

Wheat Market Outlook and Price Report: October 24, 2022

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i) Background and Rationale for the Report

The following wheat market outlook and price report will be published on a weekly basis on the Sask Wheat Website. The report provides producers with an overview of world wheat markets, a market forecast, and benchmark prices at both the primary elevator and export positions (FOB Vancouver or elsewhere).

The report is made up of several sections. Following this section, a World Wheat overview is provided, which includes a summary of wheat market fundamentals, world production and trade, and a wheat market outlook. This is followed by several price tables, which include primary elevator bids at various Saskatchewan locations (Table 1), grain spreads (Table 2), and FOB port prices and basis (as measured by subtracting the primary elevator price (Rosetown) from the relevant port location price for individual crops) (Table 3). Table 3 is preceded by a description of the various assumptions, definitions and methodology used in arriving at the FOB port prices and in the export basis calculation.

ii) Wheat Market Outlook October 24, 2022

International Grains Council October Grain Market Report

	19/20	20/21	21/22 est.	22/23 fcast	
million tons				22.09	20.10
TOTAL GRAINS ^{a)}					
Production	2192	2226	2290	2256	2256
Trade	397	426	424	409	408
Consumption	2199	2239	2293	2274	2271
Carryover stocks	615	603	600	587	584
<i>year/year change</i>	-7	-13	-3		-15
Major exporters ^{b)}	153	132	141	143	142
WHEAT					
Production	761	773	782	792	792
Trade	185	190	197	193	192
Consumption	745	770	782	785	784
Carryover stocks	275	278	278	286	286
<i>year/year change</i>	16	3	0		8
Major exporters ^{b)}	61	59	63	70	70

Source: ICG, Oct 24/22

- The International Grains Council (ICG) made very small changes in their October report. They left global grain production unchanged at 2.26 billion mt. Global wheat production was also unchanged at 792 million mt.
- The ICG saw global grain trade shrinking by 1 million mt to 408 million mt. Most of this decrease was in wheat, where trade was lowered by 1 million mt to 192 million mt due to lower imports from China and Egypt.
- Global grain consumption fell 3 million mt to 2.27 billion mt. Wheat consumption accounted for 1 million mt of this decrease, falling to 784 million mt.
- Overall, global grain ending stocks were reduced by 3 million mt to 584 million mt, now a 15 million mt decrease from last year. Wheat ending stocks were unchanged from last month at 286 million mt, which is an 8 million mt increase from last year.

Developments in Wheat Demand:

There were several trades last week as end users took the advantage of the dip in global prices. There was little business for North American wheat which remains expensive compared to other origins.

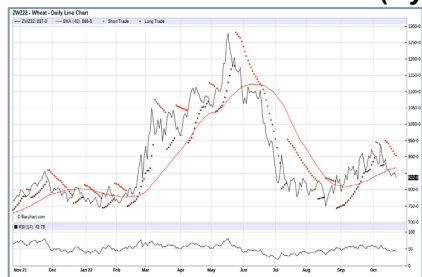
➤ Global wheat production and trade:

There is a lot of competition in the wheat markets as wheat is produced around the world. Below is a brief synopsis of last week's market events in the major wheat origins.

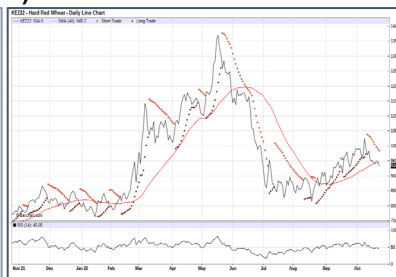
Futures:

- December 2022 contract **Chicago winter wheat** closed at 850-6, up 1-4 cents on Friday, *down 9 cents on the week*.
- December 2022 contract **Kansas hard red winter wheat** closed at 948-2, down 1-4 cents in Friday's trade, *down 4 cents on the week*.
- December 2022 **Minneapolis hard red spring wheat** closed at 954-2, down 24-6 cents on Friday, *down 13-6 cents on the week*.
- *Wheat futures are currently down 2-6 cents per bushel this Monday morning.*

CBOT December 2022 Wheat (1 yr.)



KC December 2022 Wheat



Mpls. December 2022 Wheat



Canadian Wheat

- In their final crop report for the year, Saskatchewan Agriculture left spring wheat yields at 44 bu/acre, which implies a 9.6 million mt spring wheat crop for Saskatchewan. The latest yields by Alberta Agriculture were at a 52.9 bu average for Alberta, slightly lower than the 53 bu average shown earlier. The provincial yields get us to a Canadian spring wheat production of 24.2 million mt, compared with the StatsCan number of 25.6 million mt.

Spring WHEAT	Acres					Production Est. ('000 mt)		
	2018	2019	2020	2021	2022	% '22	E'22 Yield	E2022 Production
Manitoba	2,852,100	3,099,900	3,106,400	2,827,100	2,955,100	17.1%	67.5	5,428,621
Sask.	7,827,400	8,705,800	8,053,000	7,433,800	7,993,100	46.2%	44.0	9,571,533
Alberta	6,265,000	6,587,600	6,314,100	5,849,800	6,310,300	36.5%	52.9	9,084,881
BC	59,500	68,500	44,900	50,100	50,100	0.3%	52.9	72,129
Ttl. W Cda.	17,004,000	18,461,800	17,518,400	16,160,800	17,308,600	100.0%	51.3	24,157,163

- Official production numbers for Canadian & US spring wheat add to 37.7 million mt, 58% higher than last year's combined number, but well short of the 40 million mt produced in 2020.

N Am. Sprg. Wht Prod'n	2018	2019	2020	2021	2022	Δ in %	Δ in mt
MB	4,717,400	4,955,700	5,184,500	3,668,359	5,051,461	138%	1,383,102
SK	10,084,900	10,924,400	10,874,500	6,377,062	10,614,450	166%	4,237,388
AB	8,771,600	9,512,800	9,555,900	5,713,091	9,935,576	174%	4,222,485
Ttl.	23,573,900	25,392,900	25,614,900	15,758,512	25,601,487	162%	9,842,975
US mIn bu				297	446		
US Sprg wht	15,980,000	14,150,000	14,430,000	8,082,952	12,138,036	150%	4,055,084
Cda & US prod'n	39,553,900	39,542,900	40,044,900	23,841,464	37,739,523	158%	13,898,059

- Canadian wheat export shipments for week 11 were okay at 333k mt (about double those in the US). Year-to-date exports add to 3.7 million mt, 32% (or 897k mt) more than last year's.

(CGC) Grain Handling Summary Wheat		Wk. 11	(Oct. 16'22)
	Producer Deliveries	Terminal Receipts	Bulk Exports
('000 mt)			Domestic Disappearance
Wk. 10	471.4	493.0	333.1
Week ago	477.7	334.3	593.9
YTD	5,349.6	4,879.0	3,670
Last YTD	3,566.5	4,031.4	2,773.4
YTD less Last YTD	1,783.1	19,500.2	896.6
YTD over Last YTD	149%	116%	125%

- Wheat prices have continued to strengthen. Expect prices to remain firm. Continue to hold additional sales for now.
- Durum:** In their final crop report for the year, Saskatchewan Agriculture left durum wheat yields unchanged from previously at 31 bu/acre, which implies a 4.4 million mt durum crop for Saskatchewan. For Alberta, we used a 42 bu/ac long-term average yield (excluding 2021). And for Manitoba, we used a 55 bu/ac long term average (excluding 2021). - The provincial yields get us to a Canadian durum production of 5.6 million mt, compared with the StatsCan number of 6.1 million mt.

DURUM	Acres					Production Est. ('000 mt)			L.T. Avg excl. '21
	2018	2019	2020	2021	2022	% '22	E'22 Yield	E2022 Production	
Manitoba		18,400	31,000	19,300	34,800	0.6%	55.0	52,090	L.T. Avg excl. '21
Sask.	4,989,600	4,100,000	4,645,600	4,519,400	5,215,400	84.0%	31.0	4,400,103	SK Ag est.
Alberta	1,184,800	775,000	1,012,000	988,500	957,500	15.4%	42.0	1,094,464	L.T. Avg excl. '21
BC	900		0		0	0.0%	42.0	-	L.T. Avg excl. '21
Ttl. W Cda.	6,175,300	4,893,400	5,688,600	5,527,200	6,207,700	100.0%	32.8	5,546,658	

Official production numbers for Canadian & US durum wheat add to 7.9 million mt, 93% higher than last year's combined number, but well short of the 8.4 million mt produced in 2020.

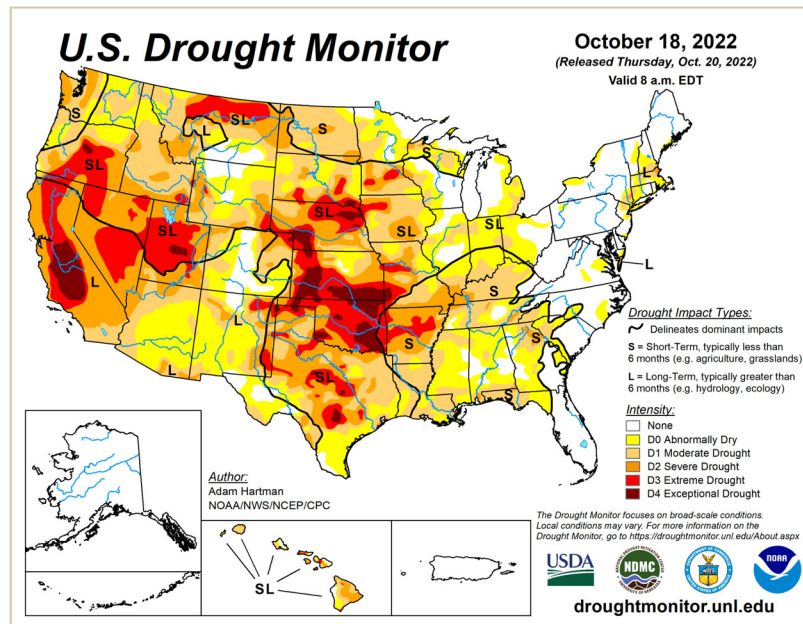
N Am. Dur. Prod'n	2018	2019	2020	2021	2022	Δ in %	Δ in mt
MB		27,300	35,300	20,982	41,583	198%	20,601
SK	4,636,100	4,342,400	5,211,200	2,416,061	4,664,657	193%	2,248,596
AB	1,134,100	647,300	1,324,700	598,923	1,411,229	236%	812,306
Ttl.	5,770,200	5,017,000	6,571,200	3,035,966	6,117,469	201%	3,081,503
US mln bu				38	64		
US Dur. wht	2,080,000	1,460,000	1,850,000	1,034,182	1,741,781	168%	707,599
Cda & US prod'n	7,850,200	6,477,000	8,421,200	4,070,148	7,859,250	193%	3,789,102

Durum exports for week 11 were at a good 131k mt, for a year-to-date total of 560k mt, 14% behind the 735k mt shipped last year-to-date.

(CGC) Grain Handling Summary Durum				Wk. 11	(Oct. 16'22)
('000 mt)	Producer Deliveries	Terminal Receipts	Bulk Exports	Domestic Disappearance	
Wk. 10	124.9	147.5	130.9	30.2	
Week ago	149.6	125.5	48.6	3.4	
YTD	1,084.5	958.8	560.2	128.7	
Last YTD	821.9	712.4	735.2	54.6	
YTD less Last YTD	262.6	246.4	-175.0	74.1	

US Wheat:

- Heavy rain fell over a large swath of Oklahoma and Texas last week, which brought some relief, but drought conditions are still observed across the region given the long-term persistent dryness. The High Plains states missed out on the rain, where a lack of precipitation and high winds have continued to degrade conditions region-wide, despite below-average temperatures. More than 80% of the US is facing abnormally dry conditions, the biggest portion so far this century. The recent escalation of dryness across several key grain states already raises risks for the 2023 harvest. This is most concerning for the US winter wheat crop since there is less recovery time than for other crops.



- As of October 16, 69% of **US winter wheat** was planted, advancing 14 points from last week and 1 point ahead of the 5-year average. The emergence of newly planted winter wheat is 38%, 6 points behind the 5-year average of 44%.
- US weekly wheat sales were at the low end of expectations at 163k mt.
- US HRS for October 2022 was valued at \$441.90/ mt FOB PNW (*down \$6.00/mt from last week*), FOB Gulf HRW 11/12.5 pro is valued at \$433.50/mt (*down \$10.10/mt from last week*).

Australian wheat:

- In Australia, rain continued across the eastern half of the country, resulting in more logistics problems, and increasing quality concerns (protein/falling number). Yield declines are also likely.

Argentine wheat:

- In **Argentina** production estimates were again lowered by both the Rosario Grain Exchange (to 15 million mt from 16 million mt previously) and by Buenos Aires Grain Exchange (to 15.2 million mt from 16.5 million mt previously). Gd/Ex ratings fell to new lows of 11% (12% last week, 44% a year ago).
- We note that a 15 million mt crop leaves only 9 million mt for exports, and 8.8 million mt of export licenses have already been taken.

EU wheat:

- Marché à Terme International de France (Matif) wheat futures in Europe saw the sharpest declines last week falling €8.75/MT. Declining Russian wheat prices and mixed reports from the trade corridor pressured European values.
- FOB prices in the EU: October 2022 French 11.5 pro wheat closed at \$337.40/mt (*down \$16.80/mt from last week*); October 2022 German 12.5 pro wheat closed at \$342.80/mt (*down \$17.70/mt from last week*); October 2022 Baltic 14.0 pro wheat closed at \$384.80/mt (*down \$15.80/mt from last week*).

Black Sea wheat:

- The Russian UN Ambassador said he was not optimistic about the renewal of the export corridor as Russian demands are not being addressed or met. Turkish importers say there are no Russian offers beyond mid-November.
- Despite a huge wheat harvest this season, Russia's Ag Min says they are considering an export quota on all grains. The export quota would be 25.5 million mt of grain and would begin February 15 and end June 30. The quota still needs government approval. They did not say how much wheat was included in the quota. *This move may be an attempt to scare the market into paying more for Russian wheat.*

➤ **Significant purchases/ trades:**

- Turkey bought 470k mt of wheat on Friday in their tender. Prices were lower, but we do not have full details.
- Results on the Saudi Arabia's 535k mt tender should be out today.
- Algeria bought 400k mt of Russian wheat at levels lower than EU prices and much lower than North American prices.
- Iraq is scheduled to tender for 50k mt on the 24th.
- Pakistan tenders on the 26th for 500k mt.
- US export sales of 163k mt create a season total of 415 million bushels which is 8% lower than last year.

➤ **Wheat Market Outlook:**

Significant events over the past week:

- The IGC kept its 2022/23 **world wheat crop forecast** unchanged at 792 million mt (782 million mt last year). ICG assessed ending stocks at 286 million mt (unchanged from last month), compared to 278 million mt last year. Stocks with major exporters were put at 70 million mt (unchanged from last month), compared to 63 million mt last year.
- Barge traffic resumed last week along the **Mississippi River**, a key artery for grain exports through the Gulf, but lagged their pace from a year ago, according to USDA's weekly Grain Transportation Report.
- More than 80% of the **United States** faces abnormally dry conditions, the biggest portion so far this century, and the recent escalation of dryness across several key grain states raises risks for the 2023 harvest. Extreme fall dryness is more concerning for the U.S. winter wheat crop since there is less recovery time
- Despite a huge wheat harvest this season, **Russia** is considering an export quota on all grains, said Dmitriy Patrushev, the nation's agriculture minister. Patrushev said the export quota is 25.5 MMT of grain and would begin February 15 and end June 30. However, the minister did not indicate how much wheat was included in the quota. The quota still needs government approval, reported AgriCensus.
- Nibulon, a **Ukrainian agricultural company**, said it completed the first phase of its new grain export terminal at the Danube port of Izmail. Three Ukrainian ports ship grain down the Danube. Also, this week, Europe's largest land-based container terminal began operation near the Hungarian border with Ukraine. The terminal allows containers to be transferred between wide and standard gauge rail tracks and between trains and trucks. The terminal will increase Ukrainian grain shipments from the Adriatic Sea.

Outlook:

The uncertainties in Ukraine remain. Talk surrounding the renewal of the trade corridor, and Russia again concentrating on civilian targets will affect commodity markets. Export commitments remain well below last year's due to the economic uncertainties. The continued strong dollar and a fear of economic meltdowns will keep buyers of volume hard to find and we expect harvest pressure to keep futures prices low and in a narrow range. There remains optimism for wheat prices in the long term, but in the meantime, expect futures to trade a little lower, but in a narrow range. It's not advisable to extend sales for now.

iii) Primary Elevator Price Tables and Grade Spreads

Table 1: Canadian Primary Elevator Bids, in Canadian Dollars per Bu and per MILLION MT

Date: 24/10/2022

NW Sask	Spot		NW Sask	Deferred	
	(bu.)	(mt)		Dec '22 (bu.)	Dec '22 (mt.)
1 CWRS 13.5	\$11.87	\$436.15	1 CWRS 13.5	\$11.91	\$437.62
1 CWAD 13.0	\$13.40	\$492.37	1 CWAD 13.0	\$13.42	\$493.10
1 CPSR 11.5	\$11.22	\$412.27	1 CPSR 11.5	\$11.39	\$418.51
SW Sask			SW Sask		
1 CWRS 13.5	\$11.75	\$431.74	1 CWRS 13.5	\$11.79	\$433.21
1 CWAD 13.0	\$13.40	\$492.37	1 CWAD 13.0	\$13.40	\$492.37
1 CPSR 11.5	\$11.10	\$407.86	1 CPSR 11.5	\$11.33	\$416.31
NE Sask			NE Sask		
1 CWRS 13.5	\$11.48	\$421.82	1 CWRS 13.5	\$11.55	\$424.39
1 CWAD 13.0	\$13.24	\$486.49	1 CWAD 13.0	\$13.24	\$486.49
1 CPSR 11.5	n/a	n/a	1 CPSR 11.5	n/a	n/a
SE Sask			SE Sask		
1 CWRS 13.5	\$11.52	\$423.29	1 CWRS 13.5	\$11.59	\$425.86
1 CWAD 13.0	\$13.13	\$482.45	1 CWAD 13.0	\$13.15	\$483.18
1 CPSR 11.5	\$10.93	\$401.61	1 CPSR 11.5	\$11.09	\$407.49

Data source: PDQ, Oct. 24/'22

Table 2: Grade Spreads, in Canadian Dollars per Bu and per MILLION MT

Avg. Grade Spread/ Pro Discounts	Cdn\$/bu.	Cdn./mt
1 CWRS 14.0	0.05	1.89
1 CWRS 13.5	Base Grade	Base Grade
2 CWRS 13.5	(0.10)	-3.67
1 CWRS 12.5	(0.30)	-11.02
1 CWAD 13.0	Base Grade	Base Grade
1 CWAD 13.5	0.00	0.00
2 CWAD 13.0	(0.10)	-3.67
2 CWAD 12.5	(0.15)	-5.51

Data source: PDQ, Oct. 24/'22

iv) FOB Wheat Prices and Export Basis Calculation

Background and Rationale:

Reporting FOB prices at port position and primary elevator prices allows the reader to gain an understanding of both local and international wheat prices and to understand the relationship between the two, as measured by the export basis. Export basis can be defined as FOB port position prices minus the primary elevator prices at any given prairie delivery location and is therefore reflective of transportation costs plus any premiums being captured by terminal grain elevator companies or the railway companies, at any given time.

In general, a widening basis is indicative of decreasing system performance in terms of either reduced port capacity or rail service, or both. A narrowing basis is indicative of increased available port capacity and/or better ability of the railways to provide ample service to grain shippers. In this regard, tracking these prices over time has value both in terms of producers being able to time the selling of their grain but also in terms of evaluating and setting policy related to various transportation and capacity issues.

Gray (2015) has calculated a normal basis to be in the range of C\$72/million mt. During the 2013/14 crop year the export basis for wheat widened to approximately C\$250/million mt, which indicated an inability of the grain handling and transportation system to adequately handle the record crop produced that year. This occurrence has highlighted the need to improve the level of rail service and take measures to expand port capacity where possible. It has also underscored the need for better price transparency and market information within the grain sector.

Assumptions, Definitions, and Methodology

The following background information should assist in understanding and interpreting international market signals and to relate them to the 'local' Saskatchewan wheat market:

- The price information generated for the weekly report is designed to show farmers at what price levels several wheat classes are trading at local primary elevators (Table 1) and in nearby international markets (Table 3). To express the Export Basis¹ (see *Export Basis* in Table 3) defined as Canadian FOB Prices minus primary elevator bids, the FOB prices are translated into Canadian dollars from US dollars and compared to current actual primary elevator Street prices at Rosetown, Saskatchewan (see *Street Prices* in Table 3). Rosetown is used as a proxy for all primary elevators in the basis calculation. The actual handling and transportation costs from the West Coast to delivered elevator (Rosetown area) range from ~C\$58.00-C\$74.72/million mt, depending on number of cars moved and elevator used.
- Approximate relationship between U.S. wheat classes and Canadian wheat classes:
 - DNS 14% in the Pacific North West (PNW) ≈ 1 CWRS 13.5% in Vancouver

¹ Gray, R.S. (2015). The Economic Impacts of Elevated Export Basis Levels on Western Canadian Grain Producers 2012/13, 2013/14 and 2014/15.

“The difference between FOB Vancouver prices and the Saskatchewan elevator cash bids to producers is referred to as export basis: Basis can refer to the difference between any two prices. As the largest volume port, Vancouver FOB, minus the elevator bid prices representative measure of the “export” basis for grains in Western Canada.”

- HRS in the Pacific North West (PNW) \approx 2 CWRS 13.0% in Vancouver
- HRW in the Pacific North West (PNW) \approx 3 CWRS in Vancouver
- SW (lowest price wheat) \approx CPS red (mostly fed domestically)
- HAD (Lakes) \approx CWAD (Thunder Bay/ Lawrence)
 - Abbreviations: DNS (Dark Northern Spring Wheat); HRS (Hard Red Spring Wheat); HRW (Hard Red Winter Wheat); SW (Soft Wheat); HAD (Hard Amber Durum Wheat); CWRS (Canadian Western Red Spring Wheat); CPS (Canada Prairie Spring Wheat); CWAD (Canadian Western Amber Durum Wheat)

➤ Hard wheat price calculations:

Exporters in Western Canada generally derive their primary elevator wheat prices from HRS values at the West Coast (Pacific Northwest - PNW).

Similarly, HRW values are used for lower grade (3) CWRS.

- West Coast HRS and HRW values essentially dominate the international hard wheat trade and determine its basic value.
- If premiums are paid for 1 CWRS 13.5, elevator companies are often able to retain the premium

➤ Durum wheat price calculations:

The primary export route for Canadian durum wheat is still through Thunder Bay, not the West Coast of Canada.

- Nevertheless, the Pacific Coast has increased in importance for durum over time with 38% of total export volume crop year to date.
- Italy is the single biggest buyer of Canadian durum wheat with 27% of total Canadian durum exports YTD (East Coast shipments).

➤ Optional origin grain sales:

Most major international grain companies sell 'optional origin' wheat to their customers and often cover their sales 'at best' closer to the shipment position. The Canadian grain system is not conducive to servicing optional origin sales because the volume of wheat kept in storage in port today is much smaller than prior to deregulation of the Canadian wheat market.

Table 3: Relevant FOB Prices and calculated Basis, US & Canadian Dollars per MT

Relevant FOB Prices and Export Basis				October 24, 2022
Type of Wheat	FOB Prices CDA ¹ (calculated)		Street Prices	Export Basis ²
	West Coast (Cdn./mt\$)	Great Lakes (Cdn./mt)	Rosetown (Cdn./mt)	Basis: West Coast-Centr. SK (Cdn\$/mt)
DNS 14.0	\$529.23	\$856.66		
HRS	\$522.83			
HRW 11.5	\$543.85			
SWW 12.0	\$448.09			
1 CWRS 13.5 ³	\$529.23		\$425.86	\$103.37
2 CWRS 13.0 ³	\$522.83		\$413.00	\$109.83
3 CWRS ³	\$543.85		\$398.30	\$145.55
CPS ³	\$441.03		\$400.88	\$40.15
1 CWAD ⁴		\$419.98	\$514.42	\$61.69
Competing wheat:	US\$/mt			
Russia 12.5 (Black Sea, 25k mt)	\$320.00		November	
French 11.5 (Rouen)	\$337.40		November	
APW 10.5 (W Coast)	\$385.00		December	
Argentine 12.5	\$375.00		December	
¹ FOB Prices CDA = FOB US\$ converted into Canadian Currency ² Export Basis = FOB Prices CDA minus Cdn. Street Price ³ DNS 14% ≈ 1 CRWS 13.5%; HRS ≈ 2 CWRS 13.0%; HRW ≈ 3CWRS; SWW ≈ CPS ⁴ Values derived to Lakehead FOB				