

## Wheat Market Outlook and Price Report: October 15, 2019

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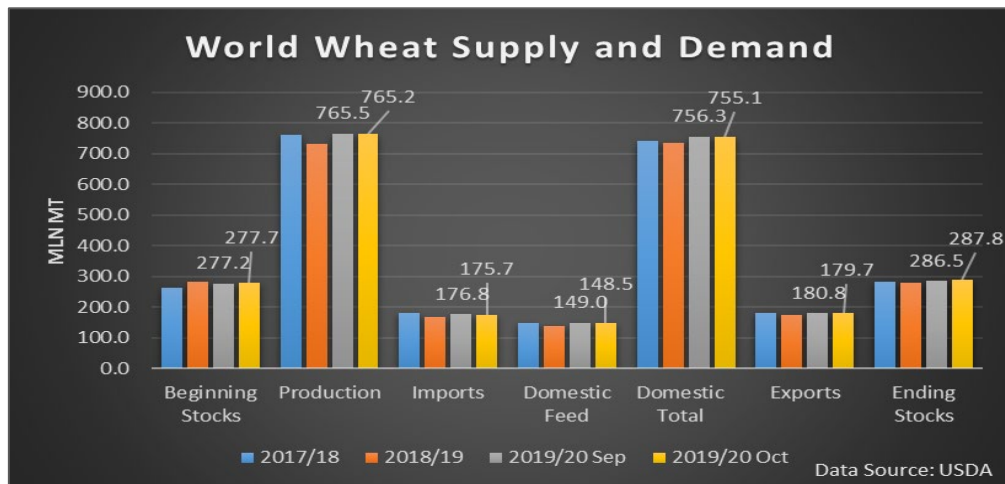
### i) Background and Rationale for the Report

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 Oct 10<sup>th</sup>, 2019

#### USDA/WASDA October Estimates of World Wheat Supply and Demand



- Global 2019/200 wheat supply was raised slightly as a 0.3 mln mt decrease in production was more than off-set by a 0.5 mln mt increase in beginning stocks.
- The decrease in world production was led by a 1 mln mt cut the Aussie production to 18 mln mt. Production in Canada was seen 300k mt lower at 33 mln mt, while production in the EU was raised 1 mln mt to 152 mln mt. Production in both South America and the Black Sea was left unchanged. We think future reports need to increase Russian production upwards of 5 mln mt while production in Argentina needs to be 1 mln mt lower.
- Exports were seen 1.2 mln mt lower led by a 1 mln mt reduction in Aussie exports because of their production shortfall.
- World wheat consumption was seen 1.1 mln mt lower mainly on a 0.8 mln mt reduction in US feed use, as stocks numbers released in the Sept 30<sup>th</sup> report indicated smaller than expected 2018/19 feed use and similar-to-last year feed use YTD 2019/20.
- Overall, wheat ending stocks were raised 1.3 mln mt from last month to a record 287.8 mln mt.

➤ **Global wheat production and trade:**

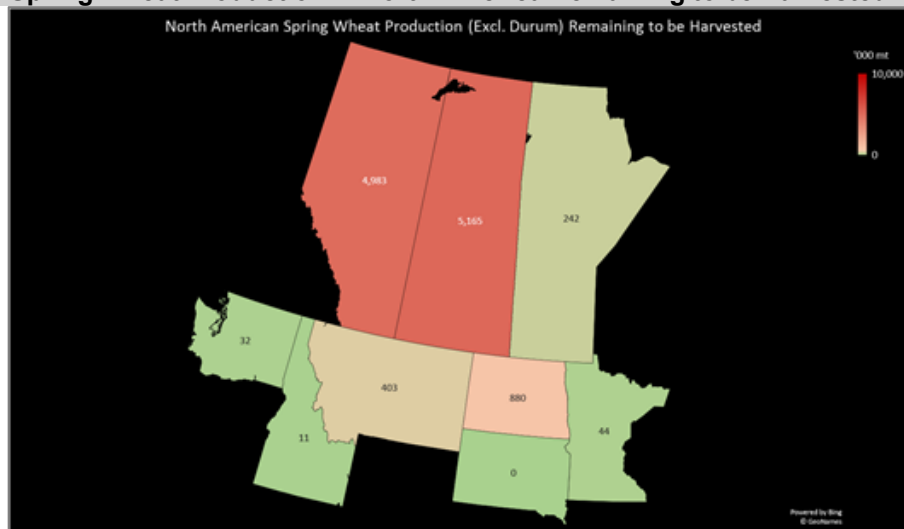
There is a lot of competition in the wheat markets as wheat is produced around the world. Below is a brief synopsis on last week's market events in the major wheat origins.

- **Futures:** Dec '19 contract **Chicago** winter wheat closed at 508-0, up 15-0 cents for the day, up 17-4 cents for the week.
- Dec '19 contract **Kansas** hard red winter wheat closed at 419-4, up 16-2 cents for the day, up 15-4 cents for the week.
- In **Minneapolis**, Dec '19 contract hard red spring wheat closed at 548-0, up 12-6 cents for the day, up 9-4 cents for the week, while March '20 hard red spring wheat closed at 562-0, up 13-0 cents for the day, up 8-6 cents for the week.

**Canadian Wheat:**

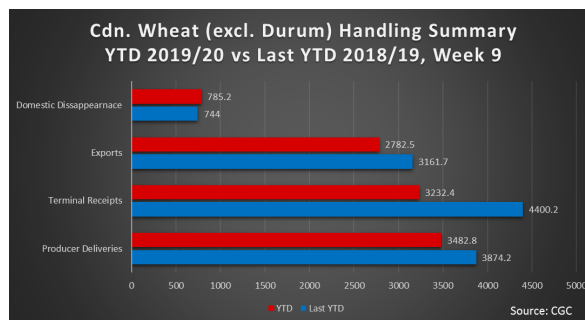
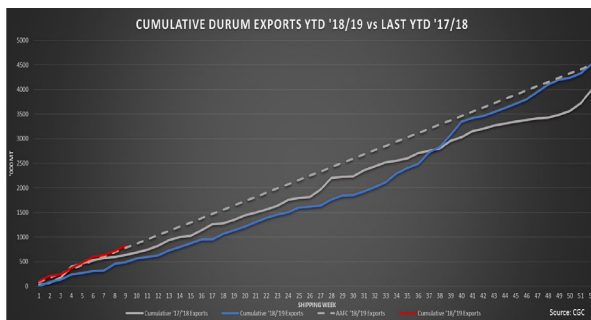
- Heavy snowfall amounts of up to 24 inches was experienced in most of the main cropping areas of MB and parts of SE SK over the weekend. While the weather concern was supporting futures leading into the weekend, AB and most of SK (where most of the unharvested wheat remains) missed the system and in many cases were able to continue harvest operations over the long weekend.
- As of Oct 7<sup>th</sup>, harvest in SK was 52% complete having made headway on another 8% of the crop. Spring wheat harvest in AB is 13% higher than last week at 48% complete. In their final report of the season, MB Ag put MB spring wheat harvest up 4% from last week to 95% complete.
- As most of the remaining wheat to be harvested in MB is in the SW region, the area most impacted by snow, we think most of the remaining crop will be left unharvested. The provincial seasonal summary will be posted today.
- There is still 11.8 mln mt of spring wheat (excl. durum) in North America remaining to be harvested, however most of this is in AB and SK where they have been experiencing OK harvest conditions and much of this will likely get thrashed.

**Spring Wheat Production in North America Remaining to be Harvested**



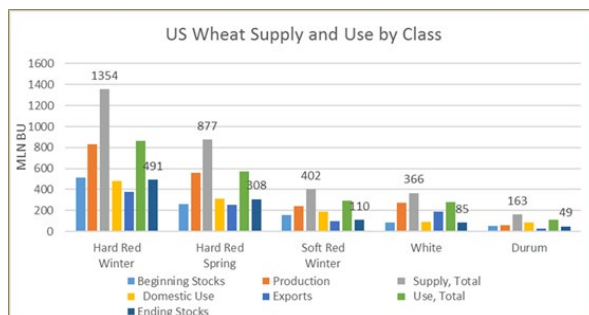
- In SK, 59% of the durum crop has been harvested as of Oct 7<sup>th</sup> having made progress on just 2% of the crop. Harvest in AB is now 92% done.
- Canadian producers delivered 553.1k mt of wheat (excl. durum) into the Canadian grain handling system during week 9 of the 2019/20 marketing year. Exports during the week were 326.9k mt, for a YTD total of 2.785 mln mt, 379.2k mt (12%) less than this time last year.

- Canadian producers delivered 69.5k of durum into the grain handling system during week 9 of the marketing year. Exports though out the week were 101.9k mt for a YTD total of 860 mt, 68% (348.7k mt) higher than this time last year.



## US wheat:

- The US Wheat Associates said on Friday that the US HRS harvest has all but ended given the heavy and persistent rain/snow in MT and ND. As of Oct 7<sup>th</sup>, the NASS crop report showed US spring wheat harvest at just 91% complete having progressed only 1% over the week. We estimate there is just under 1.4 mln mt worth of unharvested spring wheat in the US.
- The Harvest Sample Program is complete for HRS and the average grade of the crop managed to remain a No. 1 NS. Average protein was down 1% from last year at 14.5%, falling number was 35 points less at 379 seconds, and DHV was down 27% from last year at 63%.
- There was no update on the US durum harvest which was 90% complete last week. The MT and ND crop were just 55% and 78% harvested respectively. The average US durum sample as tested by the US Wheat Associates was a No. 1 AD. Average protein was 13.6% (-0.6% y/y), falling number was 341 seconds (-77 sec y/y), and HVAC was 62% (-26% y/y).
- The USDA/WASDE report saw US wheat production 18.5 mln bu lower than last month at 1,962 mln bu based on the Sept 30<sup>th</sup> Small Grains Summary. Imports were seen 15 mln bu lower at 120 mln bu, as per the Sept 30<sup>th</sup> Grain Stocks Report. 2018/19 ending stocks were raised 8 mln bu as (according to the USDA) first quarter ending stocks were down only slightly from last year implying similar y/y feed and residual use, causing 2019/20 feed and residual to be lowered 30 mln bu to 140 mln bu (which is still 50.2 mln bu higher than last year's amount). Us exports were seen 25 mln bu lower at 950 mln bu because of its lack of competitiveness for an *overall 29 mln bu increase in US ending stocks from last month at 1,043 mln bu vs trade's expected 1,015 mln bu.*
- On a by class basis, HRW ending stocks were raised 29 mln bu, SRW was lowered 3 mln bu, white wheat was raised 18 mln bu, durum was lowered 5 mln bu and HRS was lowered 9 mln bu. HRS supply was seen 19 mln bu lower mainly because of a 2 mln bu decrease in beginning stocks and a 7 mln bu decrease in production. HRS demand was decreased just 10 mln mt entirely because of lower exports.



## Australian wheat:

- USDA-FAS reported last week that winter grain crop prospects in much of Australia deteriorated during September as a result of inadequate rainfall. Specifically, the forecast for Australia's 2019/20 wheat production was revised down to 18.0 mln mt, up only 700,000 mt compared to the drought-impacted 2018/19 crop. If realized, wheat production would be more than 25% below the 10-year production average.
- Last week, the USDA also lowered Aussie wheat production forecasts by 1 mln mt to 18.0 mln mt.
- Some rain in Australia's East pressured futures and Fob as APW WA is now bid at \$234 for Jan delivery -still far too expensive to trade.

#### **Argentine wheat:**

- Dryness is becoming progressively worse in Argentina and there is little precipitation in the forecast. BAGE put Argentine's wheat production estimates down another 1.2 mln mt to 19.8 mln mt. Crop ratings lost another 7 points at 23% Gd/Ex (37% last year). Just 36% of the crop is heading vs 56% last year. Despite this the USDA left their number unchanged at 20.5 mln mt which we think needs to be revised in upcoming reports.
- Macri said that if re-elected, he would scrap export taxes by 2021, but farmers do not believe him and are upset about the revenue already lost.
- Arg. 12% pro Fob is currently bid at \$184-\$190 for Dec delivery.

#### **EU wheat:**

- Matif made 11-week highs on Friday following the US rally. Talk of additional demand to Morocco and ongoing strong EU shipments further supported wheat futures. Higher futures is starting to hurt their competitiveness in the world market as French wheat was \$4-6 too high to trade in the last GASC tender which was sourced entirely from the Black Sea.
- Reuters is estimating that 2019/20 EU soft wheat exports are 6.65 mln mt at of Oct 6<sup>th</sup>. This is a 38% increase over last year vs the USDA's current total export estimate of 28 mln mt, a 17% increase over last year.
- French winter wheat planting advanced 3 points to 4% complete vs 15% last year.
- Yesterday, French Fob, was bid at \$200.5 for 11.5% pro, Baltic 12.5% pro was \$198, while German 12.5% pro was bid at \$201.

#### **Black Sea wheat:**

- In their latest update, the Russian Ag Min showed 76.3 mln mt of wheat had been harvested with 1-1.5 mln ha remaining to be cut. This suggests their earlier 77-78 mln mt estimate is feasible -a whole 5 mln mt above the USDA's unchanged number.
- The Russian Grain Union is estimating that the country will export 34 mln mt of wheat in 2019/20, down 5% from last year, but 11% higher than the 5-year average.
- Russian winter wheat planting has covered 33.1 mln acres, 77% of the total expected area.
- Russian Fob yesterday was bid at \$200 and \$197 for 12.5% pro and 11.5% pro respectively.

#### ➤ **Significant purchases/ trades:**

- **Egypt** (GASC) bought 295,000 mt of Black Sea at \$222.50.
- **Jordan** bought 60,000 mt at \$229.80.
- **Tunisia** bought 50,000 mt at \$221.
- **USA** inspections were 385,000 mt (season total 327 mln bu, up 21%), sales were 522,000 mt (season total 493 mln bu, up 16%). Considering that the wheat markets are in a carrying charge (i.e. deferred prices are higher) USA sales year to date are very good.

➤ **Wheat Market Outlook:**

**Significant events:**

- **Extreme winds and up to 24 inches of wet heavy snow fell on SE SK, MB, the Dakotas over the weekend.** Most of the wheat remaining to be harvested in these areas will likely be left unharvested.
- **Crop quality concerns due to excessive rainfall at harvest and minimal farmer and elevator selling supported Pacific Northwest (PNW) and Gulf HRS export basis** week-over-week for October and November deliveries. Gulf HRW export basis rose over last week on minimal farmer selling and the potential for increased high protein winter wheat demand due to HRS crop quality concerns. The protein premium spread between HRW 11.0 (12% moisture basis) and HRW 12.0 out of the Gulf increased from 35 cents last week to 45 cents this week. News of reduced 2019 SRW production from the October World Agricultural Supply and Demand Estimates (WASDE) report (see below) and crop quality concerns supported SRW export basis for nearby deliveries. News of reduced club wheat planted area and crop quality concerns on unharvested club wheat supported western white (WW) wheat premiums week-over-week.
- **Indirectly supporting wheat is the potential impact that the snow and freezing conditions will have on the corn crop.** According to the latest NASS crop progress report, 93% of the US corn crop has dented, while just 58% of the crop is mature. From the start of denting (R5 stage), until mature (R6 stage), a killing frost could inflict anything from 5-40% yield loss depending on the crops development. Temperatures of 32 degrees Fahrenheit can be lethal to corn if they persist for several hours, while temperatures of 28 degrees are fatal in a matter of minutes. Reports indicate that Sub-32 temperatures persisted in MT, ND, SD, NE and W MN for over 18 hours while the remainder of MN and parts of IW had sub-32 temperatures for 10-13 hours.
- Late in Friday's trading day, **POTUS said China and the US have agreed to the outlines of a deal that could be signed as early as next month.** The framework of the agreement is for China to purchase \$40-\$50 bln worth of US agricultural goods within 2 years. For context, the most amount of US Ag goods sold to China in a single year was in 2001 were \$29 bln worth of Ag goods were sold. Of course, capping the optimism of these reports was China saying that they wanted to hold more talks this month to work out the details of "phase one" before President Xi agrees to sign it. The expectation is that talks will continue for another 4-6 weeks before a final agreement, but there are 4 major points that remain unclear.
  - 1) There is no product split for the \$40-50 bln worth of Ag goods.
  - 2) There are no specifics on the reduction or removal of tariffs by either country.
  - 3) There is not start date.
  - 4) There is no guarantee that it will be implemented even without agreement on major areas like intellectual property and tech sales which have not seen additional progress.
- **Weather around the world:**
  - **USA:** After a weekend of very heavy snow in the Dakotas, precipitation moves progressively eastwards this week with temperatures becoming increasingly warm.
  - **Canada** also looks much warmer this week with limited precipitation. The **South American** forecast maintains needed rain in much of **Argentina** this week, but most of **Brazil** remains dry until the 8-15 day timeframe. **South Africa** remains mostly dry and warm. **Europe** begins the week with significant rain in the west, and this progressively moves eastward although the system is expected to stall out before reaching the Balkans or the Black Sea. Temperatures remain warm everywhere with readings in the east up to 10°C above normal. **Australia** looks dry in the west; there will be some showers in the south-east corner with temperatures below normal.

➤ **Outlook:**

The Funds still find it hard to get bullish on milling wheat and consider the markets are oversupplied. We think they are underestimating demand, particularly feed usage. The carrying charge market has resulted in consumers having less coverage than normal due to the higher prices in deferred positions, and weather conditions remain an issue. *Funds are short, so a breakout is possible.*

***If \$7.00 or better can be achieved for 2CWRS wheat, we would sell 25 percent.***

**iii) Primary Elevator Price Tables and Grade Spreads**

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

NW Sask	Spot		NW Sask	Deferred	
	(bu.)	(mt)		Dec. '19 (bu.)	Dec. '19 (mt.)
1 CWRS 13.5	\$6.40	\$235.16	1 CWRS 13.5	\$6.51	\$239.20
1 CWAD 13.0	\$7.28	\$267.50	1 CWAD 13.0	\$7.32	\$268.97
1 CPSR 11.5	\$5.29	\$194.38	1 CPSR 11.5	\$5.35	\$196.58
SW Sask			SW Sask		
1 CWRS 13.5	\$6.27	\$230.38	1 CWRS 13.5	\$6.37	\$234.06
1 CWAD 13.0	\$7.28	\$267.50	1 CWAD 13.0	\$7.33	\$269.33
1 CPSR 11.5	\$5.26	\$193.27	1 CPSR 11.5	\$5.30	\$194.74
NE Sask			NE Sask		
1 CWRS 13.5	\$6.14	\$225.61	1 CWRS 13.5	\$6.23	\$228.92
1 CWAD 13.0	\$7.69	\$282.56	1 CWAD 13.0	\$7.77	\$285.50
1 CPSR 11.5	\$5.03	\$184.82	1 CPSR 11.5	\$5.10	\$187.39
SE Sask			SE Sask		
1 CWRS 13.5	\$6.19	\$227.45	1 CWRS 13.5	\$6.24	\$229.28
1 CWAD 13.0	\$7.65	\$281.09	1 CWAD 13.0	\$7.75	\$284.77
1 CPSR 11.5	\$5.07	\$186.29	1 CPSR 11.5	\$5.14	\$188.86

**Table 2: Grade Spreads, in Canadian Dollars per Bu and per 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	(0.15)	-5.51
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	(0.20)	-7.35



#### **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/tonne. During the 2013/14 crop year the export basis for wheat widened to approximately C\$250/tonne, 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 Basis<sup>1</sup> (see *Export Basis* in Table 3) defined as Cdn. FOB Prices minus primary elevator bids, the FOB prices are translated into Cdn. 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/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
  - HRS in the Pacific North West (PNW) ≈ 2 CWRS 13.0% in Vancouver
  - HRW in the Pacific North West (PNW) ≈ 3 CWRS in Vancouver
  - SW (lowest price wheat) ≈ CPS red (mostly fed domestically)

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<sup>1</sup> 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.”

- HAD (Lakes) ≈ 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 15, 2019
Type of Wheat	FOB Prices CDA <sup>1</sup> (calculated)		Street Prices	Export Basis <sup>2</sup>
	West Coast (Cdn./mt\$)	Great Lakes (Cdn.\$/mt)	Rosetown (Cdn.\$/mt)	Basis: West Coast-Centr. SK (Cdn\$/mt)
DNS 14.0	\$349.99	\$329.09		
HRS	\$345.13			
HRW 11.5	\$287.28			
SWW 12.0	\$303.32			
1 CWRS 13.5 <sup>3</sup>	\$349.99		\$225.98	\$124.01
2 CWRS 13.0 <sup>3</sup>	\$345.13		\$205.77	\$139.36
3 CWRS <sup>3</sup>	\$287.28		\$163.51	\$123.77
CPS <sup>3</sup>	\$296.52		\$182.25	\$114.27
1 CWAD <sup>4</sup>		\$307.70	\$0.00	\$307.70
<b>Competing wheat:</b>				
	US\$/mt			
Russia 12.5 (Black Sea, 25k mt)	\$200.00			
French 11.5 (Rouen)	\$200.50			
APW 10.5 (W Coast)	\$234.00			
Argentine 11.5	\$180.00			
<sup>1</sup> FOB Prices CDA = FOB US\$ converted into Canadian Currency <sup>2</sup> Export Basis = FOB Prices CDA minus Cdn. Street Price <sup>3</sup> DNS 14% ≈ 1 CRWS 13.5%; HRS ≈ 2 CWRS 13.0%; HRW ≈ 3CWRS; SWW ≈ CPS <sup>4</sup> Values derived to Lakehead FOB				

## ADDENDUM

### Futures Driven Basis Calculation, Canadian Dollars per MT

Canadian Wheat - World Price Parities					October 15, 2019
<b>Canadian Funds</b>				<b>Grade</b>	
<b>PNW value/Vancouver</b>	<b>1CWRS13.5</b>	<b>2CWRS</b>	<b>3CWRS</b>	<b>Winter wht.</b>	<b>CPS</b>
May/June delivery	\$9.34	\$9.21	\$7.63	\$8.07	\$8.07
<b>Parity Track Rosetown</b>	\$7.84	\$7.71	\$6.14	\$6.57	\$6.57
<b>Track Bid Rosetown Area</b>	\$6.15	\$5.60	\$4.45	\$4.96	\$4.96
<b>Gross Margin at Elevator (\$/bu)*</b>	\$1.69	\$2.11	\$1.69	\$1.61	\$1.61
<b>Gross Margin at Elevator (\$/mt)*</b>	\$62.22	\$77.57	\$61.98	\$59.28	\$59.28
* to cover elevation, elevator market risk, margin					