Grain Monitoring Program

Weekly Performance Update

Summary	W	eek 15	Week 14	Var. from Last Year						
1. Stocks in Store ('000 tonnes)										
Country Elevators	₩	3,777.6	4,024.4	-9%						
% of Working Capacity		70%	74%							
Terminal Elevators		1,597.9	1,450.4	10%						
% of Working Capacity		82%	75%							
2. Country Deliveries ('000 to	nne	s)								
Country Deliveries	₩	725.0	951.6	-17%						
3. Railcar Supply to Western	Por	ts (Cars))							
CN Allocation Plan	₩	3,478	3,513	-31%						
CN Unloads		4,256	3,913	-18%						
CP Allocation Plan		n/a	n/a	n/a						
CP Unloads		4,230	3,730	-23%						
4. Port Performance (Cars)										
Total Weekly Unloads		8,486	7,643	-20%						
4-Week Rolling Average		8,379	8,046	n/a						
Var. to 4-Week Rolling Average		1%	-5%	n/a						
YTD Unloads		104,830	96,344	-31%						
Weekly Out-of-Car Time		19.1%	6.0%	19.9%						
5. Terminal Shipments Year-t	to-D	ate ('000	tonnes)							
Vancouver		6,481.5	5,932.3	-30%						
Prince Rupert		557.2	498.7	-66%						
Churchill	_	0.0	0.0	-100%						
Thunder Bay		2,096.9	2,021.2	-31%						
Total Western Canada		9,135.6	8,452.2	-35%						
6. Vessels as at Nov 21, 2021	И	/eek 16	Week 15	Var. from Last Year						
্ট Vessel Lineup in port		26	22	-24%						
Vessels Cleared Vessels Arrived	\	8	10	-47%						
> Vessels Arrived		12	11	0%						
ਓ Vessel Lineup in port		2	0	-75%						
ੇ Vessels Cleared	\	0	1	-100%						
Vessels Arrived	♠	2	0	-33%						
Vessels Inbound Nov 22, 2021	to N	Vov 28, 2	021 (Week	17)						
Vancouver		7								
Prince Rupert		2								
7. Weather		eek 15 ctual	Week 16 Actual	Week 17 Forecast						
Winnipeg < -25°C		0	0	0						
Edmonton < -25°C		0	0	0						
				_						

November 23, 2021 For Grain Week 15 (2021-22 CY)

Note to Readers:

Grain Week 15 ended on Sunday November 14. On Monday November 15, south-western BC experienced a severe climate event that caused extensive damage to road and rail access to and from the Port of Vancouver. This week's report covers the period immediately before this event occurred.

1. Stocks in Store: (Page 2)

- Country stocks decreased to 3.78 MMT in Week 15 utilizing 70% of the system's working capacity. Space in primary elevators is good.
- Total western port terminal stocks increased to 1.60 MMT in Week 15, utilizing 82% of the working capacity.

2. Country Deliveries: (Page 2)

Deliveries to primary elevators were 0.73 MMT in Week 15.

3. Railcar Supply: (Page 3)

 Railcar allocation plans are supplied by CN to Week 17 2021-22 (see page 3 for details).

4. Port Performance: (Page 4)

- Total western port unloads were 1% higher than the 4-week moving average and 20% lower than Week 15 last year.
- West Coast unloads were 6,655 cars (Vancouver 5,953 and Prince Rupert 702), 3% higher than the 4-week moving average and 20% lower than Week 15 last year.
- Thunder Bay unloads were 1,831 cars, 4% lower than the 4week moving average and 21% lower than Week 15 last year.
- Year-to-date total western port unloads are 31% lower than the same period last year. The corresponding tonnage is 30% lower than the same period last year.
- The total average terminal out-of-car time (OCT) increased to 19.1% from 6.0% in the previous week. The OCT for Week 15 was 23.6% at Vancouver and 0.0% at Thunder Bay. At the time of publishing, Prince Rupert had not yet reported Week 15 OCT.

5. Shipments: (Page 5)

 Year-to-date Western Canadian shipments from port terminal elevators at Week 15 are 35% lower than the same period last year and 20% lower than the 3-year average.

6. Vessels: (Page 5)

- Vancouver vessel lineup for Week 16 2021-22 increased to 26 vessels (The current one-year average at Vancouver is 21 vessels). Of the 26, 6 were at berth, 8 were anchored at English Bay, 1 was anchored at Burrard Inlet, and 11 were anchored at Vancouver Island.
- Prince Rupert vessel lineup for Week 16 2021-22 increased to 2 vessels (The current one-year average at Prince Rupert is 3 vessels).
- Vessels cleared from Vancouver was 8, and from Prince Rupert was 0 in Week 16 2021-22.

7. Weather:

- High rain and flooding in BC have caused mainline washouts for CN and CP. The flow of traffic into the Port of Vancouver has been heavily restricted. As of November 23, CP estimates track should be passable by end of day November 23, while CN estimates early November 24 for their line.
- High amounts of precipitation forecasted for Vancouver in Week
 17 may affect the ability to load vessels.



Vancouver Days Precip > 8mm

1. Stocks in Store

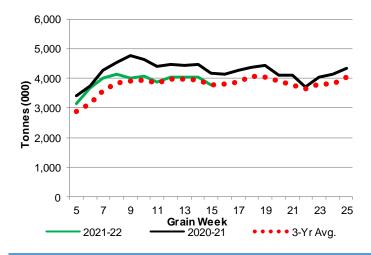
1-A1 Country Stocks ('000 tonnes) – Week 15

_	МВ	SK	АВ	ВС	Total
2021-22	703.7	1,735.7	1,313.7	24.5	3,777.6
2020-21	856.4	2,120.9	1,171.5	21.2	4,170.0
3-Yr Avg.	735.7	1,873.9	1,156.0	22.6	3,788.3
Var % - LY	-18%	-18%	12%	16%	-9%
Var % 3-Yr Avg.	-4%	-7%	14%	8%	0%
Storage Capacity	1,636.3	4,163.8	2,498.6	39.7	8,338.4
Estimated Working Capacity	1,063.6	2,706.5	1,624.1	25.8	5,420.0
21-22 % of Wkg Cap	66%	64%	81%	95%	70%

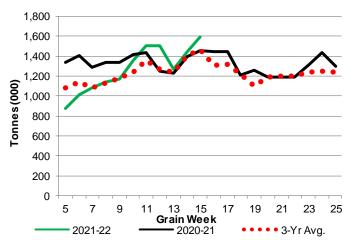
1-B1 Terminal Stocks ('000 tonnes) - Week 15

	vc	VC PR Wes		СН	ТВ	Total
2021-22	824.3	106.1	930.4	0.7	666.8	1,597.9
2020-21	686.8	130.6	817.4	0.7	639.0	1,457.1
3-Yr Avg.	734.5	122.4	856.9	0.7	605.2	1,462.8
Var % - LY	20%	-19%	14%	0%	4%	10%
Var % 3-Yr Avg.	12%	-13%	9%	0%	10%	9%
Storage Capacity	1,290.5	209.5	1,500.0	140.0	1,127.5	2,767.5
Estimated Working Capacity	903.4	146.7	1,050.1	98.0	789.2	1,937.3
21-22 % of Wkg Cap	91%	72%	89%	1%	84%	82%

1-A2 Weekly Country Stocks in Store



1-B2 Weekly Terminal Stocks in Store

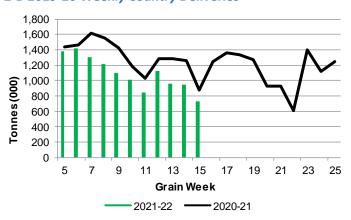


2. Country Deliveries

2-A Country Deliveries ('000 tonnes) – Week 15

	MB	SK	AB	ВС	Total
•					
2021-22	113.6	300.5	302.5	8.4	725.0
2020-21	174.6	406.9	280.8	6.9	869.2
4 Wk Avg	190.5	397.6	345.0	8.3	941.3
Var % to Last Year	-35%	-26%	8%	22%	-17%
Var % To 4 Wk Avg	-40%	-24%	-12%	1%	-23%

2-B 2019-20 Weekly Country Deliveries

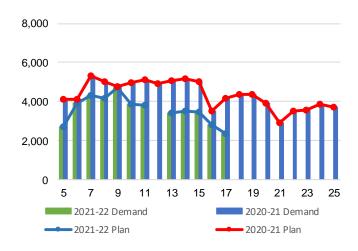




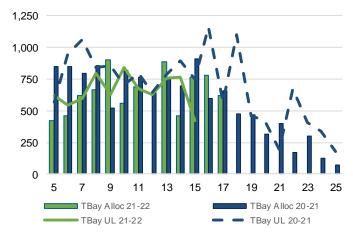
3. Railcar Supply

Special Note to readers: *CP discontinued publishing weekly railcar spotting plans in Week 12 2014-15 (GCRS Service Report). CN continues to publish a weekly plan and the graphs below reflect CN's plan to Week 17 2021-22. 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.*

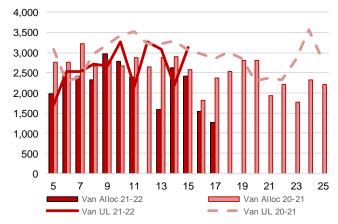
3-A: Canadian National Planned Car Allocation vs. Demand (cars) To Week 17 2021-22



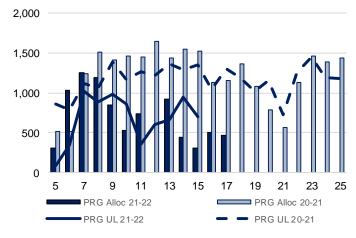
3-B1: Canadian National Planned Car Allocation to Western Ports Vs. Corridor Unloads at Port (cars) – Thunder Bay



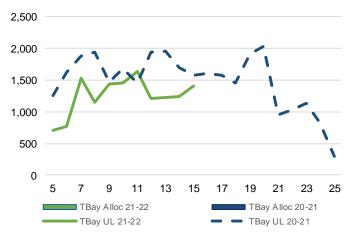
3-B2: Canadian National Planned Car Allocation to Western Ports Vs. Corridor Unloads at Port (cars) – Vancouver



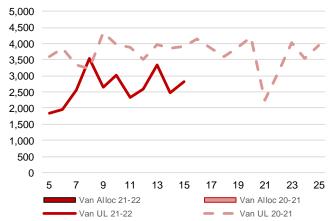
3-B3: Canadian National Planned Car Allocation to Western Ports Vs. Corridor Unloads at Port (cars) – Prince Rupert



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



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





4. Port Performance

4-A Weekly Unloads by Port (Cars) - This Year for Week 15, 4-Week Moving Average and Variances

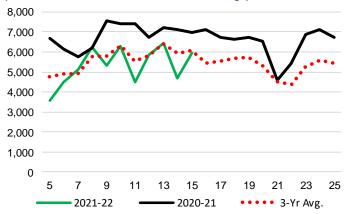
	<u>Vancouver</u>	Prince Rupert	West Coast	Thunder Bay	<u>Churchill</u>	<u>Total</u>
2021-22	5,953	702	6,655	1,831	-	8,486
2020-21	6,972	1,355	8,327	2,332	-	10,659
4-Wk Avg.	5,734	730	6,463	1,916	-	8,379
Var % to Last Year	-15%	-48%	-20%	-21%	n/a	-20%
Var % to 4-Wk Avg.	4%	-4%	3%	-4%	n/a	1%

4-B Terminal Unloads by Port - This Year-to-Date as at Week 15 and Variances

YTD Unloads (cars)	Vancouver	Prince Rupert	West Coast	Thunder Bay	Churchill	Total
2021-22	72,330	7,462	79,792	25,038	-	104,830
2020-21	98,310	18,125	116,435	34,566	1,063	152,064
3-Yr Avg	81,506	13,647	95,153	30,150	846	126,149
Var % to Last Year	-26%	-59%	-31%	-28%	-100%	-31%
Var % to 3-Yr Avg	-11%	-45%	-16%	-17%	-100%	-17%
YTD Unloads ('000 to	nnes)					
2021-22	6,777.5	681.7	7,459.2	2,367.9	-	9,827.1
2020-21	9,092.2	1,690.2	10,782.4	3,224.7	95.5	14,102.6
3-Yr Avg.	7,558.8	1,263.3	8,822.2	2,816.1	76.4	11,714.7
Var % to Last Year	-25%	-60%	-31%	-27%	-100%	-30%
Var % to 3-Yr Avg.	-10%	-46%	-15%	-16%	-100%	-16%

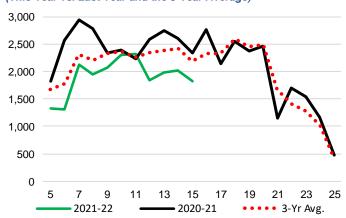
4-C Vancouver Unloads (cars)

(This Year vs. Last Year and the 3-Year Average)

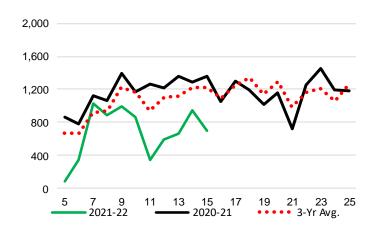


4-E Thunder Bay Unloads (cars)

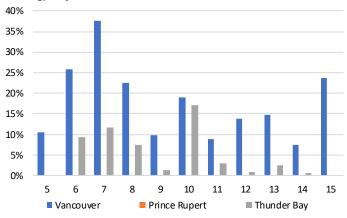
(This Year vs. Last Year and the 3-Year Average)



4-D Prince Rupert Unloads (cars) (This Year vs. Last Year and the 3-Year Average)



4-F Weekly Out-of-Car Time (% of hours out-of-cars / total hours working) – by Port to Week 15



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 railcars 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 3-Year Average to Week 13 2021-22

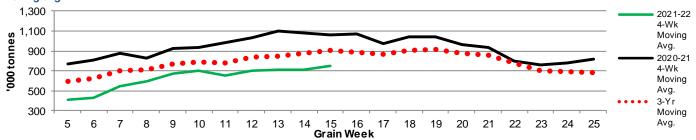
Months	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul
Weeks	1-4	5-9	10-13	14-17	18-22	23-26	27-30	31-35	36-39	40-43	44-48	49-52
2021-22	17,875	36,840	33,986	-	-	-	-	-	-	-	-	-
2020-21	35,688	50,352	44,342	42,742	45,462	35,328	28,211	43,126	42,495	34,905	33,574	21,334
3-Yr Avg.	27,792	41,067	38,202	37,894	42,092	29,151	24,353	36,784	38,685	36,117	39,664	28,970
Var % to Last Year	-50%	-27%	-23%									
Var % to 3-Yr Avg.	-36%	-10%	-11%									

5. Shipments

5-A Shipments from Port Terminals ('000 tonnes) - This Year-to-Date as at Week 15 and Variance to Last Year-to-Date

	<u>Vancouver</u>	Prince Rupert	West Coast	Thunder Bay	<u>Churchill</u>	<u>Total</u>
2021-22	6,481.5	557.2	7,038.7	2,096.9	-	9,135.6
2020-21	9,232.0	1,636.6	10,868.6	3,037.5	95.7	14,001.8
3-Yr Avg.	7,502.6	1,175.2	8,677.9	2,608.6	77.7	11,364.2
Var % to Last Year	-30%	-66%	-35%	-31%	-100%	-35%
Var % to 3-Yr Avg.	-14%	-53%	-19%	-20%	-100%	-20%

5-B Weekly Shipments ('000 tonnes) from Port Terminals - This year 4-Week moving avg. vs. last year 4-Week moving avg. and the 3-Year moving avg.

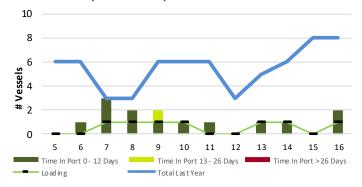


6. Vessels

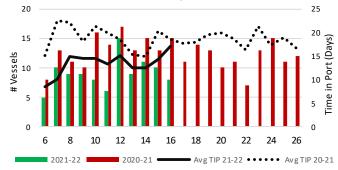
6-A Vessel Lineup at Vancouver as of Week 16 2021-22



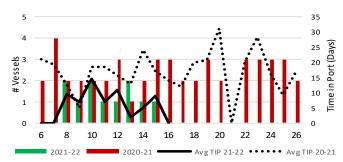
6-C Vessel Lineup at Prince Rupert as of Week 16 2021-22



6-B Vessels Cleared at Vancouver up to Week 16 2021-22



6-D Vessels Cleared at Prince Rupert up to Week 16 2021-22

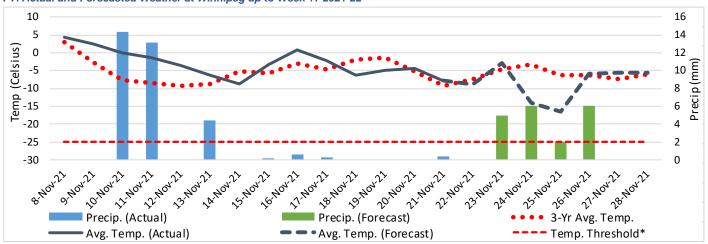


Note: The 'Time in Port' measure for 6-A and 6-C is calculated as how long each vessel in the lineup has been in port as at Sunday 23:59 of that grain week. The 'Avg Time in Port (TIP)' measure for 6-B and 6-D is the average number of days that all vessels which cleared that week were in port. These measures use vessel data provided by the BC Chamber of Shipping and Pacific Pilotage Authority.

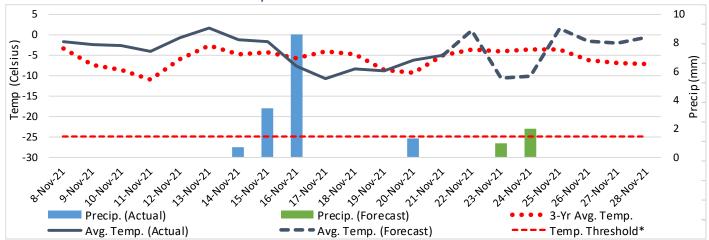


7. Weather

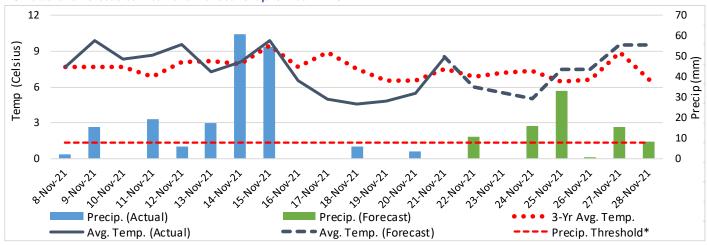
7-A Actual and Forecasted Weather at Winnipeg up to Week 17 2021-22



7-B Actual and Forecasted Weather at Edmonton up to Week 17 2021-22



7-C Actual and Forecasted Weather at Vancouver up to Week 17 2021-22



*Note: Precip Threshold refers to 8mm of rain. At this level of precipitation, vessel loading may be delayed. The duration of the delay will be dependent on the ship, the duration of rainfall, and the amount of precipitation. 8mm is a general guideline and is not meant to be a definitive limit.

Source: Environment Canada, The Weather Network (Forecast)

