Grain Monitoring Program

Weekly Performance Update

October 10, 2017 For Grain Week 9 (2017-18 CY)

Summary	This	Week	Last Week	Var. from Last Year
1. Stocks in Store (Tonnes	000)			
Country Elevators		3,866.4	3,832.1	7%
% Working Capacity		82%	81%	
Terminal Elevators	\forall	1,226.1	1,364.2	17%
% of Working Capacity		70%	78%	
2. Country Deliveries (Ton	nes 00	00)		
Country Deliveries	∳ 1	,160.0	929.7	-17%
3. Railway Car Supply to V	Vester	n Port	s (Cars)	
CN Allocation Plan	₩	5,580	5,875	0%
CN Unloads	↑	4,522	4,408	-8%
CP Allocation Plan		n/a	n/a	n/a
CP Unloads	\downarrow	4,432	4,987	-2%
4. Port Performance				
Total Weekly Unloads	₩	8,954	9,395	-5%
4 Week Rolling Average	↑	8,688	8,133	n/a
Var. to 4 Week RA	₩	3%	16%	n/a
YTD Unloads	<u></u>	65,007	56,053	1%
Weekly Out of Car Time	₩	10.6%	12.2%	-38%
5. Shipments (YTD Tonnes	000)			
Vancouver	↑	3,514	3,053	3%
Prince Rupert	↑	600	493	-13%
Thunder Bay	<u></u>	1,401	1,157	-17%
Total Western Canada	<u></u>	5,515	4,702	-5%
6. Vessels as of				
ัซ Vessel Line Up	\	15	16	-25%
Vessels Cleared		14	12	75%
Vessels Incoming	_	13	13	n/a
Vessel Line Up	lack	6	4	200%
Vessels Cleared Vessels Incoming	_	2	2	-50%
ਦੇ Vessels Incoming	₩	2	4	n/a

Note: Vessels incoming for the current week represents vessels forecasted to arrive in next grain week. Vessels incoming for the previous week represents the number of vessels that arrived in the current reporting week.

1. Stocks in Store: (Page 2)

- Country stocks increased to 3.9 MMT in Week 9 utilizing 82% of the system's working capacity. Space in country elevators is fair.
- Total western port terminal stocks decreased to 1.2 MMT in Week 9, utilizing 70% of the working capacity.

2. Country Deliveries (Page 2)

• Producer deliveries increased to 1,160,000 tonnes.

3. Railway Car Supply: (Page 3)

 Railcar allocation plans are supplied by CN to Week 11 of the 2017-18 grain year (see page 3 for details).

4. Port Performance: (Page 4)

- Total western port unloads are 3% higher than the 4-week rolling average and 5% lower than Week 9 last year.
- West Coast unloads were 6,369 cars (Vancouver 5,458 and Prince Rupert 911), 5% higher than the 4-week rolling average and 6% lower than Week 9 last year.
- Thunder Bay terminals unloaded 2,585 cars, approximately equal to the 4-week rolling average and 4% lower than Week 9 last year.
- Year to date total western port unloads 1% higher than the same period last year. The corresponding tonnage is also 1% higher.
- The total average terminal out of car time (OCT) decreased to 10.6% from 12.2% in the previous week. The OCT time for Week 9 was 11% in Vancouver, 29% in Prince Rupert and 1% in Thunder Bay.

5. Shipments: (Page 5)

 Year to date Western Canadian shipments from port terminal elevators at Week 9 are 5% lower than the same period last year and 7% lower than the 5-year average.

6. Vessels: (Page 5)

- Week 10 lineup at Vancouver decreased to a total of 15 vessels (The current one-year average at Vancouver is 22 vessels). Of the 15, 8 were at berth and 7 were anchored at English Bay.
- Prince Rupert vessel count increased to a total of 6 vessels (The current one-year average at Prince Rupert is 4 vessels).
- Vessels cleared from Vancouver were 14, and from Prince Rupert were 2 in Week 10 of the 2017-18 crop year.



1. Stocks in Store

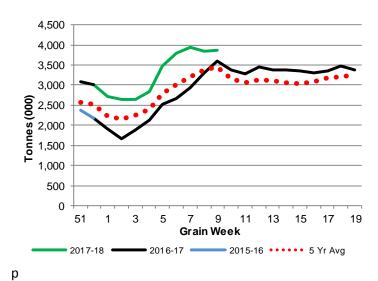
1-A1 Country Stocks ('000 tonnes) - Week 9

_	МВ	sĸ	АВ	вс	Total
2017-18	832.8	1,983.9	1,020.0	29.7	3,866.4
2016-17	796.2	1,762.2	1,021.6	28.2	3,608.2
5 Yr Avg	785.5	1,685.3	963.7	29.0	3,463.5
Var % - LY	5%	13%	0%	5%	7%
Var % - 5 Yr Avg	6%	18%	6%	2%	12%
Storage Capacity	1,594.5	3,751.1	1,904.5	41.1	7,291.3
Estimated Working Capacity	1,036.4	2,438.2	1,237.9	26.7	4,739.3
17-18 % of Wkg Cap	80%	81%	82%	111%	82%

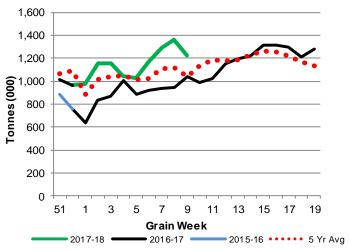
1-B1 Terminal Stocks ('000 tonnes) - Week 9

_	West Coast	Churchill	Thunder Bay	Total
2017-18	629.6	29.5	567.0	1,226.1
2016-17	632.4	29.5	381.6	1,043.5
5 Yr Avg	524.1	68.5	444.9	1,037.5
Var % - LY	0%	0%	49%	17%
Var % - 5 Yr Avg	20%	-57%	27%	18%
Storage Capacity	1,187.5	140.0	1,157.5	2,485.0
Estimated Working Capacity	831.2	98.0	810.3	1,739.5
17-18 % of Wkg Cap	76%	30%	70%	70%

1-A2 Weekly Country Stocks in Store



1-B2 Weekly Terminal Stocks in Store

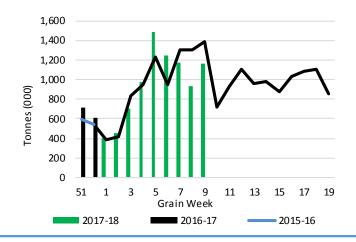


2. Country Deliveries

2-A Weekly Country Deliveries ('000 tonnes) - Week 9

_	MB	SK	AB	ВС	Total
2017-18	276.1	538.2	333.2	12.4	1,160.0
2016-17	317.1	621.7	440.3	10.9	1,390.1
4 Wk Avg	263.3	560.9	295.4	7.4	1,126.9
Var % to Last Year	-13%	-13%	-24%	14%	-17%
Var % To 4 Wk Avg	5%	-4%	13%	68%	3%

2-B 2017-18 Weekly Country Deliveries vs 2016-17

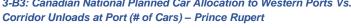


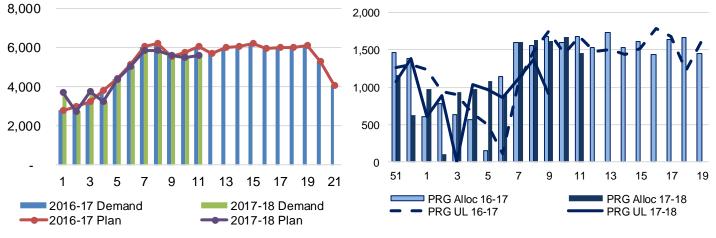


3. Railway Car Supply

Special Note to readers: CP discontinued publishing weekly railcar spotting plans in week 12 of the 2014-15 crop year (GCRS Service Report). CN continues to publish a weekly plan and the graphs below reflect CN's plan to Week 11 of 2017-18. Note that the orders accepted do not necessarily reflect shipper demand, but rather the railways' acceptance of shippers' car orders. When both railways provide the order fulfillment data requested with the expansion of the GMP mandate, which was announced on February 3, 2014, a complete set of metrics will be presented.

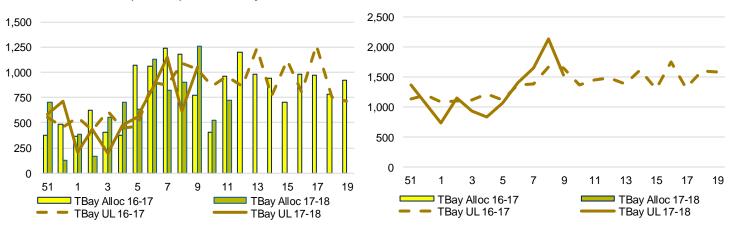
3-A: Canadian National Planned Car Allocation vs. Demand (# of Cars) 3-B3: Canadian National Planned Car Allocation to Western Ports Vs. To Week 11 2017-18 Crop Year





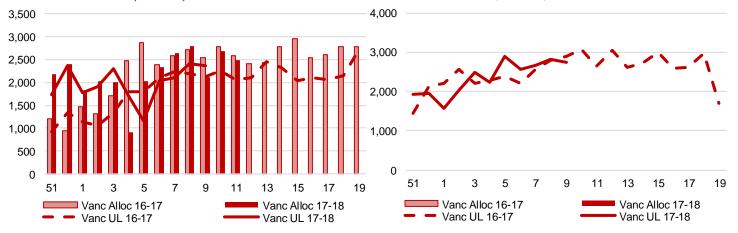
3-B1: Canadian National Planned Car Allocation to Western Ports Vs. Corridor Unloads at Port (# of Cars) - Thunder Bay

3-C1: Canadian Pacific Planned Car Allocation to Western Ports vs. Corridor Unloads at Port (# of Cars) - Thunder Bay



3-B2: Canadian National Planned Car Allocation to Western Ports Vs. Corridor Unloads at Port (# of Cars) - Vancouver

3-C2: Canadian Pacific Planned Car Allocation to Western Ports vs. Corridor Unloads at Port (# of Cars) - Vancouver





4. Port Performance

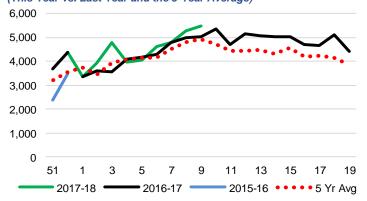
4-A Weekly Unloads by Port (Cars) - This Year for Week 9, 4-Week Rolling Average and Variances

	<u>Vancouver</u>	Prince Rupert	West Coast	Thunder Bay	<u>Churchill</u>	<u>Total</u>
2017-18	5,458	911	6,369	2,585	-	8,954
2016-17	5,008	1,746	6,754	2,683	-	9,437
4 Wk Avg	5,028	1,065	6,093	2,595	-	8,688
Var % to Last Year	9%	-48%	-6%	-4%	n/a	-5%
Var % to 4 Wk Avg	9%	-14%	5%	0%	n/a	3%

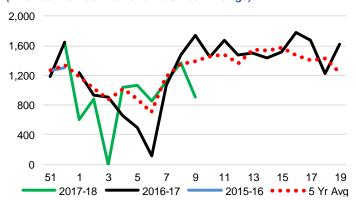
4-B Railcar Unloads and Tonnes - This Year to Date as of Week 9 and Variances

Total Cars	<u>Vancouver</u>	Prince Rupert	West Coast	Thunder Bay	Churchill	<u>Total</u>
2017-18	40,210	7,848	48,058	16,949	-	65,007
2016-17	37,888	8,648	46,536	18,108	-	64,644
5 Yr Avg	37,798	9,584	47,382	17,790	2,978	68,150
Var % to Last Year	6%	-9%	3%	-6%	n/a	1%
Var % to 5 Yr Avg	6%	-18%	1%	-5%	-100%	-5%
Total Tonnes						
2017-18	3,635,618	713,917	4,349,535	1,565,877	-	5,915,412
2016-17	3,424,614	775,411	4,200,026	1,673,502	-	5,873,528
5 Yr Avg	3,383,666	858,789	4,242,455	1,638,686	193,373	6,074,514
Var % to Last Year	6%	-8%	4%	-6%	n/a	1%
Var % to 5 Yr Avg	7%	-17%	3%	-4%	-100%	-3%

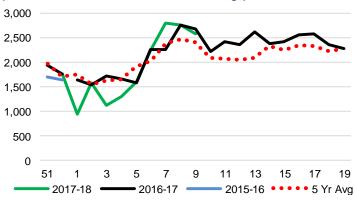
4-C Vancouver Unloads (# of Cars) (This Year vs. Last Year and the 5-Year Average)



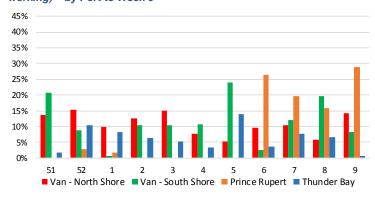
4-D Prince Rupert Unloads (# of Cars) (This Year vs. Last Year and the 5-Year Average)



4-E Thunder Bay Unloads (# of Cars) (This Year vs. Last Year and the 5-Year Average)



4-F Weekly Out of Car Time – (% of hours out of cars/total hours working) – by Port to Week 9



Out of car time is measured weekly and uses data from terminal elevators on the total number of hours the facilities are open & staffed (including overtime hours) and the corresponding number of hours that terminals have no rail cars available to unload. The measure is expressed as a percentage (hours without cars to the total number of hours working).



4-G Monthly Unloads (Cars) - This year vs. Last Year and the 5-Year Average to Week 9

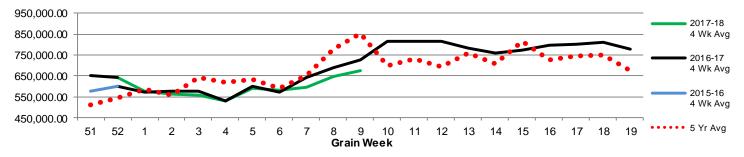
Months	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul
Weeks	1-5	6-9	10-13	14-18	19-22	23-27	28-31	32-35	36-39	40-44	45-48	49-52
2017-18	30,257	34,750	-	-	-	-	-	-	-	-	-	-
2016-17	31,197	33,447	36,002	44,476	28,797	28,771	26,824	37,057	36,789	39,112	29,666	27,065
5 Yr Avg	34,389	33,761	33,880	40,806	26,709	23,919	22,985	32,448	31,653	36,037	26,863	25,033
Var % to Last Year	-3%	4%										
Var % to 5 Yr Avg	-12%	3%										

5. Shipments

5-A Shipments from Port Terminals (Tonnes) - This Year as of Week 9 and Variance to Last Year

	<u>Vancouver</u>	Prince Rupert	West Coast	Thunder Bay	Churchill	<u>Total</u>
2017-18	3,513,640	599,987	4,113,627	1,400,988		5,514,615
2016-17	3,412,776	688,766	4,101,542	1,695,003		5,796,545
5 Year Avg	3,400,601	750,075	4,150,676	1,626,821	137,551	5,915,047
Var % to Last Year	3%	-13%	0%	-17%	n/a	-5%
Var % to 5 Year Avg	3%	-20%	-1%	-14%	-100%	-7%

5-B Weekly Shipments (Tonnes) from Port Terminals - This year 4-Wk moving avg vs. last year 4-Wk moving avg and the 5-year avg

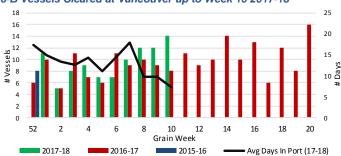


6. Vessels

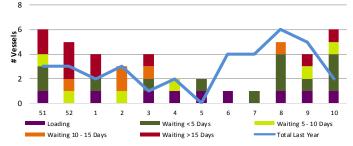
6-A Vessel lineup at Vancouver as of Week 10 2017-18



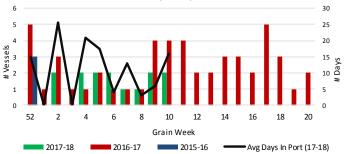
6-B Vessels Cleared at Vancouver up to Week 10 2017-18



6-C Vessel lineup at Prince Rupert as of Week 10 2017-18



6-D Vessels Cleared at Prince Rupert up to Week 10 2017-18



Note: To determine Avg Days in Port, Quorum first establishes which vessels cleared port in each specific grain week. Then, the number of days each cleared vessel spent in port is calculated by subtracting the date of arrival from the date of departure. Lastly, an average of these days is produced for the week, which yields Avg Days in Port. The measure uses vessel data provided by the BC Chamber of Shipping.

