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 March 26th, 2020

International Grains Council World Wheat Supply and Demand

- In their latest update, the ICG decreased their expectations for 2020/21 world wheat supply by 1 million mt from last month to 768 million mt. This is still a 5 million mt increase over 2019/20’s (expected) record crop of 763 million mt.
- As 2019/20 ending stocks are expected to be large at 275 million mt (vs 265 million mt in 2018/19), total 2020/21 supply is expected to expand to 1,043 million mt, 15 million mt more than last year.
- Total consumption in 2020/21 is forecast to expand by 7 million mt to 760 million mt.
- With total supply rising more than demand, ending stocks are forecast to rise 8 million mt above the expected record 275 million mt carry-out in 2019/20 to 283 million 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:** May ’20 contract **Chicago** winter wheat closed at 571.2, up 2-2 cents on Friday, *up 32-0 cents for the week.*
- May ’20 contract **Kansas** hard red winter wheat closed at 486-6, down 0-4 cents in Friday’s trade, *up 17-6 cents for the week.*
- **Minneapolis,** May ’20 contract hard red spring wheat closed at 537-0, up 5-6 cents in Friday’s trade, *up 16-0 cents for the week* while Jul ’20 hard red spring wheat closed at 545-4, up 5-4 cents on Friday, *up 15-6 cents for the week.*

**Canadian Wheat:**
- Exports throughout the week were 317,400 mt. Good exports, but still well below the 448,000 of weekly exports needed to reach AAFC’s 18.2 million mt estimate. Total exports are now 9.69 million mt, 15% (1.70 million mt) less than last year.

- We continue to hear reports of Canadian wheat exporters being uncompetitive in international tenders. In each case, Canadian wheat had better specs, but premiums over other origins were too high. There seems to room to tighten offers between the market value for grains at the elevator in SK and grower bids.
Traded global wheat values are worth US$245/mt FOB Vancouver. Accounting for the exchange rate, transportation, and costs, this backs off to CA$8.02 at the elevator in Central SK!

Market value for grains at the elevator Sask.
Canadian wheat into the Philippines has been outcompeted by EU wheat. In the last two years Canada has supplied 217,000 to 246,000 mt of wheat to the Philippines (red). A large portion of Philippine demand is from the hog market which has been ravished by the swine flu. However, the USDA thinks that 2020 imports will be down only slightly from 2019 as population and income growth causes the demand for milling wheat to rise. – This should be an opportunity for Canadian wheat.

Volatility is the name of the game as COVID-19, plummeting oil prices, CA$ vs US$ and panic buying play out. If not already sold as per our recommendations, we would suggest targets be put at the $7.00 level and the volatility in the wheat and currency markets may get it triggered.

Durum: Canadian producers delivered 142,800 mt of durum into the system during week 33 for a year-to-date total of 3.15 million mt, 15% (415,200 mt) more than last year.

Exports throughout the week were large at 184,900 mt for a season total of 3.15 million mt, 42% (937,500 mt) more than last year.

Vegetation maps in N Africa are poor vs last year. Morocco was in a state of drought until last week when the country was hit with a series of torrential rain, sleet, snow and sub-freezing temperatures. It will be at least a week before we know if this was a benefit or hinderance to the drought-stricken crops.

Old crop bids continue to be $8-$8.50 in SE SK. Old crop supply is tight and demand is strong. We would finish selling old crop at $8.50 (+) basis good quality.

We continue to think that durum could be a strong crop to plant in 2020/21. Planted area in the US and Canada will be higher, but unless acreage increases exceed ~15%, should not to cause stocks
to be burdensome. Additionally, weather has been sub-optimal in N Africa and the EU so far, so there is good potential for another strong 2020/21 export program.

US wheat:
- US futures found early support from US millers restocking after the previous week’s run on supermarkets.
- US wheat sales were strong at 740,000 mt, well above trade’s 200,000 to 500,000 mt expectation. China bought 200,000 mt for 2019/20 delivery and 285,000 for 2020/21 delivery. Year-to-date sales are now 24.7 million mt, 5% ahead of last year vs the USDA’s projected 7% increase. SRW is completely priced out of the market. HRW was expensive, but the fall in the US$ will help its competitiveness. Feed wheat is too expensive vs corn.
- Winter wheat conditions showed strong improvement from last week: KS winter wheat is 48% Gd/Ex, up 2%, winter wheat in OK is 77% Gd/Ex, up 10%, the TX crop improved 13% to 49%, the CO crop improved 10% to 55% Gd/Ex and the AR crop is at 43%, up 4% from last week.
- HRS prices FOB the PNW rose $8.00/mt over the week and are now bid at $253.00/mt.

Australian wheat:
- Aussie futures closed US$17 higher for the week. Exports are “high” which is supporting both domestic and FOB values.
- FOB prices nominally rose $5.00/mt last week to $255.00/mt.

Argentine wheat:
- Transportation restrictions in Argentina have been casing supply disruptions. Local governments are restricting freight transportation to minimize the spread of COVID-19.
- Planting should start of the end of April, but soil moisture continues to be low.
- Official FOB values were nominally $5.00/mt higher than the week previous at $220.00-$230.00/mt.

EU wheat:
- Vegetation maps are showing an improvement from last week in most of Europe except for France. That being said, French wheat crop conditions were stable with 63% of the crop rated as Gd/Ex unchanged from last week.
- Wheat yields in the EU are expected to drop 2% from last year at 5.88 mt/ha.
- Cash premiums in the EU hit season highs before slipping back on Friday. The rally was driven by export restriction talk in the Black Sea, logistical issues and the fact that Algeria received so few offers at their tender.
- French 11.5 pro FOB values were up $11.29/mt from last week at $225.76/mt, German 12.5 pro was $15.67/mt higher at $228.47/mt while Baltic 12.5 pro values rose $15.60/mt last week to 226.80/mt.

Black Sea wheat:
- The main news in the Black Sea was the talk about export restrictions:
  - Flour prices in Russia and Ukraine saw sharp increases last week as panic buying and logistical issues caused shortages at flour mills.
    - Flour prices in Moscow hit all-time highs, drawing requests from mills for export restrictions. Russia’s AgMin proposed setting an Apr-Jun export quota at 7 million mt for all grains. This would put total wheat exports at ~33 million mt.
    - Similarly, Ukraine’s bakers and millers have requested that the government limit the exports of grain and grain products. So far, the country has imposed “volunteer” restrictions on exports.
  - Concerned about restrictions in wheat supply from the Black Sea, Kazakhstan has banned flour exports for 15 days.
- FOB values in the Black Sea were nominally $14.00/mt higher than last week: Russian 12.5 pro was $224.00/mt while Ukrainian feed wheat was $215.00/mt.
**Significant purchases/trades:**

- **Russia** will impose a grain export quota of 7 million mt for Apr-May-Jun. This will probably equate to total wheat exports of around 33 million mt against the USDA's 35 million mt.
- **Ukraine** also wants to limit wheat exports to 20.2 million mt (17.8 million mt has already been shipped) against the USDA's 20.5 million mt.
- **Turkey** bought 175,000 mt 13.5 pro wheat for April shipment (lowest price $237 and a mix of Russian and Baltic wheat).
- **Algeria** bought 240,000 mt wheat at around $243.
- **Thailand** bought 120,000 mt feed at $210.50 for Aug and $215 for Sep.
- **US** inspections were 349,000 mt (season total 738 million bu, up 9% on last year), sales were 740,000 mt (season total 908 million bu, up 5% against the USDA's 7%).
- **China's** Jan-Feb wheat imports of 680,000 mt were down 9% from last year.
- **EU** shipments advanced another 1 million mt for a soft wheat total 23.2 million mt, up 72%.
- **Canadian** exports continue to be slow and are causing us to question our 17.5 million mt non-durum wheat estimate (vs AAFC's 18.2 million mt number).

**Wheat Market Outlook:**

**Significant events:**

- **COVID-19 continues to be the world’s major concern and it continues to expand.** According to Worldometer, 750,000 people have been infected by the "coronavirus" and 36,000 deaths occurred globally. In the USA there are 145,000 cases 2,600 deaths and in Canada 6,600 cases and 67 deaths. It's a global problem with virtually all countries affected. Many countries don’t have the ability to test, therefore we consider the numbers are understated and casualties will expand. Statements from salaried politicians show that they have little understanding of the effects of this pandemic has on working class people and how ill prepared the national medical facilities are (notably in the USA) for such a problem. Perhaps the world politicians will realize from "coronavirus" that they have the responsibility to protect the public - shareholder returns are not necessarily in the best interests of a nation.
- **Ethanol prices hit all-time lows.** The head of the RFA said the US would likely shut down 2 bln gallons of annual capacity, which is around 725 million bu corn equivalent and 5.5 million tonnes of lost DDG's. Unless corn offsets all wheat for feeding, the lack of its use for ethanol is bearish on feed grain prices.
- **US weekly corn sales were large at 1.8 million mt** for a season total of 1,214 million bu, 24% behind last year's pace vs the USDA's projected decline of 17%. Corn prices remain at a sharp discount to wheat which will limit wheat feed use.
- **Weather Around the World:**
  - **South America:** The east and far south of Brazil look dry next week, along with much of central Argentina, whilst week two looks even drier for S Brazil and the whole of Argentina. Temperatures remain cool in Brazil, above normal in Argentina. **US:** Precipitation looks near normal this week across central USA but with very heavy amounts in the south-east in week two of the forecast. Temperatures will be mixed but mostly slightly either side of normal. **Europe:** The European outlook is for ongoing dryness everywhere except Iberia and the Southern Balkans. Temperatures remain significantly below normal in the west, but slightly warmer in Ukraine and Russia. **Australia** has more good rain in the east, but the west stays dry. **South Africa** is warm with good showers; **North Africa** has near normal precipitation and cool temperatures. **Weather needs close watching as the market's attention turns to new crop.**
➤ **Outlook:**
COVID-19 will continue to dominate market attention. Plummeting oil prices, volatile exchange rates and panic buying will cause volatility, but we see the overall trend in futures will be lower (especially in Chicago new crop wheat).
Tuesday brings the USA stocks and plantings report; this is unlikely to be bullish. There is opportunity that countries with functioning transportation systems (like Canada) could win some additional demand, but we have little confidence our exporters will be aggressive to make sales.
If not already sold as per our recommendations, we suggest targets at the $7.00 level. The volatility in the wheat and currency markets may trigger targets. We would not make any new crop sales as we see further downside risk to the Canadian dollar.
### 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 May '20 (Bu.)</th>
<th>Deferred May '20 (mt.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 CWRS 13.5</td>
<td>$6.44</td>
<td>1 CWRS 13.5</td>
<td>$6.57</td>
<td>$241.41</td>
</tr>
<tr>
<td>1 CWAD 13.0</td>
<td>$7.55</td>
<td>1 CWAD 13.0</td>
<td>$7.69</td>
<td>$282.56</td>
</tr>
<tr>
<td>1 CPSR 11.5</td>
<td>$5.65</td>
<td>1 CPSR 11.5</td>
<td>$5.83</td>
<td>$214.22</td>
</tr>
<tr>
<td><strong>SW Sask</strong></td>
<td></td>
<td><strong>SW Sask</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 CWRS 13.5</td>
<td>$6.37</td>
<td>1 CWRS 13.5</td>
<td>$6.50</td>
<td>$238.84</td>
</tr>
<tr>
<td>1 CWAD 13.0</td>
<td>$7.57</td>
<td>1 CWAD 13.0</td>
<td>$7.68</td>
<td>$282.19</td>
</tr>
<tr>
<td>1 CPSR 11.5</td>
<td>$5.58</td>
<td>1 CPSR 11.5</td>
<td>$5.74</td>
<td>$210.91</td>
</tr>
<tr>
<td><strong>NE Sask</strong></td>
<td></td>
<td><strong>NE Sask</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 CWRS 13.5</td>
<td>$6.18</td>
<td>1 CWRS 13.5</td>
<td>$6.34</td>
<td>$232.96</td>
</tr>
<tr>
<td>1 CWAD 13.0</td>
<td>$7.99</td>
<td>1 CWAD 13.0</td>
<td>$8.00</td>
<td>$293.95</td>
</tr>
<tr>
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<td>$5.37</td>
<td>1 CPSR 11.5</td>
<td>$5.59</td>
<td>$205.40</td>
</tr>
<tr>
<td><strong>SE Sask</strong></td>
<td></td>
<td><strong>SE Sask</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 CWRS 13.5</td>
<td>$6.20</td>
<td>1 CWRS 13.5</td>
<td>$6.36</td>
<td>$233.69</td>
</tr>
<tr>
<td>1 CWAD 13.0</td>
<td>$7.96</td>
<td>1 CWAD 13.0</td>
<td>$8.00</td>
<td>$293.95</td>
</tr>
<tr>
<td>1 CPSR 11.5</td>
<td>$5.36</td>
<td>1 CPSR 11.5</td>
<td>$5.54</td>
<td>$203.56</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>0.05</td>
<td>1.89</td>
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<tr>
<td>1 CWRS 13.5</td>
<td>Base Grade</td>
<td>Base Grade</td>
</tr>
<tr>
<td>2 CWRS 13.5</td>
<td>(0.10)</td>
<td>-3.67</td>
</tr>
<tr>
<td>1 CWRS 12.5</td>
<td>(0.15)</td>
<td>-5.51</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>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>2 CWAD 13.0</td>
<td>(0.10)</td>
<td>-3.67</td>
</tr>
<tr>
<td>2 CWAD 12.5</td>
<td>(0.20)</td>
<td>-7.35</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 1 (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)


“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.”
- 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 year-to-date (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

<table>
<thead>
<tr>
<th>Type of Wheat</th>
<th>FOB Prices CDA(^1) (calculated)</th>
<th>Street Prices</th>
<th>Export Basis(^2)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>West Coast (Cdn./mt$)</td>
<td>Great Lakes (Cdn./mt)</td>
<td>Rosetown (Cdn./mt)</td>
</tr>
<tr>
<td>DNS 14.0</td>
<td>$378.81</td>
<td>$349.15</td>
<td></td>
</tr>
<tr>
<td>HRS</td>
<td>$372.08</td>
<td>$241.78</td>
<td></td>
</tr>
<tr>
<td>HRW 11.5</td>
<td>$339.26</td>
<td>$217.89</td>
<td></td>
</tr>
<tr>
<td>SWW 12.0</td>
<td>$327.30</td>
<td>$186.66</td>
<td>$217.52</td>
</tr>
<tr>
<td>1 CWRS 13.5(^3)</td>
<td>$378.81</td>
<td>$241.78</td>
<td></td>
</tr>
<tr>
<td>2 CWRS 13.0(^3)</td>
<td>$372.08</td>
<td>$217.89</td>
<td></td>
</tr>
<tr>
<td>3 CWRS(^3)</td>
<td>$339.26</td>
<td>$186.66</td>
<td></td>
</tr>
<tr>
<td>CPS(^3)</td>
<td>$320.01</td>
<td>$217.52</td>
<td></td>
</tr>
<tr>
<td>1 CWAD(^4)</td>
<td>$399.88</td>
<td>$299.46</td>
<td></td>
</tr>
</tbody>
</table>

**Competing wheat:**

- Russia 12.5 (Black Sea, 25k mt) $224.00
- French 11.5 (Rouen) $225.76
- APW 10.5 (W Coast) $255.00
- Argentine 12.5 $220-$230

\(^1\) 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

*Note: As per the opening of the Great Lakes, there are now posted bids for DNS and CWAD*
## ADDENDUM

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

<table>
<thead>
<tr>
<th></th>
<th>1CWR5</th>
<th>2CWR5</th>
<th>3CWR5</th>
<th>Winter wht.</th>
<th>CPS</th>
</tr>
</thead>
<tbody>
<tr>
<td>PNW value/Vancouver May/June</td>
<td>$10.11</td>
<td>$9.93</td>
<td>$9.03</td>
<td>$8.71</td>
<td>$8.71</td>
</tr>
<tr>
<td>Parity Track Rosetown</td>
<td>$8.61</td>
<td>$8.43</td>
<td>$7.54</td>
<td>$7.21</td>
<td>$7.21</td>
</tr>
<tr>
<td>Track Bid Rosetown Area</td>
<td>$8.68</td>
<td>$8.93</td>
<td>$6.98</td>
<td>$6.92</td>
<td>$6.92</td>
</tr>
<tr>
<td>Gross Margin at Elevator ($/bu)</td>
<td>$2.03</td>
<td>$2.50</td>
<td>$2.46</td>
<td>$1.29</td>
<td>$1.29</td>
</tr>
<tr>
<td>Gross Margin at Elevator ($/mt)</td>
<td>$74.76</td>
<td>$91.92</td>
<td>$90.33</td>
<td>$47.50</td>
<td>$47.50</td>
</tr>
</tbody>
</table>

* $ to cover elevator, elevator market risk, margin.