

Grain Monitoring Program

Weekly Performance Update

April 10, 2018

For Grain Week 35 (2017-18 CY)

Summary

	This Week	Last Week	Var. from Last Year	
1. Stocks in Store (Tonnes 000)				
Country Elevators	↓ 4,177.6	4,349.8	8%	
% of Working Capacity	87%	90%		
Terminal Elevators	↓ 1,267.1	1,390.3	-5%	
% of Working Capacity	73%	80%		
2. Country Deliveries (Tonnes 000)				
Country Deliveries	↓ 717.9	812.0	-10%	
3. Railway Car Supply to Western Ports (Cars)				
CN Allocation Plan	↓ 5,144	5,376	-6%	
CN Unloads	↑ 4,066	3,793	-9%	
CP Allocation Plan	n/a	n/a	n/a	
CP Unloads	↓ 2,720	2,841	-35%	
4. Port Performance				
Total Weekly Unloads	↑ 6,786	6,634	-22%	
4 Week Rolling Average	↑ 6,634	6,340	n/a	
Var. to 4 Week RA	↓ 2%	5%	n/a	
YTD Unloads	↑ 246,792	240,006	-7%	
Weekly Out of Car Time	↑ 8.3%	13.8%	19%	
5. Shipments (YTD Tonnes 000)				
Vancouver	↑ 14,479	14,162	-2%	
Prince Rupert	↑ 3,424	3,328	-12%	
Thunder Bay	↑ 4,116	4,038	-15%	
Total Western Canada	↑ 22,019	21,528	-6%	
6. Vessels as of 4/8/2018				
Vancouver	Vessel Line Up	↑ 23	20	-12%
	Vessels Cleared	— 7	7	-42%
	Vessels Incoming	↑ 12	10	n/a
Pr. Rupert	Vessel Line Up	↓ 1	3	-67%
	Vessels Cleared	— 3	3	0%
	Vessels Incoming	↑ 4	1	n/a
7. Weather				
	Wk 35 (Actual)	Wk 36 (Actual)	Wk 37 (Forecast)	
Winnipeg Days < -25 °C	—	0	0	0
Edmonton Days < -25 °C	—	0	0	0
Vancouver Days Precip > 8 mm	↑	2	2	4

1. Stocks in Store: (Page 2)

- Country stocks decreased to 4.2 MMT in Week 35 utilizing 87% of the system's working capacity. Space in primary elevators is tight.
- Total western port terminal stocks decreased to 1.3 MMT in Week 35, utilizing 73% of the working capacity.

2. Country Deliveries: (Page 2)

- Producer deliveries were 717,900 tonnes in Week 35.

3. Railway Car Supply: (Page 3)

- Railcar allocation plans are supplied by CN to Week 37 of the 2017-18 grain year (see page 3 for details).

4. Port Performance: (Page 4)

- Total western port unloads were 2% higher than the 4-week rolling average and 22% lower than Week 35 last year.
- West Coast unloads were 5,793 cars (Vancouver 4,416 and Prince Rupert 1,377), 8% lower than the 4-week rolling average and 19% lower than Week 35 last year.
- Thunder Bay unloads were 993 cars, 177% higher than the 4 week-rolling average and 32% lower than Week 35 last year.
- Year to date total western port unloads are 7% lower than same period last year. The corresponding tonnage is 7% lower.
- The total average terminal out of car time (OCT) decreased to 8.3% from 13.8% in the previous week. The OCT time for Week 35 was 10% in Vancouver, 15% in Prince Rupert, and 0% in Thunder Bay.

5. Shipments: (Page 5)

- Year to date Western Canadian shipments from port terminal elevators at Week 35 are 6% lower than the same period last year and 2% lower than the 5-year average.

6. Vessels: (Page 5)

- Week 36 lineup at Vancouver increased to a total of 23 vessels (The current one-year average at Vancouver is 22 vessels). Of the 23, 7 were at berth, 12 were anchored at English Bay, 1 was anchored at Burrard Inlet, and 3 were anchored along the southern shore of Vancouver Island.
- Prince Rupert vessel count decreased to 1 vessel (The current one-year average at Prince Rupert is 4 vessels).
- Vessels cleared from Vancouver were 7, and from Prince Rupert were 3 in Week 36 of the 2017-18 crop year.

7. Weather: (Page 6)

- Rain in Vancouver may delay vessel loading in Week 37.

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

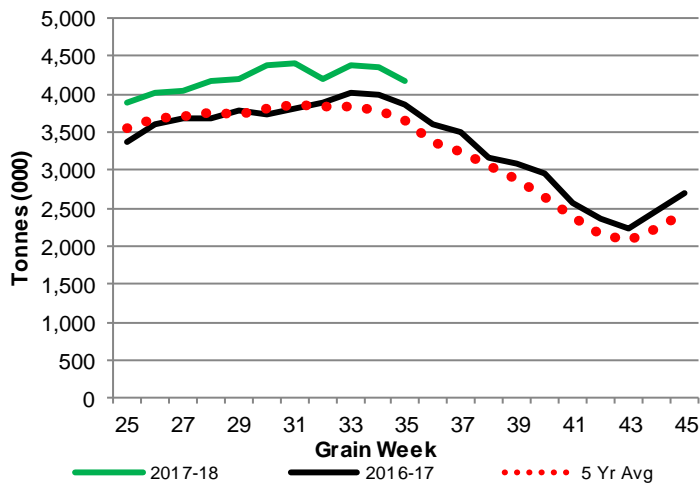
1-A1 Country Stocks ('000 tonnes) – Week 35

	MB	SK	AB	BC	Total
2017-18	892.3	2,172.9	1,082.9	29.5	4,177.6
2016-17	824.9	1,957.0	1,039.9	34.8	3,856.6
5 Yr Avg	778.9	1,876.5	986.2	28.0	3,669.6
Var % - LY	8%	11%	4%	-15%	8%
Var % - 5 Yr Avg	15%	16%	10%	5%	14%
Storage Capacity	1,577.1	3,878.3	1,913.7	41.1	7,410.2
Estimated Working Capacity	1,025.1	2,520.9	1,243.9	26.7	4,816.6
17-18 % of Wkg Cap	87%	86%	87%	110%	87%

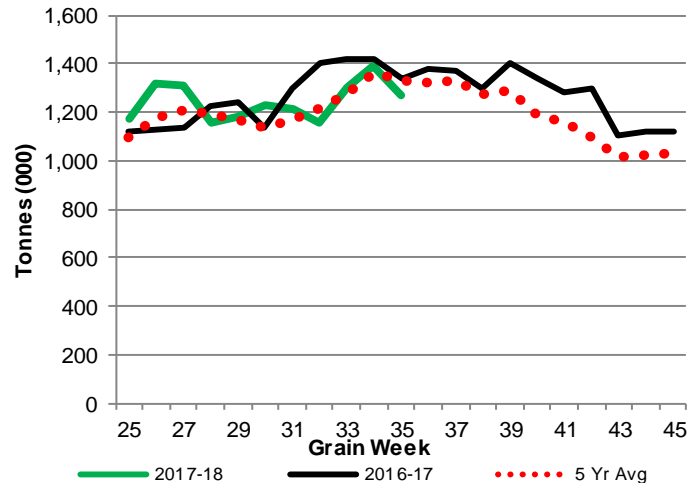
1-B1 Terminal Stocks ('000 tonnes) – Week 35

	West Coast	Churchill	Thunder Bay	Total
2017-18	627.6	29.5	610.0	1,267.1
2016-17	744.3	29.5	564.4	1,338.2
5 Yr Avg	696.3	34.8	598.9	1,329.9
Var % - LY	-16%	0%	8%	-5%
Var % - 5 Yr Avg	-10%	-15%	2%	-5%
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%	75%	73%

1-A2 Weekly Country Stocks in Store



1-B2 Weekly Terminal Stocks in Store

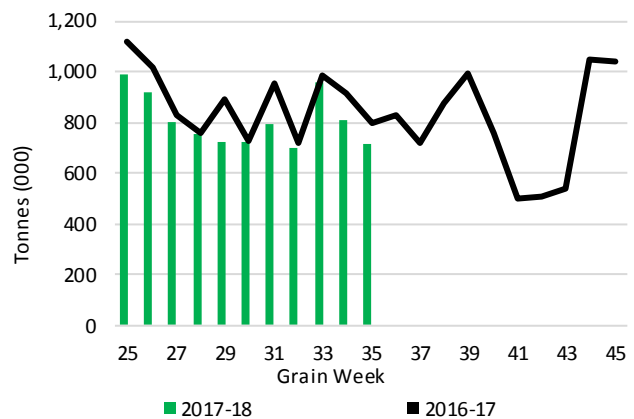


2. Country Deliveries

2-A Weekly Country Deliveries ('000 tonnes) - Week 35

	MB	SK	AB	BC	Total
2017-18	95.0	374.3	244.7	3.9	717.9
2016-17	81.8	386.6	321.4	8.0	797.8
4 Wk Avg	126.1	389.7	275.0	5.5	796.3
Var % to Last Year	16%	-3%	-24%	-51%	-10%
Var % To 4 Wk Avg	-25%	-4%	-11%	-29%	-10%

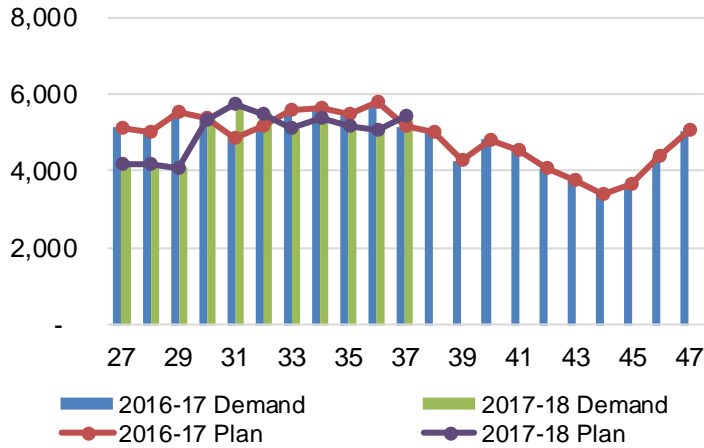
2-B 2017-18 Weekly Country Deliveries vs 2016-17



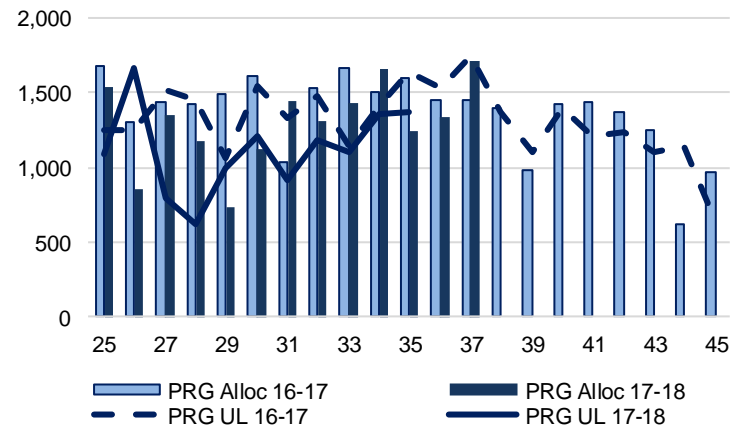
3. Railway Car Supply

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 37 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.

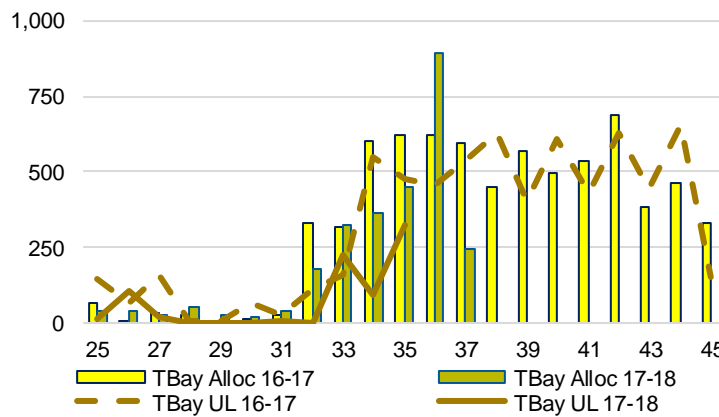
3-A: Canadian National Planned Car Allocation vs. Demand (# of Cars) To Week 37 2017-18 Crop Year



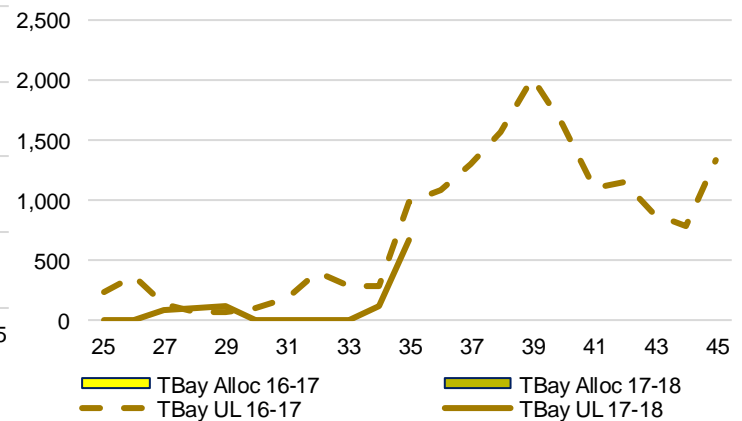
3-B3: Canadian National Planned Car Allocation to Western Ports Vs. Corridor Unloads at Port (# of Cars) – Prince Rupert



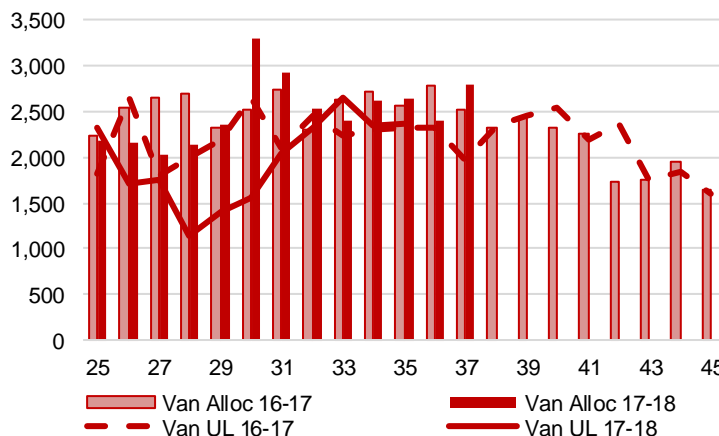
3-B1: Canadian National Planned Car Allocation to Western Ports Vs. Corridor Unloads at Port (# of Cars) – Thunder Bay



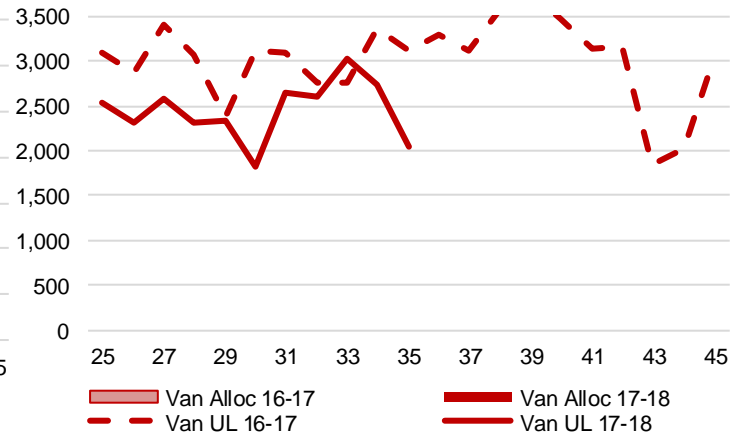
3-C1: Canadian Pacific Planned Car Allocation to Western Ports vs. Corridor Unloads at Port (# of Cars) – Thunder Bay



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 35, 4-Week Rolling Average and Variances

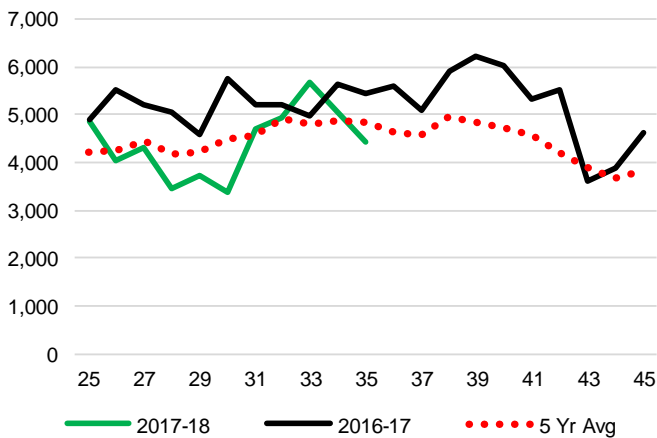
	Vancouver	Prince Rupert	West Coast	Thunder Bay	Churchill	Total
2017-18	4,416	1,377	5,793	993	-	6,786
2016-17	5,460	1,736	7,196	1,455	-	8,651
4 Wk Avg	5,020	1,256	6,276	358	-	6,634
Var % to Last Year	-19%	-21%	-19%	-32%	n/a	-22%
Var % to 4 Wk Avg	-12%	10%	-8%	177%	n/a	2%

4-B Railcar Unloads and Tonnes – This Year to Date as of Week 35 and Variances

	Vancouver	Prince Rupert	West Coast	Thunder Bay	Churchill	Total
Total Cars						
2017-18	162,897	38,218	201,115	45,677	-	246,792
2016-17	166,825	45,177	212,002	54,569	-	266,571
5 Yr Avg	153,369	44,085	197,454	49,528	2,686	249,669
Var % to Last Year	-2%	-15%	-5%	-16%	n/a	-7%
Var % to 5 Yr Avg	6%	-13%	2%	-8%	-100%	-1%
Total Tonnes						
2017-18	14,685,662	3,460,181	18,145,842	4,181,830	-	22,327,673
2016-17	14,927,812	4,025,738	18,953,551	4,984,031	-	23,937,582
5 Yr Avg	13,685,474	3,930,062	17,615,536	4,525,499	294,229	22,435,264
Var % to Last Year	-2%	-14%	-4%	-16%	n/a	-7%
Var % to 5 Yr Avg	7%	-12%	3%	-8%	-100%	0%

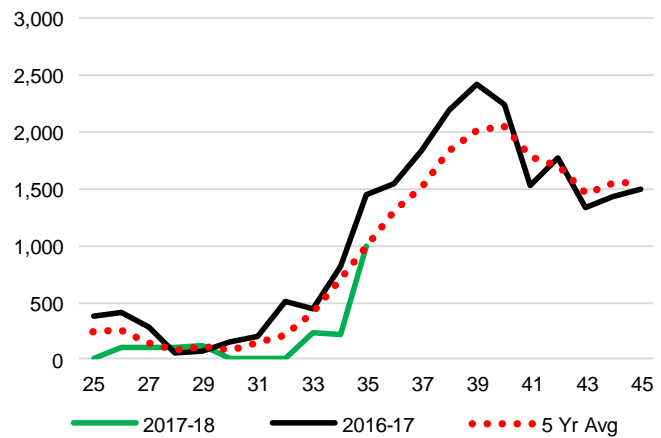
4-C Vancouver Unloads (# of Cars)

(This Year vs. Last Year and the 5-Year Average)



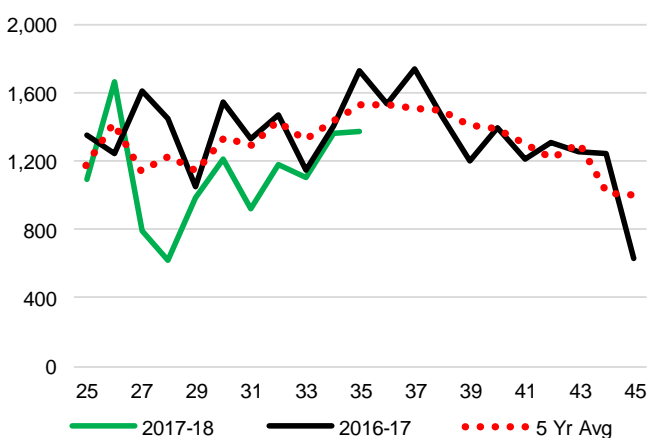
4-E Thunder Bay Unloads (# of Cars)

(This Year vs. Last Year and the 5-Year Average)

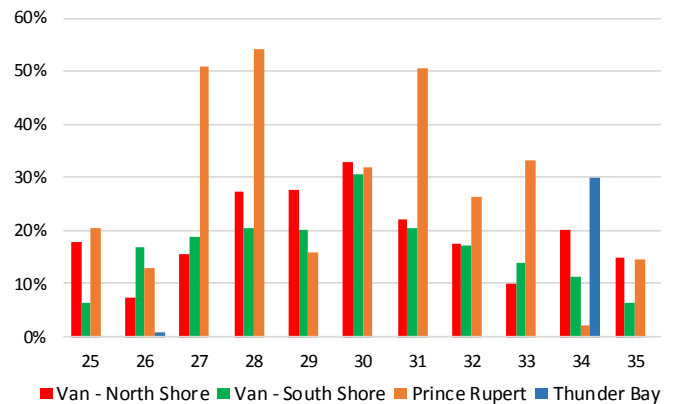


4-D Prince Rupert Unloads (# of Cars)

(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 35



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 35

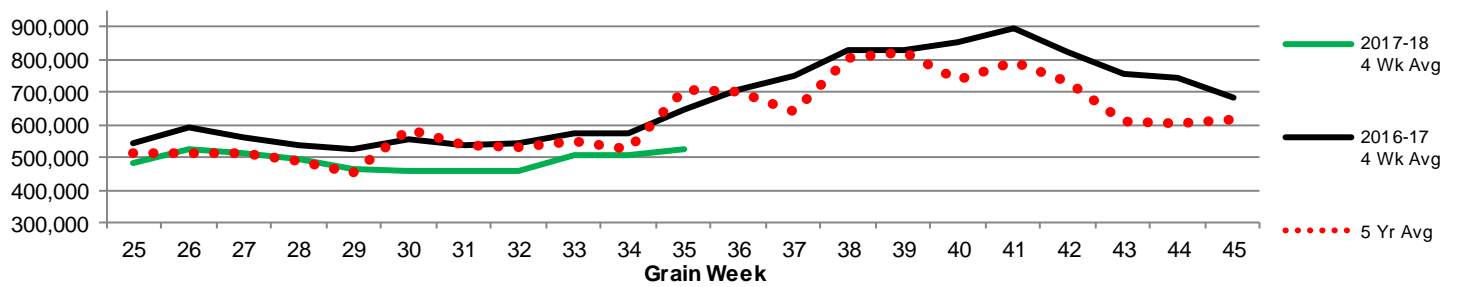
Months	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul
Weeks	1-5	6-9	10-13	14-18	19-22	23-27	28-31	32-35	36-39	40-44	45-48	49-52
2017-18	30,257	34,787	35,650	40,849	29,069	30,431	19,213	26,536	-	-	-	-
2016-17	31,197	33,447	36,002	44,476	28,797	28,771	26,824	37,057	36,789	39,112	29,666	27,065
5 Yr Avg	33,626	33,193	34,523	41,645	26,367	30,015	22,872	27,427	31,653	36,037	26,863	25,033
Var % to Last Year	-3%	4%	-1%	-8%	1%	6%	-28%	-28%				
Var % to 5 Yr Avg	-10%	5%	3%	-2%	10%	1%	-16%	-3%				

5. Shipments

5-A Shipments from Port Terminals (Tonnes) – This Year as of Week 35 and Variance to Last Year

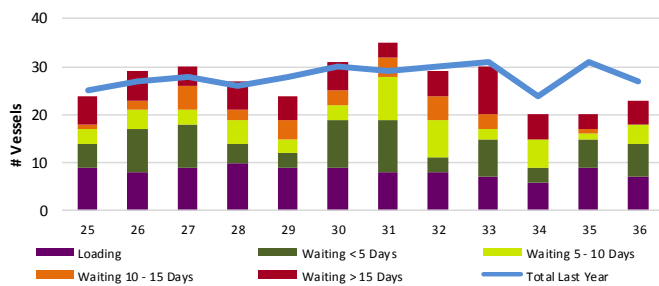
	Vancouver	Prince Rupert	West Coast	Thunder Bay	Churchill	Total
2017-18	14,479,017	3,423,702	17,902,719	4,116,352	-	22,019,071
2016-17	14,775,037	3,903,060	18,678,097	4,853,353	-	23,531,450
5 Year Avg	13,880,035	3,883,373	17,763,408	4,447,214	270,243	22,480,865
Var % to Last Year	-2%	-12%	-4%	-15%	n/a	-6%
Var % to 5 Year Avg	4%	-12%	1%	-7%	-100%	-2%

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

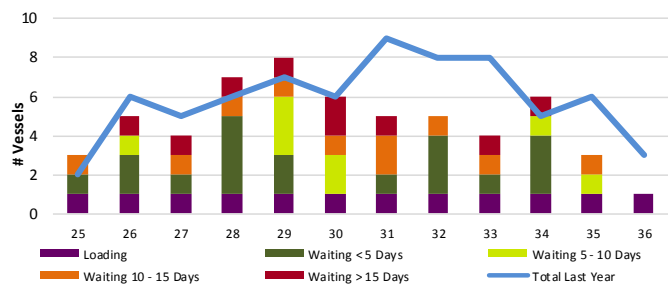


6. Vessels

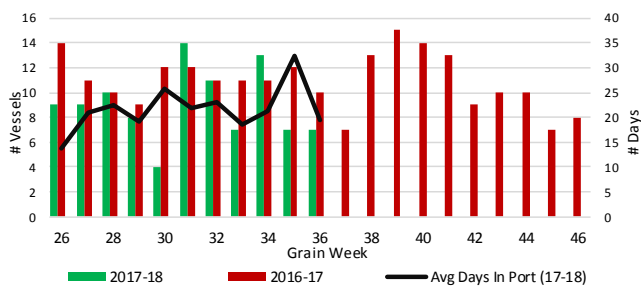
6-A Vessel lineup at Vancouver as of Week 36 2017-18



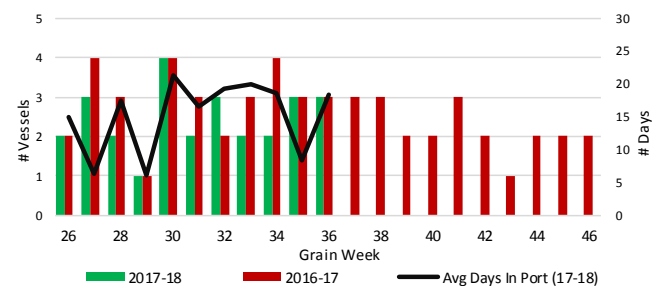
6-C Vessel lineup at Prince Rupert as of Week 36 2017-18



6-B Vessels Cleared at Vancouver up to Week 36 2017-18



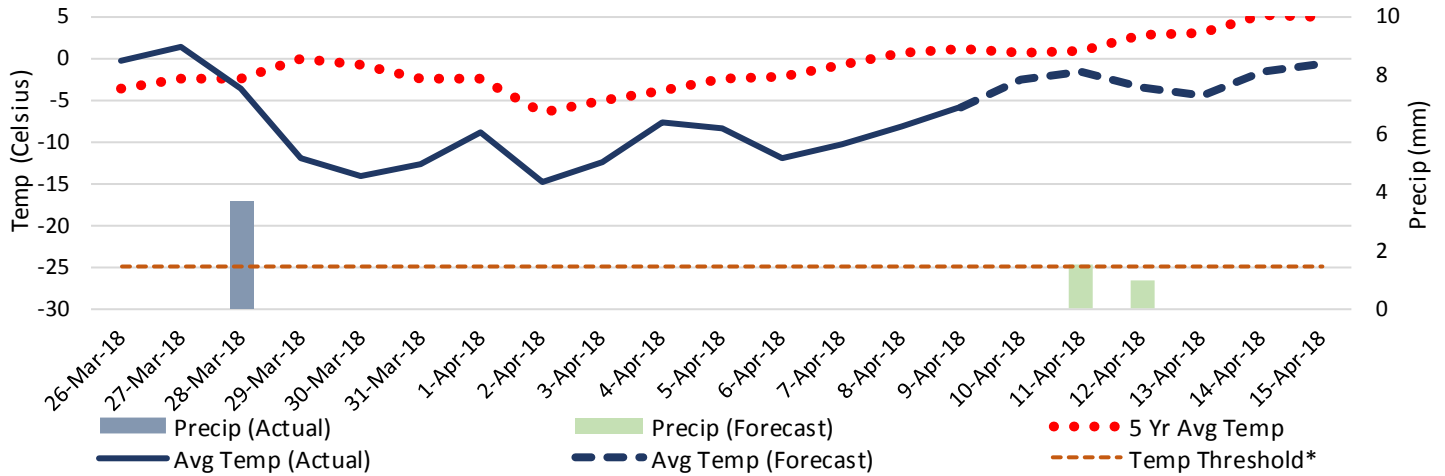
6-D Vessels Cleared at Prince Rupert up to Week 36 2017-18



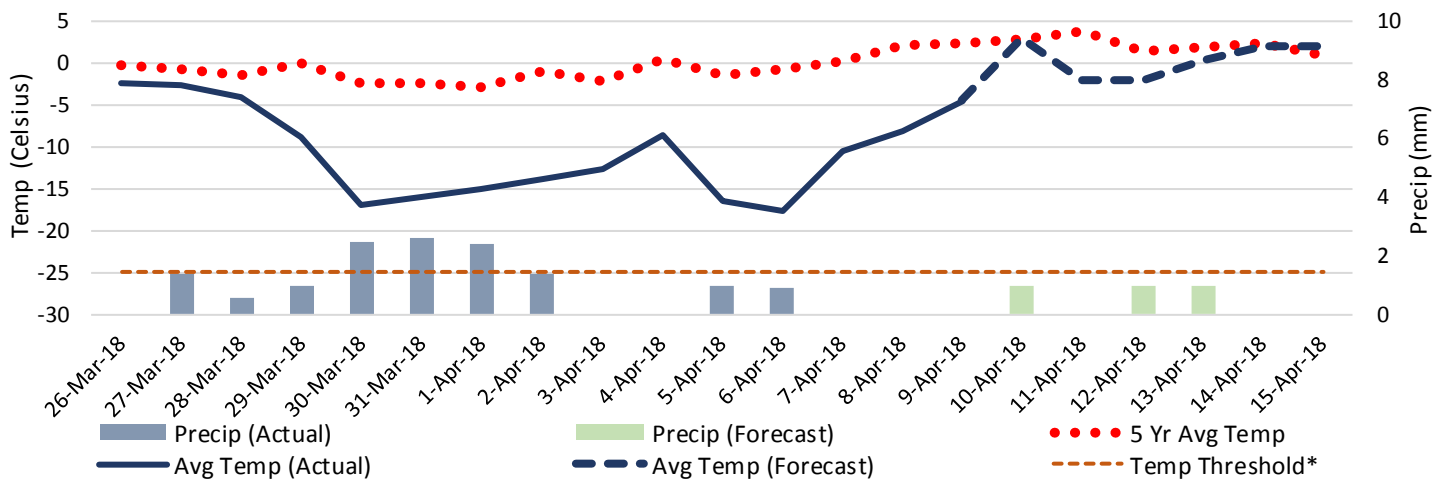
Note: To determine Avg Days in Port, Quorum first establishes which vessels cleared port in each specific grain week. Then, the number of days each cleared vessel spent in port is calculated by subtracting the date of arrival from the date of departure. Lastly, an average of these days is produced for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

7. Weather

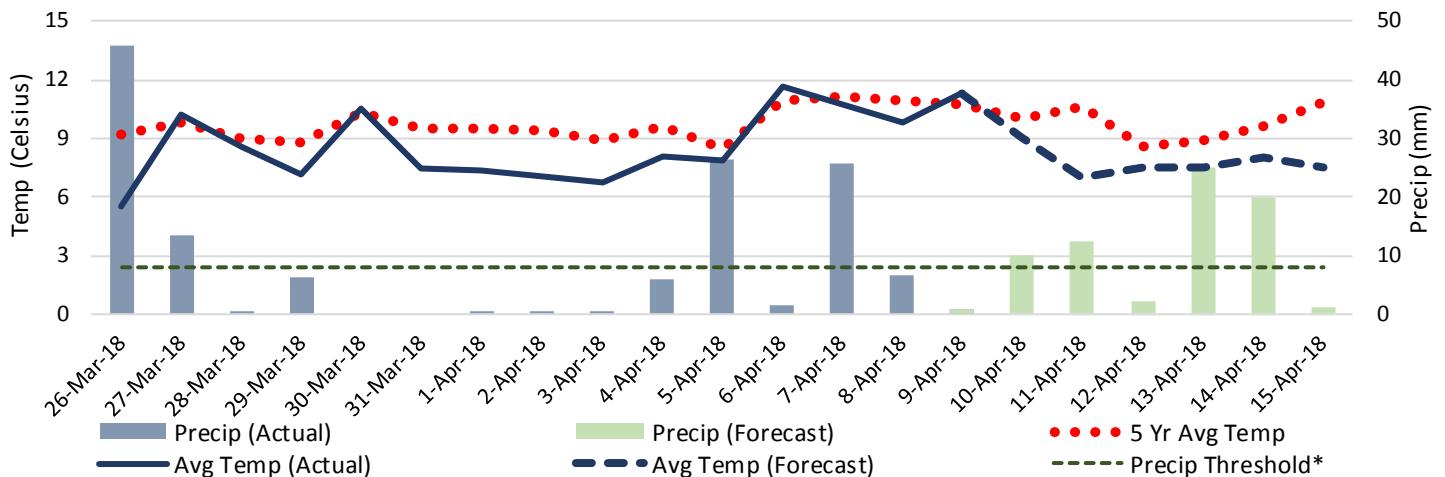
7-A Actual & Forecasted Weather at Winnipeg up to Week 37 2017-18



7-B Actual & Forecasted Weather at Edmonton up to Week 37 2017-18



7-C Actual & Forecasted Weather at Vancouver up to Week 37 2017-18



*Note: Precipitation Threshold refers to 8mm of rain; this is a general guideline and is not meant to be a definitive limit. At this level of precipitation vessel loading may be delayed. The duration of the delay will be dependent on the ship design, the duration of rainfall, and the amount of precipitation. Temperature Threshold refers to -25°C. At this temperature an impact on railway operations is likely.

**The Weather indicator has been included to denote any impact that weather may have on the Canadian grain supply chain. The three cities presented above are an indicator of the weather across the GHTS and are not meant to be exhaustive.

Source: Environment Canada, The Weather Network (Forecast)