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) Global Wheat Markets June 5, 2017

2017/18 World Wheat Production Summary – International Grains Council (ICG)

![Graph showing Global Wheat, 2008/09-P2017/18]

- **World wheat production and trade**: ICG did not change their 2017/18 wheat production forecast of 736 million mt.
- But ICG did increase wheat trade by 3 million mt to 169 million mt.
- Wheat ending stocks were left at 239 million mt, though stocks for major exporters were lowered by 5 million mt.
Global wheat events and trade:
Below is a brief synopsis on this week’s market events in the major wheat origins.

- **Futures**: Wheat futures settled 1/2 and 2 1/2 cent higher in the Chicago and Kansas City front months. Minneapolis closed 5 cents higher in July 17. Dry weather forecast for the next 6-10 days in the already abnormally dry North gave a boost to HRS prices. The dominant theme is the widening of the spread against Kansas City wheat to a historically high $1.50, which is a function of the tight old crop HRS balance sheet, building dryness issues for new crop, and the less than ideal start to Canada’s growing season.

- **Funds**: Index Funds continue to do very little and actually have done quite well on their corn and wheat longs. Specs and Speculative Funds are set for a bear market. They still have some selling power, but we don’t see them adding much until they see some positive weather.

- **Matif**: Matif exchange in Europe closed lower despite Coceral dropping the soft wheat crop by 3 million mt to 141.9 million mt (135.5 million mt last year), on the drought in Spain and dryness in Northern France, whilst FAM lowered French crop ratings one point to 75% ‘Good to Excellent’ rating against 81% last year.

**Canadian wheat:**
- According to the CGC, producers delivered 232k mt of wheat into the handling system, which is down slightly from last week’s 238k mt. Exports for week 42 were 445k mt, down slightly from last week’s 452k mt, and down 16% (-1.09 million mt) from last year’s YTD exports.
- Elevator stocks are currently at 2.4 million mt with 1.03 million mt at primary elevators and most of the remaining inventory at port.
- The bulk of wheat inventory at port is located on the east coast with 322k mt at Thunder Bay, 542k mt at the St Lawrence, and 115k mt at Bay and Lakes. Meanwhile, the Pacific coast has only 305k mt at port, which is comparatively small.
- Producers delivered 77k mt of durum into the handling system over the past week. Durum exports during week 42 amounted to 39k mt; 3.5 million mt year-to-date. This is 10.2% or 363k mt lower than last year-to-date.
- Saskatchewan’s crop progress report indicates that the province is now 81% seeded which is on track with the 5-year average for this date. Reports indicate that most of southern SK is seeded, while most seeding delays have occurred in the northern regions of the province due to wet weather. Alberta is still behind average with only 79% of the crop seeded. This is 22% increase from last week, but still behind the 5-year average of 97% for this date. The main regions of trouble are still in the northern regions of the province where wet weather has hampered seeding efforts. With the June 5th crop insures deadline looming, a considerable unseeded acreage seems likely and acre switching could occur. Spring wheat seems the most likely crop so suffer with wheat being abandoned for shorter season crops. Seeding in Manitoba is nearing completion with about 90% of the crop already in the ground and many growers already finished. Seeding is lagging the most in the North West and South West regions of the province with 70 to 85% of seeding completed in these regions. Earliest planted cereals are now reported to be in the 3-4 leaf stage and many farmers are now applying post emergent herbicides.

**US wheat:**
US Winter Wheat: The US custom harvest continues to progress with initial harvest reports indicating yields in the 20 - 40 bushel per acre range with some reports of less than 20 bushels per acre and some reports indicating yields of as high as 50. As of June 2nd, Texas is reported to be 27% harvested while Oklahoma is at 16% harvested. Recent rains have slightly reduced bushel weights, but samples are still weighing in at an average of 60.7 lbs per bushel with grades of US No. 1 HRW. According to USDA crop progress reports, 50% of the US winter wheat crop is rated as good or excellent, which is down from 63% this time last year and slightly reduced from 52% last week.

US spring wheat: Spring wheat in the US is currently rated as 79% emerged which is behind last year's YTD estimate of 87%, but still ahead of the 5-year average of 74%. 62% of the US spring wheat crop is rated as good or excellent, while 32% is rated as fair, and only 6% is rated as poor or very poor. Concerns about drought in the northern US states have sparked fears in the market and bought a price rally. North Dakota is reported to produce up to 45% of the US spring wheat crop and much of the state is on the verge of drought.

Weather forecasts indicate that there is potential for Friday rain in some of the troubled regions, but the forecast going forward looks dry and sunny for much of North Dakota, Montana, and Minnesota.

Initial HRW samples from Texas & Oklahoma:

EU: Weekly EU wheat shipments were just 110kt for a season soft wheat total 22 million mt, which again made the USDA's annual all-wheat number of 27 million mt seem too high.

The EU has slightly lowered their wheat crop forecasts from 141.9 million mt to 141.3 million mt as winter crops continue to develop.

Argentina: Argentine wheat Fob values were little changed with nearby 12% protein offered at US$190/mt plus US$2/mt per month and US$6/mt less for 11.5% protein wheat. New crop sellers remained at US$180/mt, less US$5/mt for 11.5% protein wheat. Argentina's Government put the 2018 crop at 20 million mt against this year's 18.4 million mt, with both numbers still high against USDA's 17 million mt and 16 million mt respectively.

Australia: Australian Fob and futures wheat prices increased on dryness concerns and good Asian demand. Offers into Indonesia for APW were at ~US$227/mt, against ASW at US$221/mt, US white wheat at US$215 and Black Sea 11.5% protein wheat at US$197/mt.

Russia: Old crop Black Sea wheat was nominally at around US$190-194/mt. New crop wheat was at ~US$176- 178/mt for late July/Aug. shipping, plus US$2-3/mt per month.
Significant purchases/trades:
- Egypt (GASC) bought 180k mt Russian/Romanian wheat at an average US$192/mt C&F, for 1-10 July 1-10 shipment.
- Jordan bought 50k mt wheat at US$204/mt for shipment FH Oct.

Wheat Market Outlook:

Significant events this past week:
- The dominant theme in wheat is the **widening of the spread** against Kansas City wheat to a historically high $1.50, which is a function of the tight old crop HRS balance sheet, building dryness issues for new crop, and the less than ideal start to Canada's growing season. With **dryness** also a potential issue in China, the Black Sea and Australia, plus the funds still short well over 100,000 contracts in Chicago, downside would appear to be limited. On the other hand, HRW wheat was well off the pace at this week's GASC tender, producer selling picked up as the S Plains HRW harvest advanced amidst some reports of better than expected yields, whilst inspections and sales were neutral.
- There was debate about the Russian crop following the Russian AgMinister’s surprise all-grain reduction from 110 million mt to 100-105 million mt, while in Ukraine concern grew about increasing dryness; May rainfall was 40-60% of normal.

- **Outlook:**
  - The Northern Hemisphere harvest is just ahead, and this will make immediate rallies difficult. However, the world's cheapest quality wheat continues to gradually get more expensive and quality will again be an issue this year, with the HRS wheat balance sheet looking especially tight.

iii) Primary Elevator Price Tables and Grade Spreads

Table 1: Canadian Primary Elevator Bids, in Canadian Dollars per Bu and per MT, (PDQ data)
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)

  **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.


\(^2\) 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.”
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
<table>
<thead>
<tr>
<th>Type of Wheat</th>
<th>FOB Prices CDA¹ (calculated)</th>
<th>Street Prices</th>
<th>Export Basis²</th>
<th>Basis: West Coast-Centr. SK (Cdn$/mt)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>West Coast (Cdn./mt$)</td>
<td>Rosetown (Cdn.$/mt)</td>
<td></td>
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</tr>
<tr>
<td>DNS 14.0</td>
<td>$360.58</td>
<td>$328.39</td>
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<tr>
<td>HRS</td>
<td>$353.15</td>
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<tr>
<td>HRW 11.5</td>
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<tr>
<td>SWW 12.0</td>
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<td>1 CWRS 13.5³</td>
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<td>2 CWRS 13.0³</td>
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<td>CPS³</td>
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<td>1 CWAD¹</td>
<td>$388.81</td>
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</table>

Competing wheat: US$/mt

- Russia 12.5 (Black Sea, 25k mt) $192.00
- French 11.0 (Rouen) $185.76
- ASW 10.5 (W Coast) $206.00
- Argentine 12.0 $185-190

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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 = 3CWRS; 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>December-January Delivery</th>
<th>Parity Track Rosetown</th>
<th>Track Bid Rosetown Area</th>
<th>Gross Margin at Elevator ($/bu)*</th>
<th>Gross Margin at Elevator ($/mt)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>PNW value/Vancouver</td>
<td>$9.62</td>
<td>$8.13</td>
<td>$6.87</td>
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<td>1CWRS13.5</td>
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<td>3CWRS</td>
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<td>Winter wheat</td>
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<tr>
<td>CPS</td>
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* to cover elevation, elevator market risk, margin

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June 5, 2017

Source: SaskWheat Development Commission