analyses within both home heating oil and motor fuel markets, as well as concentration comparisons in those markets over the last ten reporting years.

B. Overview - Retail Home Heating Oil Markets.

Overall, concentration levels in Maine's home heating oil markets have remained relatively consistent. We note that some variations from last year are due to refinement/corrections made to the database compilation process (e.g. the higher concentration in Market 19 for this report as compared to the last report is due not to a substantive change in concentration but rather due primarily to a wrong address for a retailer in the prior reporting period).

As was the case for the last reporting period, only one market achieved the unconcentrated designation - this time in southern coastal Maine between Kennebunk and Old Orchard Beach. The greater Augusta area saw a slight

decrease in competition, moving from unconcentrated to moderately concentrated. Generally speaking, the more competitive home heating oil markets (either unconcentrated or moderately concentrated) are located in the more densely populated areas of the state, such as those in reasonable proximity to the state's major north-south highway (south of Waterville, at least), including greater Portland, Lewiston/Auburn, Biddeford/Saco, and Augusta. The greater Belfast coastal area is also among the more competitive markets in the state, as is central Penobscot County.

The markets stretching from Waterville - Pittsfield - Bangor - Ellsworth to the coast, as well as the southern Penobscot and Hancock County areas, are moderately concentrated. These areas roughly follow the turnpike from Waterville through Bangor/Old Town then southeast (through Ellsworth to the coast. Similar to last year's report, the least densely populated regions of the state, such as Northern and Downeast Maine, generally fall into the least competitive, extremely concentrated designation.

Multiple home heating oil markets bordering or in reasonable proximity to New Hampshire remain depicted as among the most concentrated, or least competitive. However, since we don't collect data pertaining to retailers based in New Hampshire who deliver in Maine, those regions may be more competitive than our maps depict.

While, in general, concentration levels have remained relatively consistent, there are several markets that have shifted noticeably. The most notable shifts were improvements in two markets experiencing 2,000+ point

reductions in concentration levels, namely Market 7 (around Old Town and Orono), and Market 24 in the Gray/New Gloucester area.

C. Overview - Retail Motor Fuel Oil Markets.

The concentration levels for the county-wide motor fuel markets have not shifted significantly since the last report. Three counties remain extremely concentrated (Knox, Oxford, and Piscataquis), though Lincoln County improved from extremely to highly concentrated. Piscataquis County bears note in that it experienced a dramatic 2,500-point decline in concentration level, even though it is still extremely concentrated.

All three southernmost coastal counties, namely, Cumberland,
Sagadahoc, and York became more competitive shifting from highly to
moderately concentrated since the last reporting period. Franklin and Hancock
Counties retain their relatively competitive moderately concentrated levels.

III. RECOMMENDATION

The Attorney General is required to recommend whether additional legislation is needed to further limit or curtail the activity of refiners operating retail outlets. We do not recommend any changes on that basis, since there are no refiner retail operations in Maine in either home heating oil or motor fuel oil. Further, we recommend no changes to the law because it works relatively well for the Office as a starting point in merger enforcement. The ready availability of sales data from wholesalers enables the Attorney General to evaluate competitive conditions surrounding proposed mergers and

acquisitions in the petroleum industry much more quickly than we would be able to if the data were not required under the PMSA. This makes merger enforcement in this area more nimble for the Attorney General, and less burdensome for companies wishing to engage in merger or acquisition transactions in the Maine petroleum industry.

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APPENDIX A

HHO MARKETS

- 1. St. John Valley
- 2. Ashland/Presque Isle
- 3. Houlton
- 4. Lincoln
- 5. Woodland/Calais
- 6. Cherryfield/Machias
- 7. Old Town
- 8. Ellsworth
- 9. Bangor
- 10. Dover-Foxcroft
- 11. Pittsfield/Newport
- 12. Belfast
- 13. Rockland
- 14. Mid Coast
- 15. Augusta
- 16. Waterville
- 17. Skowhegan
- 18. Jackman/Greenville
- 19. Farmington
- 20. Jay
- 21. Lewiston/Auburn
- 22. Bath/Brunswick
- 23. Portland
- 24. Gray
- 25. Paris
- 26. Rumford/Rangeley
- 27. Bethel
- 28. Bridgton
- 29. Limerick
- 30. Sanford
- 31. Biddeford/Saco
- 32. York
- 33. Mt. Desert

MFO MARKETS

Androscoggin

Aroostook

Cumberland

Franklin

Hancock

Kennebec

Knox

Lincoln

Oxford

Penobscot

Piscataquis

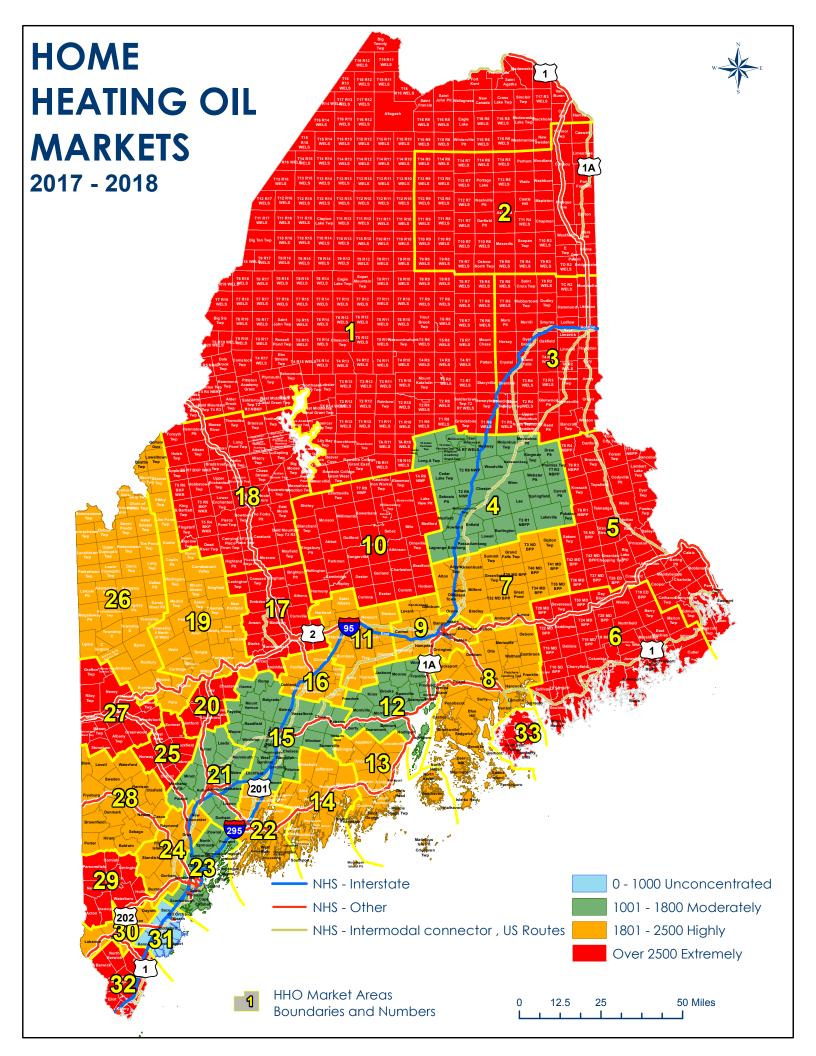
Sagadahoc

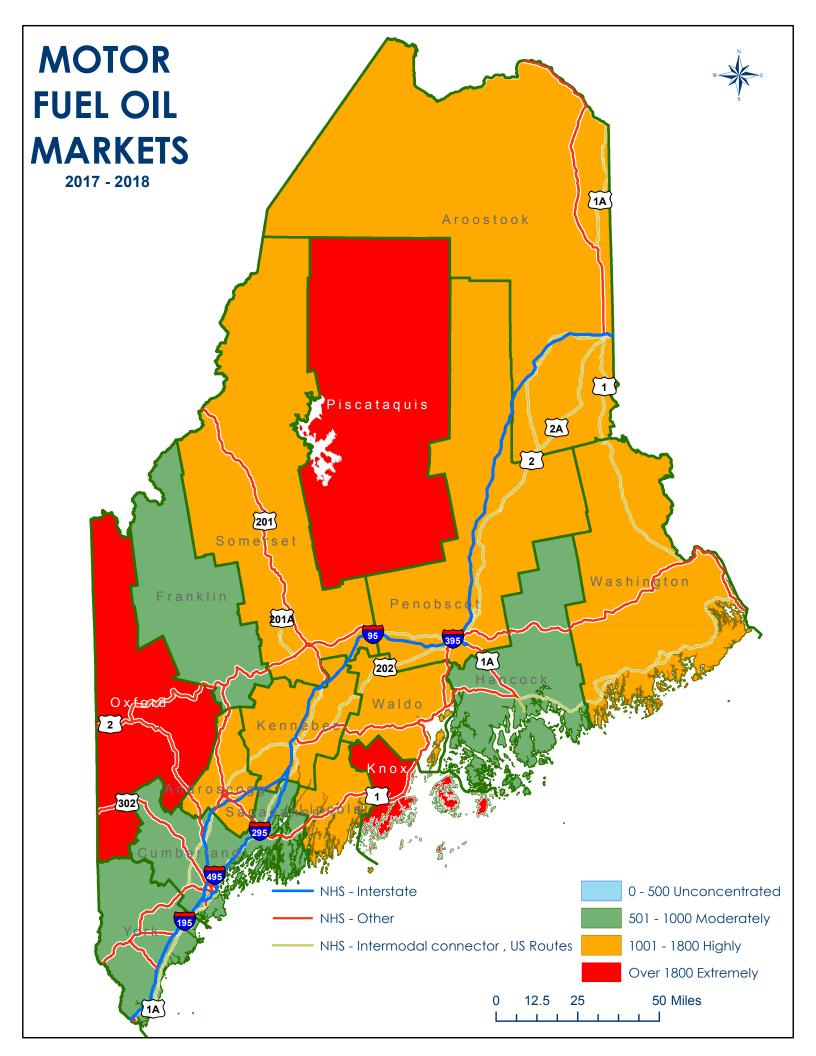
Somerset

Waldo

Washington

York





APPENDIX B

HHI DATA TABLES

HHO & MFO Concentration by Market Area 2008 to 2017

HHO MARKET CONCENTRATION Home Heating Oil by HHO Market

Market Area	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	inc/dec from previous yr
01. St. John Valley	3736	3624	3388	3889	3834	4134	3434	3242	3391	3455	64
02. Ashland /Presque Isl	3147	3041	2905	2962	3618	3707	3348	3351	3751	3808	57
03. Houlton	4200	4074	3762	3338	6568	3917	3725	3168	3194	4092	898
04. Lincoln	1767	1502	1431	1576	1776	1594	1584	1490	1316	1593	277
05. Woodland /Calais	4507	2759	2893	3353	4491	3167	3071	3154	3103	2821	-282
06. Cherryfield / Machia	3616	5040	3002	2918	2568	3198	2444	2625	2012	2544	532
07. Old Town	1886	1892	2025	2427	2680	1725	1564	3822	4439	1952	-2487
08. Ellsworth	1954	1668	1139	1894	1812	1664	1536	1487	1446	1817	371
09. Bangor	1156	1030	3046	1524	4153	1701	1063	1741	1538	1831	293
10. Dover-Foxcroft	3447	3042	3152	4528	3838	3680	3791	2819	3242	3399	157
11. Pittsfield / Newport	1826	1834	1777	2215	2167	2216	3687	1947	2172	2394	222
12. Belfast	1994	1962	1634	1916	1230	1100	1398	1007	1486	1109	-377
13. Rockland	1576	1889	1947	2340	2088	1728	1721	2647	2157	2104	-53
14. Midcoast	1931	3001	2525	3101	2886	3366	3163	2755	1972	1880	-92
15. Augusta	987	1010	1449	1144	995	849	857	911	850	1370	520
16. Waterville	1621	1647	1865	1758	1881	2190	1950	2231	2275	2311	36
17. Skowhegan	3536	2688	2255	2397	2485	1863	2162	2525	2688	2724	36
18. Jackman /Greenville	3298	5694	6328	5938	5441	5450	8681	8002	8214	8305	91
19. Farmington	2594	2220	3796	3618	2305	2531	2702	1654	2404	2110	-294
20. Jay	5382	6205	5000	5200	5128	5913	5190	3282	4137	4436	299
21. Lewiston /Auburn	1500	1249	1139	2327	2013	1846	2212	2247	1574	1553	-21
22. Bath / Brunswick	2056	3191	2505	1661	2361	4064	2258	2214	2138	1918	-220
23. Portland	1212	964	1140	1261	1234	1420	1772	1520	1250	1186	-64
24. Gray	1974	2321	2397	2868	3922	1585	3061	3429	4043	2018	-2025
25. South Paris	3893	5806	4542	4152	3958	1684	3982	3492	3498	3532	34
26. Rumford /Rangeley	1752	1850	1427	1789	1861	2295	1541	2565	2638	2016	-622
27. Bethel	5014	2882	4072	3869	4550	2330	8022	10000	10000	10000	0
28. Bridgton	2774	2728	2507	2126	2123	2550	2297	1182	1132	1936	804
29. Limerick	2187	2467	2463	2602	2953	2833	2760	2237	2813	2543	-270
30. Sanford	3571	4930	3043	6273	4146	3102	2999	3377	3191	2485	-706
31. Biddeford /Saco	2004	2150	2228	1932	1582	3805	1204	1601	1236	915	-321
32. York	2626	3550	3632	5098	7906	4574	7654	4428	5420	5071	-349
33. Mt. Desert	4320	3339	2432	2942	3664	9234	3635	3030	2714	3554	840
	0 - 1000 1001 - 1800 1801 - 2500		ated								
		extreme									

MFO MARKET CONCENTRATION Motor Fuel Oil by County

Market Area	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017 (rev)	2017-2018	inc/dec from previous yr	Avg	Median
Androscoggin	1077	745	694	796	897	2051	872	1399	989	1528	539	1105	1474
Aroostook	1375	1477	1146	981	1285	1137	1021	1301	1480	1642	162	1285	1211
Cumberland	741	537	447	493	697	693	644	1103	748	874	126	698	695
Franklin	991	887	932	1060	1027	988	874	819	840	944	104	936	1008
Hancock	820	657	452	570	797	661	640	925	915	830	-85	727	729
Kennebec	1015	619	750	740	767	709	768	895	889	1093	204	825	
Knox	1459	2445	1850	2082	2256	2020	2279	2417	2319	3102	783	2223	2138
Lincoln	1899	900	846	931	858	816	762	1966	1459	1579	120	1202	837
Oxford	2060	1775	1628	1534	2014	1724	1702	2012	1815	1995	180	1826	1869
Penobscot	1157	667	581	1098	804	591	824	1148	959	1045	86	887	698
Piscataquis	3046	3917	8135	5149	4552	3868	3387	5516	5599	3038	-2561	4621	4210
Sagadahoc	1364	3337	1136	1120	998	991	992	1027	929	966	37	1286	995
Somerset	769	556	588	547	440	436	577	1576	1314	1097	-217	790	438
Waldo	819	804	404	621	775	548	590	1461	1125	1200	75	835	662
Washington	1042	500	489	558	621	617	610	1455	1299	1222	-77	841	619
York	1240	606	690	820	774	878	768	1135	1058	871	-187	884	826
(voor lub 4	May 24, a	vermale: 201	7 1.15.4 0	2046 May 6	24 2047\								
(year = July 1 -	ar = July 1 - May 31; example: 2017 = July 1, 2016 - May 31, 2017)												
	0-500 Unconcentrated												
	501-1000 Moderately												
	1001-180(Highly												
	Over 1800	Extremely											