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 June 11, 2018

World Wheat Overview:

- World Wheat – Summary Current Balance Sheet Projections for 2018/19 (AMIS\(^1\))

\[\begin{array}{|c|c|c|c|}
\hline
\text{WHEAT} & \text{FAO-AMIS} & \text{USDA} & \text{IGC} \\
\hline
\text{2017/18 est.} & 757.2 & 746.6 & 754.1 \\
\text{3-May} & 758.4 & 747.8 & 758.2 \\
\text{7-Jun} & 742.3 & 742.3 & 742.3 \\
\hline
\text{2018/19 est.} & 1,010.8 & 1,024.0 & 1,031.5 \\
\text{10-May} & 1,014.3 & 1,018.3 & 1,001.8 \\
\text{14-May} & 1,003.9 & 743.8 & 740.3 \\
\hline
\text{2018/19 f\text{-}cast} & 738.6 & 743.3 & 743.5 \\
\text{2017/18 est.} & 182.1 & 188.4 & 175.6 \\
\text{14-May} & 270.5 & 264.3 & 261.6 \\
\hline
\text{Trade} & 174.2 & 174.1 & 175.0 \\
\hline
\text{Stocks} & 277.4 & 279.0 & 283.4 \\
\hline
\end{array}\]

- The wheat production forecast for 2018 was raised by FAO, but still is below 2017 despite increases to forecasts for several major producers, including Argentina and India.
- Utilization of wheat continues to grow by 1.0 percent in 2018/19, supported by rises in feed and food use.
- Wheat trade in 2018/19 (July/June) is forecast to exceed the 2017/18 record volume with higher sales from the EU, the Russian Federation and the US more than compensating for declines in exports from Argentina and Ukraine.

\(^1\) Agricultural Market Information System (AMIS).
• **Wheat stocks** (ending in 2019) are expected to reach a new record, driven by build-ups in China and India.

• **Wheat crop conditions**: **EU**: Parts of central and eastern Europe affected by a lack of precipitation. **Ukraine**: Winter wheat generally favourable though recent hot and dry conditions in the south are causing premature ripening in some areas. **Russian Federation**: Winter wheat is entering the critical development stages under mixed conditions due to recent hot and dry conditions in the south. **Spring wheat** sowing is ongoing with delays in the east due to wet weather. **Kazakhstan**: Spring wheat planting has almost completed under mostly favourable conditions. **China**: Favourable for both winter and spring wheat. **US**: Drought conditions still remain in the southern Great Plains; recent rainfall has potentially improved conditions for the winter wheat crop. **Australia**: Now favourable in the west while low soil moisture across much of the eastern and southern areas is affecting winter wheat.

- **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**: It was a mixed week in the wheat market. Trade tensions weighed heavily, while weather concerns continued to offer support.
    July’18 contract Chicago winter wheat closed 520-0, down 6-6 cents in today’s trade and down 3-2 cents for the week.
    July’18 contract Kansas hard red winter wheat closed down 6-2 cents at 538-2, down 2-4 cents for the week.
    Minneapolis, July’18 contract hard red spring wheat closed at 592-2, down 5-2 cents in today’s trade (down 11-6 cents for the week), while Sept’18 hard red spring wheat closed at 603-2, down 4-0 cents for the day and down 9-2 cents for the week.

  • **Funds**: Both sets of funds were sellers of the soybean complex and corn whilst the Trump organization continues to disrupt World Trade. (Wheat was the only commodity where Specs added 700k mt.) Funds were not prepared to continue to hold their overall longs in this circumstance, particularly the speculative element. In recent weeks they have reduced their overall long from 53 myn tonnes to 28 myn tonnes.
    We doubt the Index Funds will sell too much as their long is held against inflation worries. The Spec could go either way; sell more on bad trade news, or it could be said they have more room to buy if some bullish news hits the market. We don’t expect markets to do much prior to the WASDE report is released.

  • **Matif**: Matif made its highest weekly close since September as farm selling stopped with markets focusing increasingly on the weather.
    - **Canadian wheat**: In shipping week 44, Canadian **wheat** producers delivered 484k mt of wheat to Canadian grain handling facilities. Export shipments were excellent 422k mt for a total of 13.8 mln mt YTD. YTD exports of wheat as of week 44 are at 15% higher than last YTD.
    - **Canadian durum** producers delivered 88k mt of durum to licensed Canadian grain handling companies for a total of 3.2 mln mt YTD. Canadian durum exports were reported at 42k mt, for a total of 3.6 mln mt. This is 5% lower than last YTD.
• The N Plains and Cdn. Prairies are looking to receive avg. rainfall with slightly above avg. temps. HRS Seeding is over 95% complete in the N Plains and 80% of the crop has emerged. Meanwhile, HRS seeding in SK is 97% and will be complete by next week. Soil moisture in SK has significantly improved from last week, with only parts of SW SK remaining short on moisture. Spring cereals in SK are 60% emerged and 22% tillering.

• We see no reason to make additional sales at the present. Weather remains an issue and we think there is less wheat and corn in the world than the last USDA report suggested.

US wheat:

• It was a mixed week in the wheat market. Trade tensions weighed heavily, while weather concerns continued to offer support.

• The Export Sales report had US old crop sales as a net reduction of 19.4k mt (trade expectation was reductions of 100-300k mt). Accumulated exports in 2017/18 were thus 22,419,200mt, down 15% from last year’s 26,512,800mt. NC sales were 250.9k mt at the low end of expectations.

• The S Plains will remain dry for the foreseeable future. For many of these areas, rain now would only serve to downgrade quality and impede harvest, which has moved as far N as S KS. TX harvest is now 39% complete while OK is 53% complete. Yields are variable, with the average being 25 bu/ac (poor but not as bad as anticipated). Test weights are above expectations at 60.1 lb/bu and protein levels are high (11-12%) causing Gulf HRW premiums to fall.

• US spring wheat ratings showed 70% GD/EX (55% last year, 70% average) with 81% emerged (88% last year, 82% average), but the big problem for US wheat remains the awful pace of exports, which at current prices is unlikely to improve.

• The USDA’s June Crop Supply and Demand report is going to come out on June 12th. In anticipation of the report, analysts have made their estimates as to what the USDA number will be. The average estimate for total wheat production is 1.822 bln bu, only 1 mln bu more than the USDA’s May estimate (1.821 bln bu). We believe that while this is the right direction, this is probably an overly conservative estimate as winter wheat production numbers could rise by 30-40mln bu.

• US wheat continues to be offered at a huge premium to Russian wheat, indicating that trade is primarily focused on the shrinking FSU/EU crop rather than on demand.

Australian wheat:

• Many Western Australian wheat areas have received good rains over the past week or so, providing at least temporary relief. Dryness in E Australia continues.
Australian wheat futures began and ended lower on the back of the US futures losses and due to the late week arrival of rains in the west and south-east.

**Argentine wheat:**
- The Buenos Aires Grain Exchange (BAGE) put seeding at 19% complete against 20% last year on an expected 7% increase in acres to 6.1 mln ha. Rosario Grain Exchange is also at 6 mln ha, but this is an 11% increase on the year basis RGE numbers.
- Fob Argentine new crop wheat was quoted lower in Argentina with 12% protein wheat offered at US$202/mt and 11.5% protein wheat a $5/mt discount.

**EU wheat:**
- Western Europe suffered from persistent heavy rain, while Germany, Poland and Denmark continued to see hot dry conditions with decreasing soil moisture.
- German Co-ops lower their wheat crop estimate further to 22.9 mln mt (from 24 mln mt previously and 24.5 mln mt last year).

**Black Sea wheat:**
- There is too much rain in the EU and Russian spring wheat regions. Russian spring wheat areas are forecast to turn very wet again next week with close to 20% (~2.5 mln ha) still to be seeded.
- Russian 12.5% protein wheat was thinly offered Fob at US$206/mt spot, at US$207/mt for July and August with the bids $3-4/mt lower. September and Oct.’19 were bid at US$205-$206/mt, but with no sellers.

**Significant purchases/trades:**
- It was a very quiet week in cash trade, while buyers watched good crop conditions and wondered what new trade developments might occur.
- **Iraq** tendered for 50k mt. Australian wheat was offered at the lowest price at US$313/75/mt, while Canadian wheat was at US$318/mt, and US wheat was uncompetitive at US$337.68/mt.
- Otherwise, there were no reports of any significant wheat trades for this week.

**Wheat Market Outlook:**

**Significant events:**
- **Trump is keeping all international markets on edge.**
- So far ~80% of intended wheat acreage has been seeded in **Russia**.
- There are a number of **potential weather issues** looming for the wheat markets in both the southern and northern hemisphere. We will need to watch how crops develop in both regions.
- The next USDA supply and demand report is on June 12th, but the stocks and acreage report on June 29th will be equally important.
- **Russian wheat remains the world’s cheapest wheat.**

**Outlook:**
- Weather is still a concern in Eastern Europe and parts of the US. We have the WASDE on Tuesday (which in our view has the potential to be bullish), but after the Trump performance at the G7 meeting it’s the June 15th US tariff announcement, which will keep the market on edge.
- The Black Sea remains the world’s cheapest wheat and the current weather forecast offers no reason for lower prices.
iii) Primary Elevator Price Tables and Grade Spreads

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

<table>
<thead>
<tr>
<th>NW Sask</th>
<th>Spot (bu.)</th>
<th>NW Sask</th>
<th>Deferred Sept. '18 (bu.)</th>
<th>Sept. '18 (mt.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 CWRS 13.5</td>
<td>$6.22</td>
<td>1 CWRS 13.5</td>
<td>$6.12</td>
<td>$228.55</td>
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<tr>
<td>1 CWAD 13.0</td>
<td>$6.45</td>
<td>1 CWAD 13.0</td>
<td>$6.27</td>
<td>$227.00</td>
</tr>
<tr>
<td>1 CPSR 11.5</td>
<td>$6.02</td>
<td>1 CPSR 11.5</td>
<td>$5.81</td>
<td>$221.20</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SW Sask</th>
<th>SW Sask</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 CWRS 13.5</td>
<td>$6.68</td>
</tr>
<tr>
<td>1 CWAD 13.0</td>
<td>$7.09</td>
</tr>
<tr>
<td>1 CPSR 11.5</td>
<td>$5.87</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>NE Sask</th>
<th>NE Sask</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 CWRS 13.5</td>
<td>$6.53</td>
</tr>
<tr>
<td>1 CWAD 13.0</td>
<td>$6.98</td>
</tr>
<tr>
<td>1 CPSR 11.5</td>
<td>$5.89</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SE Sask</th>
<th>SE Sask</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 CWRS 13.5</td>
<td>$6.65</td>
</tr>
<tr>
<td>1 CWAD 13.0</td>
<td>$7.09</td>
</tr>
<tr>
<td>1 CPSR 11.5</td>
<td>$5.85</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Avg. Grade Spread/Pro Discounts</th>
<th>Cdn$/bu.</th>
<th>Cdn$/mt</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 CWRS 14.0</td>
<td>0.11</td>
<td>4.15</td>
</tr>
<tr>
<td>1 CWRS 13.5</td>
<td>Base Grade</td>
<td>Base Grade</td>
</tr>
<tr>
<td>2 CWRS 13.5</td>
<td>(0.18)</td>
<td>(6.61)</td>
</tr>
<tr>
<td>1 CWRS 12.5</td>
<td>(0.37)</td>
<td>(13.60)</td>
</tr>
<tr>
<td>1 CWAD 13.0</td>
<td>Base Grade</td>
<td>Base Grade</td>
</tr>
<tr>
<td>1 CWAD 13.5</td>
<td>0.03</td>
<td>1.10</td>
</tr>
<tr>
<td>2 CWAD 13.0</td>
<td>(0.79)</td>
<td>(29.03)</td>
</tr>
<tr>
<td>2 CWAD 12.5</td>
<td>(0.97)</td>
<td>(35.64)</td>
</tr>
</tbody>
</table>

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\(^2\) (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)
  - 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


“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.”
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>
<thead>
<tr>
<th>Type of Wheat</th>
<th>Relevant FOB Prices and Export Basis</th>
<th>June 11, 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>FOB Prices CDA¹ (calculated)</td>
<td>Street Prices</td>
</tr>
<tr>
<td></td>
<td>West Coast (Cdn.$/mt)</td>
<td>Great Lakes  (Cdn.$/mt)</td>
</tr>
<tr>
<td>DNS 14.0</td>
<td>$358.68</td>
<td>$332.00</td>
</tr>
<tr>
<td>HRS</td>
<td>$351.53</td>
<td></td>
</tr>
<tr>
<td>HRW 11.5</td>
<td>$324.86</td>
<td></td>
</tr>
<tr>
<td>SWW 12.0</td>
<td>$297.23</td>
<td></td>
</tr>
<tr>
<td>1 CWRS 13.5⁵</td>
<td>$358.68</td>
<td></td>
</tr>
<tr>
<td>2 CWRS 13.0⁵</td>
<td>$351.53</td>
<td></td>
</tr>
<tr>
<td>3 CWRS⁴</td>
<td>$324.86</td>
<td></td>
</tr>
<tr>
<td>CPS³</td>
<td>$290.56</td>
<td></td>
</tr>
<tr>
<td>1 CWAD⁴</td>
<td></td>
<td>$333.43</td>
</tr>
</tbody>
</table>

Competing wheat: US$/mt
Russia 12.5 (Black Sea, 25k mt) $207.00
French 11.5 (Rouen) $209.64
APW 10.5 (W Coast) $252.50
Argentine 12.0

¹ FOB Prices CDA = FOB US$ converted into Canadian Currency
² Export Basis = FOB Prices CDA minus Cdn. Street Price
³ DNS 14% = 1 CWRS 13.5%; HRS = 2 CWRS 13.0%; HRW = 3 CWRS; SWW = CPS
⁴ Values derived to Lakehead FOB
## ADDENDUM

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

<table>
<thead>
<tr>
<th>Canadian Funds</th>
<th>1CWRS 13.5</th>
<th>2CWRS</th>
<th>3CWRS</th>
<th>Winter wth.</th>
<th>CPS</th>
</tr>
</thead>
<tbody>
<tr>
<td>PNW value/Vancouver</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>May/June delivery</td>
<td>$9.58</td>
<td>$9.39</td>
<td>$8.66</td>
<td>$7.91</td>
<td>$7.91</td>
</tr>
<tr>
<td>Parity Track Rosetown</td>
<td>$8.08</td>
<td>$7.89</td>
<td>$7.16</td>
<td>$6.41</td>
<td>$6.41</td>
</tr>
<tr>
<td>Track Bid Rosetown Area</td>
<td>$6.65</td>
<td>$6.05</td>
<td>$5.95</td>
<td>$5.90</td>
<td>$5.90</td>
</tr>
<tr>
<td>Gross Margin at Elevator ($/bu)*</td>
<td>$1.43</td>
<td>$1.84</td>
<td>$1.21</td>
<td>$0.51</td>
<td>$0.51</td>
</tr>
<tr>
<td>Gross Margin at Elevator ($/mt)*</td>
<td>$52.67</td>
<td>$67.58</td>
<td>$44.58</td>
<td>$18.79</td>
<td>$18.79</td>
</tr>
</tbody>
</table>

* to cover elevation, elevator market risk, margin