

Grain Monitoring Program

Weekly Performance Update

February 28, 2023

For Grain Week 29 (2022-23 CY)

Summary

	Week 29	Week 28	Var. from Last Year	
1. Stocks in Store ('000 tonnes)				
Country Elevators	↑ 4,241.5	4,061.6	3%	
% of Working Capacity	77%	74%		
Terminal Elevators	↓ 1,171.0	1,182.3	19%	
% of Working Capacity	61%	61%		
2. Country Deliveries ('000 tonnes)				
Country Deliveries	↓ 1,183.3	1,203.9	54%	
3. Railcar Supply to Western Ports (Cars)				
CN Allocation Plan	↑ 3,599	3,368	161%	
CN Unloads	↓ 4,166	5,095	38%	
CP Allocation Plan	n/a	n/a	n/a	
CP Unloads	↑ 3,775	2,370	183%	
4. Port Performance (Cars)				
Total Weekly Unloads	↑ 7,941	7,465	83%	
4-Week Rolling Average	↓ 8,043	8,044	n/a	
Var. to 4-Week Rolling Average	↑ -1%	-7%	n/a	
YTD Unloads	↑ 244,530	236,589	47%	
Weekly Out-of-Car Time	↓ 15.0%	25.4%	1.2%	
5. Terminal Shipments Year-to-Date ('000 tonnes)				
Vancouver	↑ 17,376.2	16,615.8	67%	
Prince Rupert	↑ 2,569.5	2,503.7	82%	
Churchill	— 0.0	0.0	n/a	
Thunder Bay	— 3,741.9	3,741.9	6%	
Total Western Canada	23,687.6	22,861.4	54%	
6. Vessels as at Feb 26, 2023				
	Week 30	Week 29	Var. from Last Year	
Vancouver	Vessel Lineup in port	↓ 28	29	133%
	Vessels Cleared	↓ 9	15	50%
	Vessels Arrived	↓ 8	11	300%
Pr. Rupert	Vessel Lineup in port	↑ 6	4	n/a
	Vessels Cleared	— 1	1	0%
	Vessels Arrived	↑ 3	2	n/a
Vessels Inbound Feb 27, 2023 to Mar 05, 2023 (Week 31)				
Vancouver	15			
Prince Rupert	2			
7. Weather				
	Week 29	Week 30	Week 31	
	Actual	Actual	Forecast	
Winnipeg Days < -25°C	0	1	0	
Edmonton Days < -25°C	0	3	0	
Vancouver Days Precip > 8mm	0	1	1	

1. Stocks in Store: (Page 2)

- Country stocks increased to 4.24 MMT in Week 29 utilizing 77% of the system's working capacity. Space in primary elevators is good.
- Total western port terminal stocks decreased to 1.17 MMT in Week 29, utilizing 61% of the working capacity.
- Stocks at Prince Rupert have reached 137% of their estimated working capacity. The limited available terminal space has affected car unloads and is likely to continue to delay trains until the situation is resolved. A prolonged period of inclement weather since late January has constrained how much time is available to load vessels.

2. Country Deliveries: (Page 2)

- Deliveries to primary elevators were 1.18 MMT in Week 29.

3. Railcar Supply: (Page 3)

- Railcar allocation plans are supplied by CN to Week 31 2022-23 (see page 3 for details).

4. Port Performance: (Page 4)

- Total western port unloads were 1% lower than the 4-week moving average and 83% higher than Week 29 last year.
- West Coast unloads were 7,941 cars (Vancouver 7,160 and Prince Rupert 781), even with the 4-week moving average and 83% higher than Week 29 last year.
- Thunder Bay unloads were 0 cars, 100% lower than the 4-week moving average. Week 29 had 0 unloads last year.
- Year-to-date total western port unloads are 47% higher than the same period last year. The corresponding tonnage is 51% higher than the same period last year.
- The total average terminal out-of-car time (OCT) decreased to 15.0% from 25.4% the previous week. The OCT for Week 29 was 16.1% at Vancouver and 6.7% at Prince Rupert.

5. Shipments: (Page 5)

- Year-to-date Western Canadian shipments from port terminal elevators at Week 29 are 54% higher than the same period last year and 10% higher than the 3-year average.

6. Vessels: (Page 5)

- Vancouver vessel lineup for Week 30 2022-23 decreased to 28 vessels (The current one-year average at Vancouver is 17 vessels). Of the 28, 9 were at berth, 13 were anchored at English Bay, 1 was anchored at Burrard Inlet, and 5 were anchored at Vancouver Island.
- Prince Rupert vessel lineup for Week 30 2022-23 increased to 6 vessels (The current one-year average at Prince Rupert is 2 vessels).
- Vessels cleared from Vancouver was 9, and from Prince Rupert was 1 in Week 30 2022-23.

7. Weather: (Page 6)

- Temperatures across the prairies are forecasted to remain above -25°C. Railways are not expected to invoke their winter operating plans.
- The period of prolonged rainfall affecting Prince Rupert is forecasted to continue until Saturday March 4th.

1. Stocks in Store

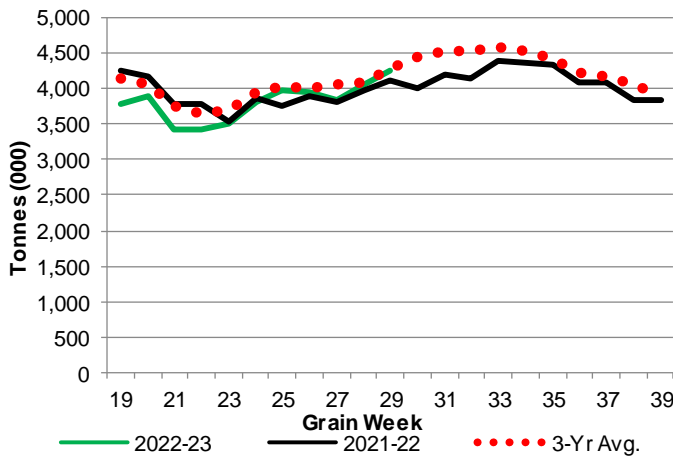
1-A1 Country Stocks ('000 tonnes) – Week 29

	MB	SK	AB	BC	Total
2022-23	813.4	2,071.0	1,333.2	23.9	4,241.5
2021-22	727.9	2,064.7	1,292.9	24.1	4,109.6
3-Yr Avg.	799.1	2,142.1	1,308.0	22.1	4,271.3
Var % - LY	12%	0%	3%	-1%	3%
Var % 3-Yr Avg.	2%	-3%	2%	8%	-1%
Storage Capacity	1,680.8	4,218.5	2,510.6	41.2	8,451.1
Estimated Working Capacity	1,092.5	2,742.1	1,631.9	26.8	5,493.3
22-23 % of Wkg Cap	74%	76%	82%	89%	77%

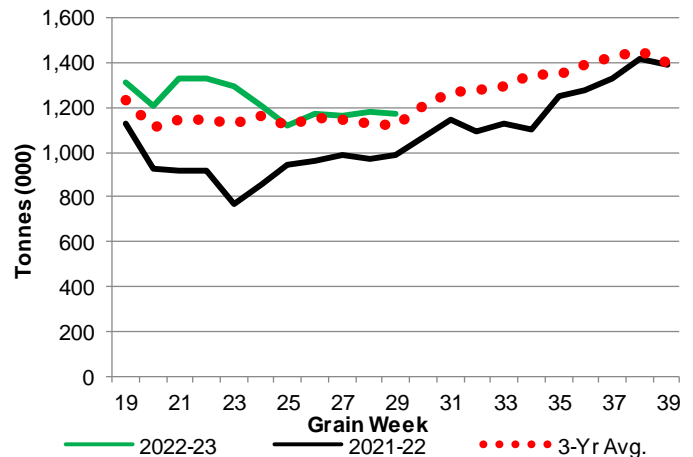
1-B1 Terminal Stocks ('000 tonnes) – Week 29

	VC	PR	West Coast	CH	TB	Total
2022-23	666.2	193.8	860.0	0.7	310.3	1,171.0
2021-22	556	59.9	615.9	n/a	372.4	988.3
3-Yr Avg.	583.5	110.7	694.2	0.5	425.1	1,119.7
Var % - LY	20%	224%	40%	n/a	-17%	18%
Var % 3-Yr Avg.	14%	75%	24%	40%	-27%	5%
Storage Capacity	1,275.5	209.5	1,485.0	140.0	1,127.5	2,752.5
Estimated Working Capacity	892.9	146.7	1,039.6	98.0	789.2	1,926.8
22-23 % of Wkg Cap	75%	132%	83%	1%	39%	61%

1-A2 Weekly Country Stocks in Store



1-B2 Weekly Terminal Stocks in Store

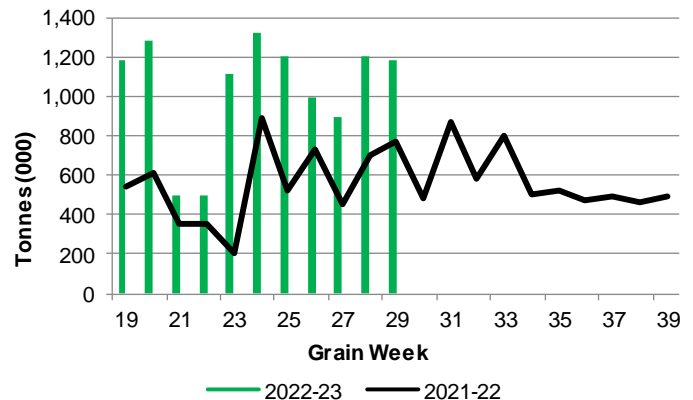


2. Country Deliveries

2-A Country Deliveries ('000 tonnes) – Week 29

	MB	SK	AB	BC	Total
2022-23	158.9	620.1	398.7	5.6	1,183.3
2021-22	74.6	354.4	331.6	5.6	766.2
4 Wk Avg	133.6	562.7	367.5	5.9	1,069.7
Var % to Last Year	113%	75%	20%	0%	54%
Var % To 4 Wk Avg	19%	10%	9%	-5%	11%

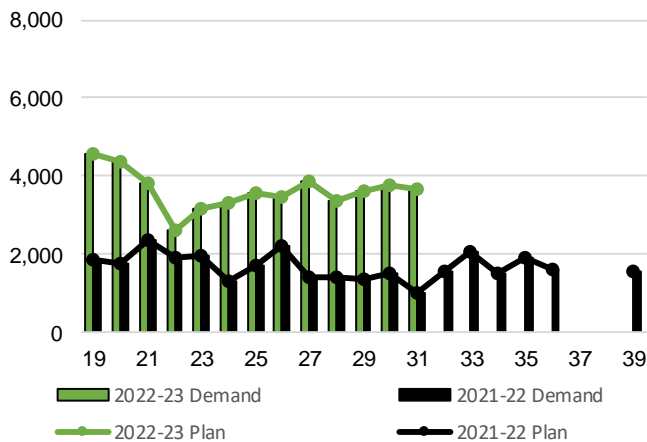
2-B 2022-23 Weekly Country Deliveries



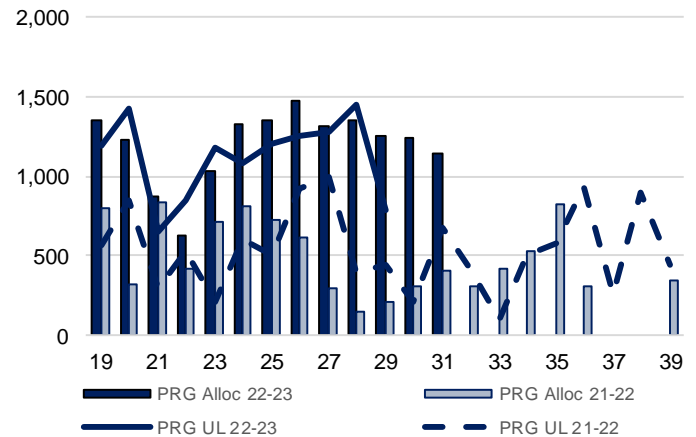
3. Railcar Supply

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 31 2022-23. 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.

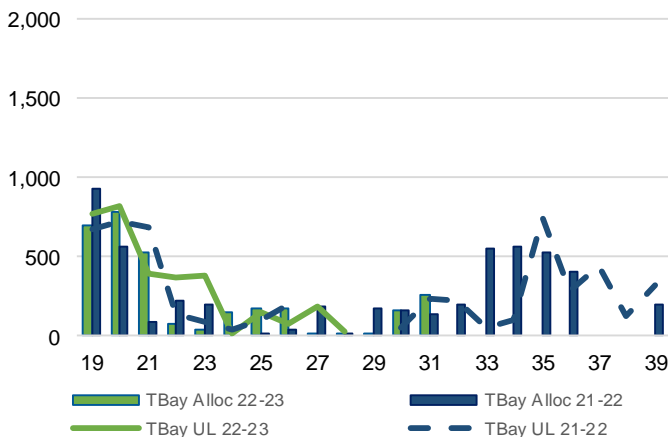
3-A: Canadian National Planned Car Allocation vs. Demand (cars) To Week 31 2022-23



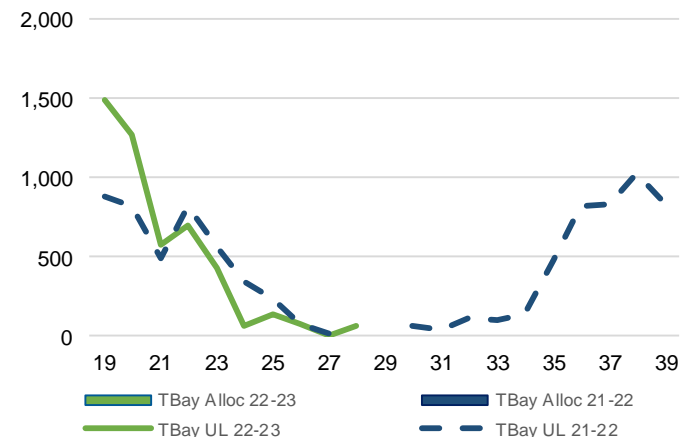
3-B3: Canadian National Planned Car Allocation to Western Ports Vs. Corridor Unloads at Port (cars) – Prince Rupert



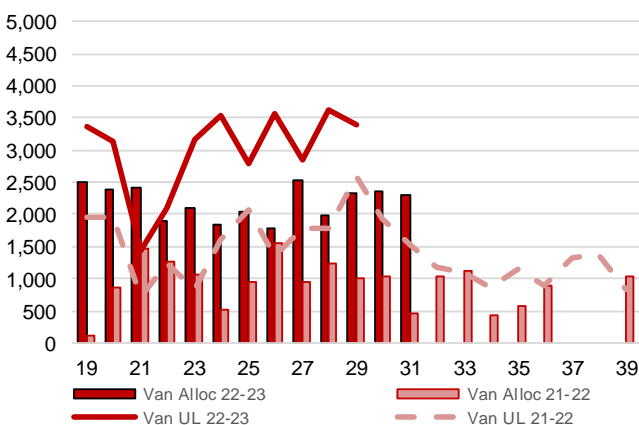
3-B1: Canadian National Planned Car Allocation to Western Ports Vs. Corridor Unloads at Port (cars) – Thunder Bay



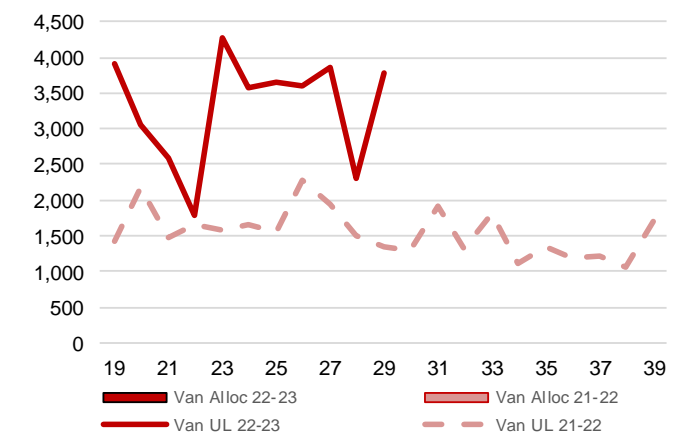
3-C1: Canadian Pacific Planned Car Allocation to Western Ports vs. Corridor Unloads at Port (cars) – Thunder Bay



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



3-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 29, 4-Week Moving Average and Variances

	Vancouver	Prince Rupert	West Coast	Thunder Bay	Churchill	Total
2022-23	7,160	781	7,941	-	-	7,941
2021-22	3,911	436	4,347	-	-	4,347
4-Wk Avg.	6,739	1,192	7,930	113	-	8,043
Var % to Last Year	83%	79%	83%	n/a	n/a	83%
Var % to 4-Wk Avg.	6%	-34%	0%	-100%	n/a	-1%

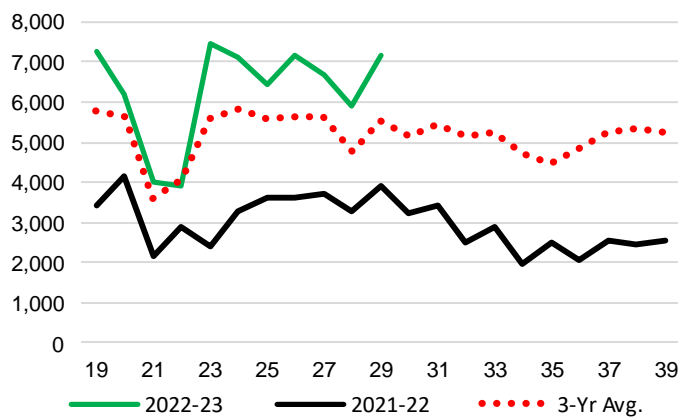
4-B Terminal Unloads by Port – This Year-to-Date as at Week 29 and Variances

YTD Unloads (cars)	Vancouver	Prince Rupert	West Coast	Thunder Bay	Churchill	Total
2022-23	176,558	28,057	204,615	39,915	-	244,530
2021-22	112,464	15,633	128,097	37,959	-	166,056
3-Yr Avg	158,318	25,769	184,087	43,692	354	228,133
Var % to Last Year	57%	79%	60%	5%	n/a	47%
Var % to 3-Yr Avg	12%	9%	11%	-9%	-100%	7%

YTD Unloads ('000 tonnes)	Vancouver	Prince Rupert	West Coast	Thunder Bay	Churchill	Total
2022-23	17,046.6	2,698.5	19,745.1	3,820.5	-	23,565.6
2021-22	10,576.3	1,446.9	12,023.2	3,597.5	-	15,620.7
3-Yr Avg.	14,972.5	2,426.8	17,399.3	4,126.8	31.8	21,557.9
Var % to Last Year	61%	87%	64%	6%	n/a	51%
Var % to 3-Yr Avg.	14%	11%	13%	-7%	-100%	9%

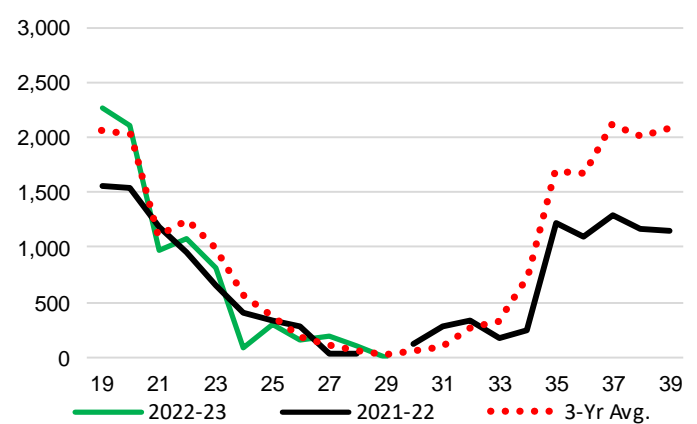
4-C Vancouver Unloads (cars)

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



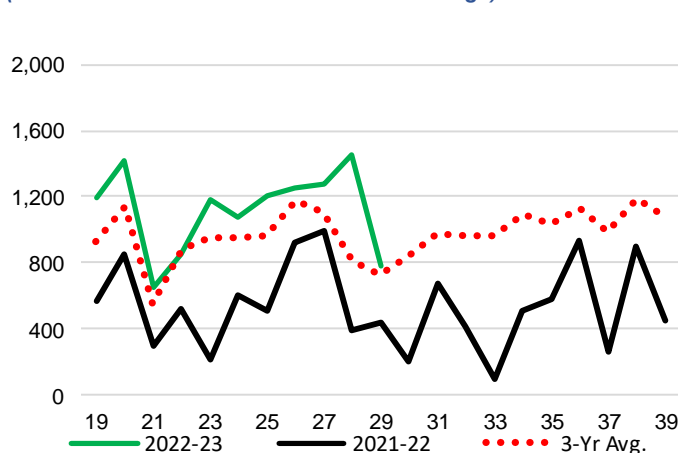
4-E Thunder Bay Unloads (cars)

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

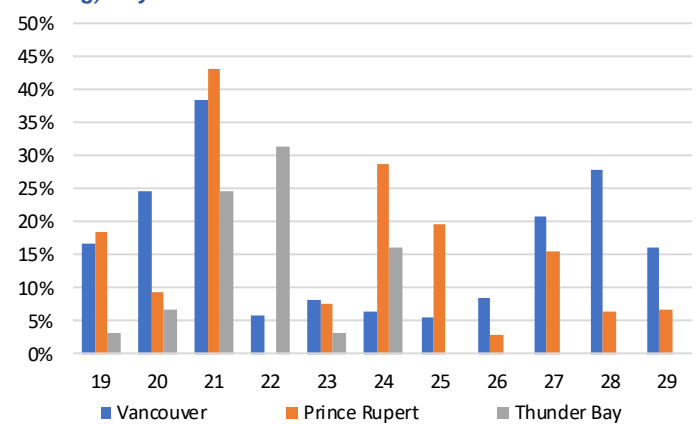


4-D Prince Rupert Unloads (cars)

(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 29



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 26 2022-23

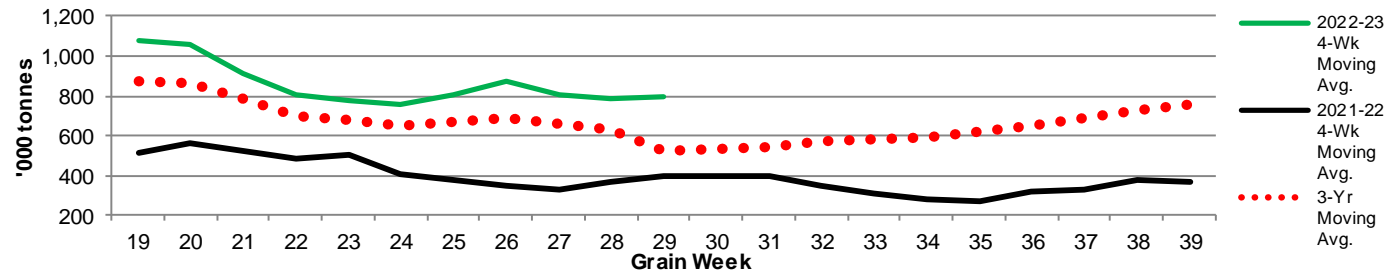
Months	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul
Weeks	1-5	6-9	10-13	14-18	19-22	23-26	27-30	31-35	36-39	40-44	45-48	49-52
2022-23	17,592	37,081	45,507	54,625	31,876	34,268	-	-	-	-	-	-
2021-22	23,199	31,888	34,000	27,251	20,099	16,847	16,324	17,791	16,839	16,881	13,630	15,436
3-Yr Avg.	28,664	36,603	41,283	44,994	29,024	28,814	22,352	33,123	33,009	35,187	26,137	23,809
Var % to Last Year	-24%	16%	34%	100%	59%	103%						
Var % to 3-Yr Avg.	-39%	1%	10%	21%	10%	19%						

5. Shipments

5-A Shipments from Port Terminals ('000 tonnes) – This Year-to-Date as at Week 29 and Variance to Last Year-to-Date

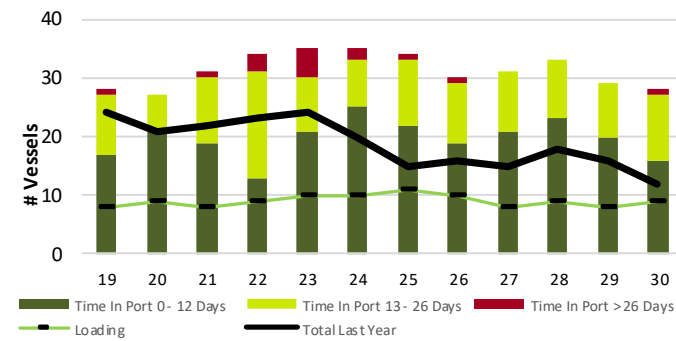
	Vancouver	Prince Rupert	West Coast	Thunder Bay	Churchill	Total
2022-23	17,376.2	2,569.5	19,945.7	3,741.9	-	23,687.6
2021-22	10,430.2	1,415.7	11,845.9	3,541.5	-	15,387.4
3-Yr Avg.	15,203.4	2,374.2	17,577.7	3,985.2	31.9	21,594.8
Var % to Last Year	67%	82%	68%	6%	n/a	54%
Var % to 3-Yr Avg.	14%	8%	13%	-6%	-100%	10%

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.

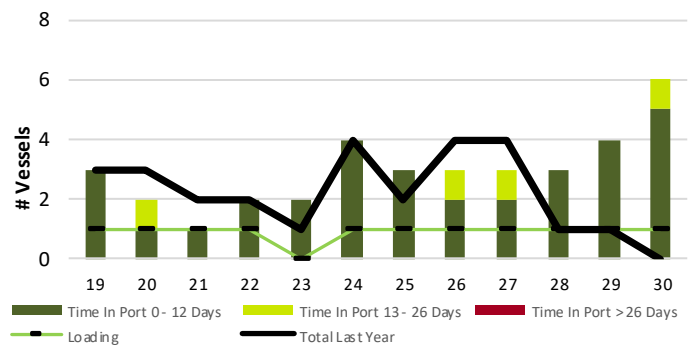


6. Vessels

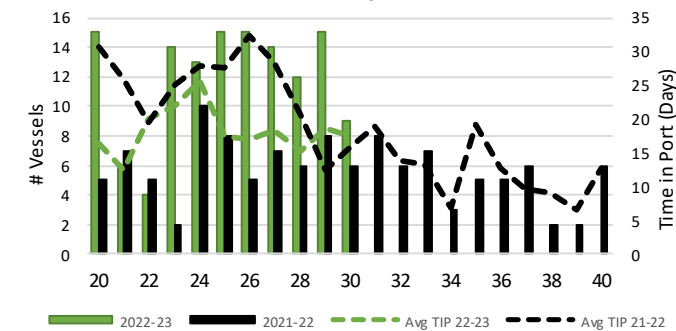
6-A Vessel Lineup at Vancouver as of Week 30 2022-23



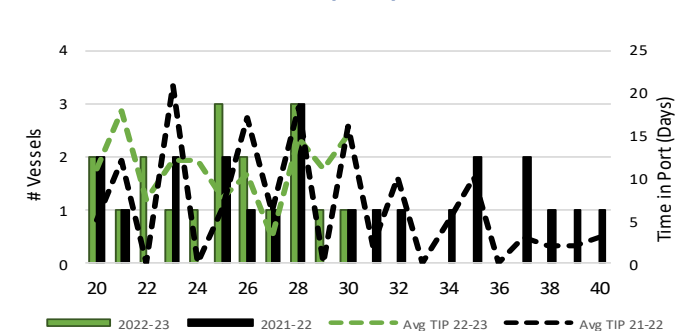
6-C Vessel Lineup at Prince Rupert as of Week 30 2022-23



6-B Vessels Cleared at Vancouver up to Week 30 2022-23



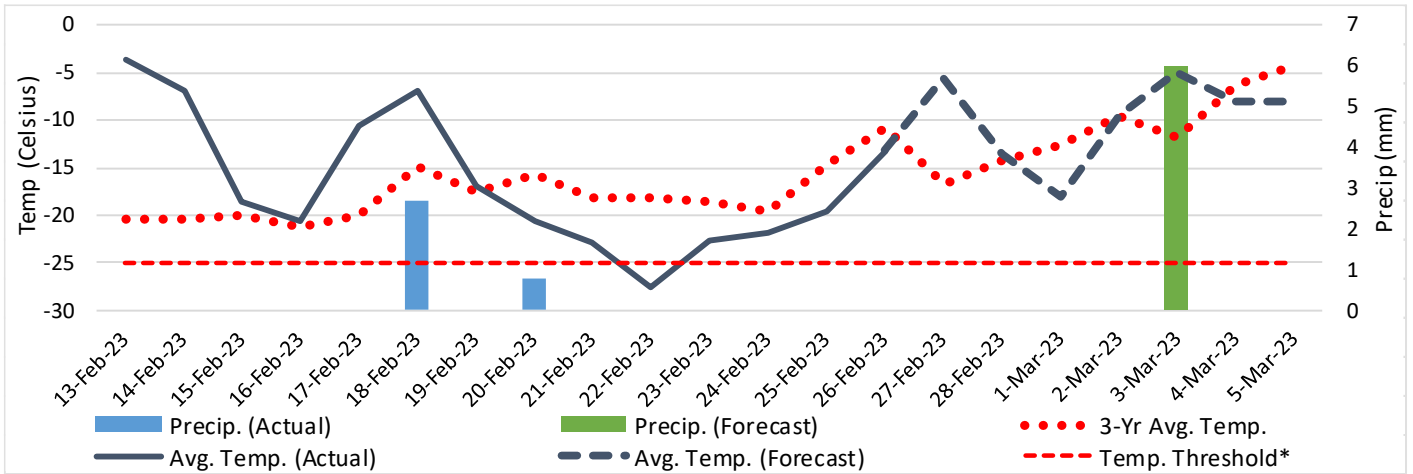
6-D Vessels Cleared at Prince Rupert up to Week 30 2022-23



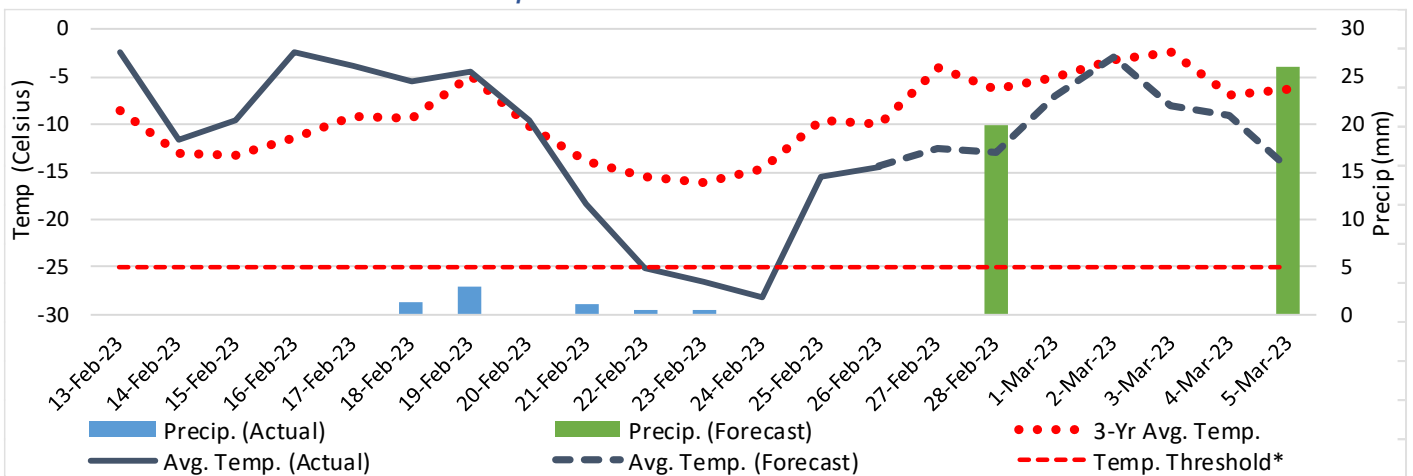
Note: The 'Time in Port' measure for 6-A and 6-C is calculated as how long each vessel in the lineup has been in port as at Sunday 23:59 of that grain week. The 'Avg Time in Port (TIP)' measure for 6-B and 6-D is the average number of days that all vessels which cleared that week were in port. These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

7. Weather

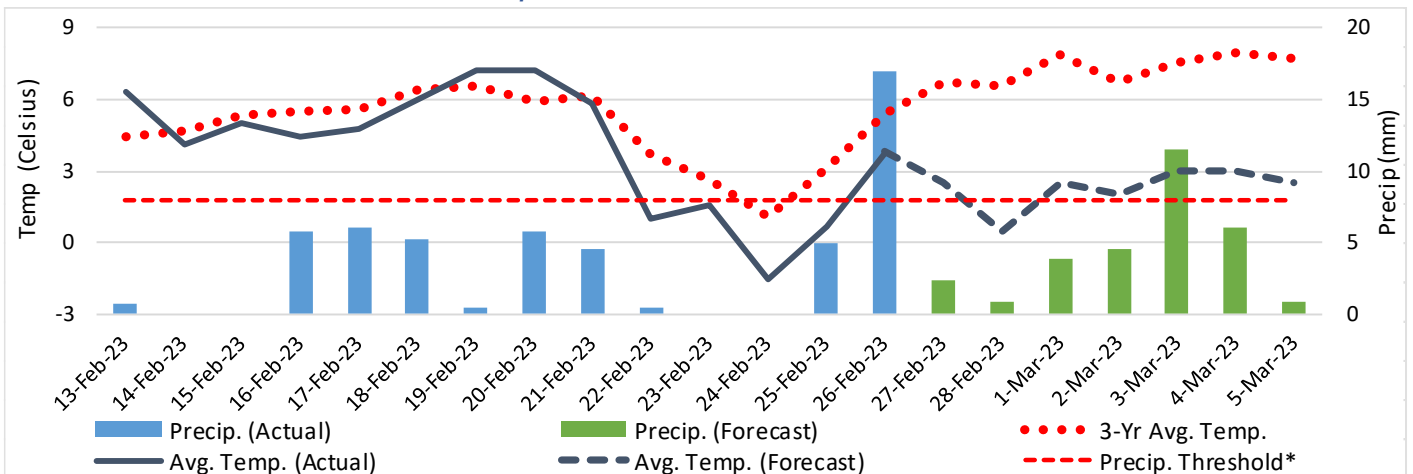
7-A Actual and Forecasted Weather at Winnipeg up to Week 31 2022-23



7-B Actual and Forecasted Weather at Edmonton up to Week 31 2022-23



7-C Actual and Forecasted Weather at Vancouver up to Week 31 2022-23



*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)