

# Grain Monitoring Program

## Weekly Performance Update

December 4, 2018

For Grain Week 17 (2018-19 CY)

### Summary

|   | This Week             | Last Week      | Var. from Last Year |      |
|---|-----------------------|----------------|---------------------|------|
| <b>1. Stocks in Store ('000 tonnes)</b>                       |                       |                |                     |      |
| Country Elevators   | ↑ 3,671.7             | 3,592.1        | -5%                 |      |
| % of Working Capacity   | 74%                   | 72%            |                     |      |
| Terminal Elevators  | ↑ 1,281.8             | 1,189.3        | 10%                 |      |
| % of Working Capacity   | 74%                   | 68%            |                     |      |
| <b>2. Country Deliveries ('000 tonnes)</b>                    |                       |                |                     |      |
| Country Deliveries  | ↑ 1,140.4             | 1,022.8        | 12%                 |      |
| <b>3. Railcar Supply to Western Ports (Cars)</b>              |                       |                |                     |      |
| CN Allocation Plan  | ↓ 5,213               | 5,811          | 3%                  |      |
| CN Unloads  | ↑ 4,467               | 4,042          | 39%                 |      |
| CP Allocation Plan  | n/a                   | n/a            | n/a                 |      |
| CP Unloads  | ↑ 4,434               | 4,338          | 27%                 |      |
| <b>4. Port Performance (Cars)</b>                             |                       |                |                     |      |
| Total Weekly Unloads  | ↑ 8,901               | 8,380          | 33%                 |      |
| 4-Week Rolling Average  | ↑ 8,990               | 8,887          | n/a                 |      |
| Var. to 4-Week Rolling Average                                | ↑ -1%                 | -6%            | n/a                 |      |
| YTD Unloads   | ↑ 135,363             | 126,462        | 2%                  |      |
| Weekly Out-of-Car Time  | ↑ 12.0%               | 9.0%           | 32.9%               |      |
| <b>5. Terminal Shipments Year-to-Date ('000 tonnes)</b>       |                       |                |                     |      |
| Vancouver   | ↑ 7,024.7             | 6,602.6        | -3%                 |      |
| Prince Rupert   | ↑ 1,857.8             | 1,764.3        | 15%                 |      |
| Churchill   | — 26.9                | 26.9           | n/a                 |      |
| Thunder Bay   | ↑ 2,784.7             | 2,639.2        | -5%                 |      |
| Total Western Canada  | 11,694.1              | 11,033.0       | -1%                 |      |
| <b>6. Vessels as at Dec 2, 2018</b>                           |                       |                |                     |      |
|   | Week 18               | Week 17        | Var. from Last Year |      |
| Vancouver   | Vessel Lineup in port | ↓ 26           | 35                  | 8%   |
|   | Vessels Cleared       | ↑ 11           | 9                   | -8%  |
|   | Vessels Arrived       | ↓ 2            | 12                  | n/a  |
| Pr. Rupert  | Vessel Lineup in port | ↓ 5            | 6                   | 0%   |
|   | Vessels Cleared       | ↓ 2            | 3                   | -33% |
|   | Vessels Arrived       | ↓ 1            | 4                   | n/a  |
| <b>Vessels Inbound Dec 03, 2018 to Dec 09, 2018 (Week 19)</b> |                       |                |                     |      |
| Vancouver   | 8                     |                |                     |      |
| Prince Rupert   | 3                     |                |                     |      |
| <b>7. Weather</b>   |                       |                |                     |      |
|   | Week 17 Actual        | Week 18 Actual | Week 19 Forecast    |      |
| Winnipeg <-25°C   | 0                     | 0              | 0                   |      |
| Edmonton <-25°C   | 0                     | 0              | 0                   |      |
| Vancouver Days Precip > 8mm                                   | 3                     | 3              | 2                   |      |

#### 1. Stocks in Store: (Page 2)

- Country stocks increased to 3.7 MMT in Week 17, utilizing 74% of the system's working capacity. Space in primary elevators is good.
- Total western port terminal stocks increased to 1.3 MMT in Week 17, utilizing 74% of the working capacity.

#### 2. Country Deliveries: (Page 2)

- Producer deliveries were 1,140,400 tonnes in Week 17.

#### 3. Railcar Supply: (Page 3)

- Railcar allocation plans are supplied by CN to Week 19 of the 2018-19 grain year (see page 3 for details).

#### 4. Port Performance: (Page 4)

- Total western port unloads were 1% lower than the 4-week moving average and 33% higher than Week 17 last year.
- West Coast unloads were 7,008 cars (Vancouver 5,668 and Prince Rupert 1,340), 2% lower than the 4-week moving average and 41% higher than Week 17 last year.
- Thunder Bay unloads were 1,893 cars, 3% higher than the 4-week moving average and 10% higher than Week 17 last year.
- Year-to-date total western port unloads are 2% higher than the same period last year. The corresponding tonnage is 3% higher than the same period last year.
- The total average terminal out-of-car time (OCT) increased to 12.0% from 9.0% in the previous week. The OCT time for Week 17 was 15.4% at Vancouver, 1.9% at Thunder Bay, and 13.6% at Prince Rupert.

#### 5. Shipments: (Page 5)

- Year-to-date Western Canadian shipments from port terminal elevators at Week 17 are 1% lower than the same period last year and 2% lower than the 3-year average.

#### 6. Vessels: (Page 5)

- Week 18 lineup at Vancouver decreased to 26 vessels (The current one-year average at Vancouver is 22 vessels). Of the 26, 7 were at berth, 8 were anchored at English Bay, 9 were anchored off Vancouver Island, and 2 were anchored at Burrard Inlet.
- Prince Rupert vessel lineup decreased to 5 vessels (The current one-year average at Prince Rupert is 4 vessels).
- Vessels cleared from Vancouver were 11, and from Prince Rupert were 2 in Week 18 of the 2018-19 crop year.

## 1. Stocks in Store

### 1-A1 Country Stocks ('000 tonnes) – Week 17

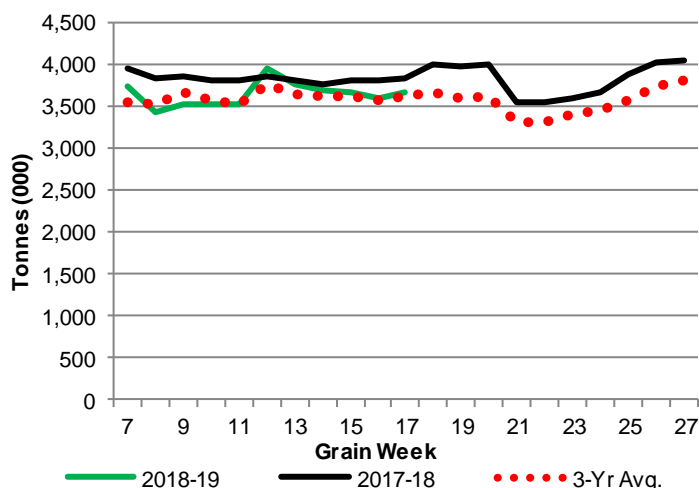
|                            | MB      | SK      | AB      | BC   | Total   |
|----------------------------|---------|---------|---------|------|---------|
| 2018-19                    | 795.7   | 1,920.3 | 931.7   | 24.0 | 3,671.7 |
| 2017-18                    | 847.5   | 1,953.9 | 1,018.7 | 23.5 | 3,843.6 |
| 3-Yr Avg.                  | 793.1   | 1,848.1 | 957.5   | 28.2 | 3,626.8 |
| Var % - LY                 | -6%     | -2%     | -9%     | 2%   | -4%     |
| Var % 3-Yr Avg.            | 0%      | 4%      | -3%     | -15% | 1%      |
| Storage Capacity           | 1,592.7 | 4,012.6 | 2,031.1 | 41.1 | 7,677.5 |
| Estimated Working Capacity | 1,035.3 | 2,608.2 | 1,320.2 | 26.7 | 4,990.4 |
| 18-19 % of Wkg Cap         | 77%     | 74%     | 71%     | 90%  | 74%     |

### 1-B1 Terminal Stocks ('000 tonnes) – Week 17

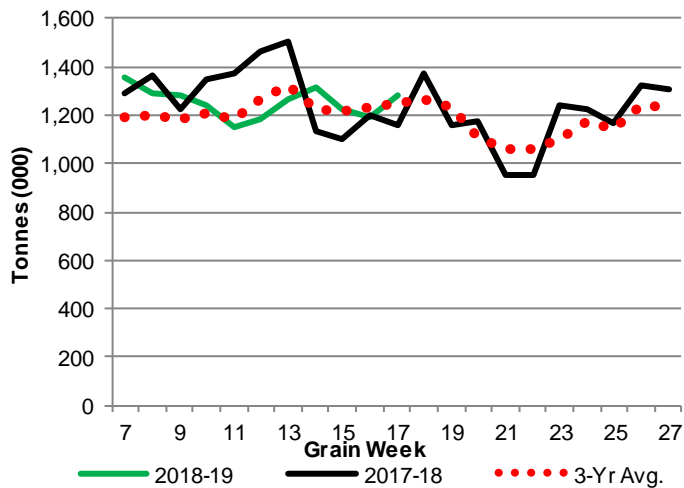
|                            | VC    | PR     | West Coast | CH    | TB      | Total   |
|----------------------------|-------|--------|------------|-------|---------|---------|
| 2018-19                    | 542.3 | 99     | 641.3      | 0.7   | 639.8   | 1,281.8 |
| 2017-18                    | n/a   | n/a    | 571.6      | 29.5  | 559.9   | 1,161.0 |
| 3-Yr Avg.                  | n/a   | n/a    | 642.0      | 19.9  | 585.6   | 1,247.4 |
| Var % - LY                 | n/a   | n/a    | 12%        | -98%  | 14%     | 10%     |
| Var % 3-Yr Avg.            | n/a   | n/a    | 0%         | -96%  | 9%      | 3%      |
| Storage Capacity           | 978.0 | 209.5  | 1,187.5    | 140.0 | 1,157.5 | 2,485.0 |
| Estimated Working Capacity | 684.6 | 146.65 | 831.3      | 98.0  | 810.3   | 1,739.5 |
| 18-19 % of Wkg Cap         | 79%   | 68%    | 77%        | 1%    | 79%     | 74%     |

**Note:** CGC Weekly Statistics between 2013-14 and 2017-18 Crop Years reported Vancouver and Prince Rupert terminal stocks as a combined West Coast total. As of 2018-19 these are separated.

### 1-A2 Weekly Country Stocks in Store



### 1-B2 Weekly Terminal Stocks in Store

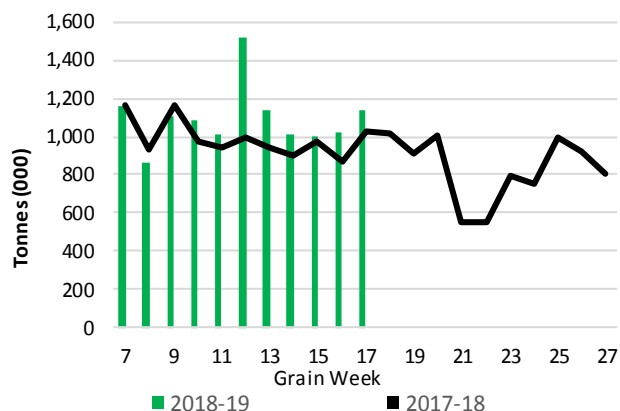


## 2. Country Deliveries

### 2-A Weekly Country Deliveries ('000 tonnes) - Week 17

|                    | MB    | SK    | AB    | BC   | Total   |
|--------------------|-------|-------|-------|------|---------|
| 2018-19            | 193.2 | 601.2 | 335.6 | 10.4 | 1,140.4 |
| 2017-18            | 214.6 | 507.2 | 295.0 | 4.8  | 1,021.6 |
| 4 Wk Avg           | 200.1 | 555.8 | 275.8 | 9.7  | 1,041.4 |
| Var % to Last Year | -10%  | 19%   | 14%   | 117% | 12%     |
| Var % To 4 Wk Avg  | -3%   | 8%    | 22%   | 8%   | 10%     |

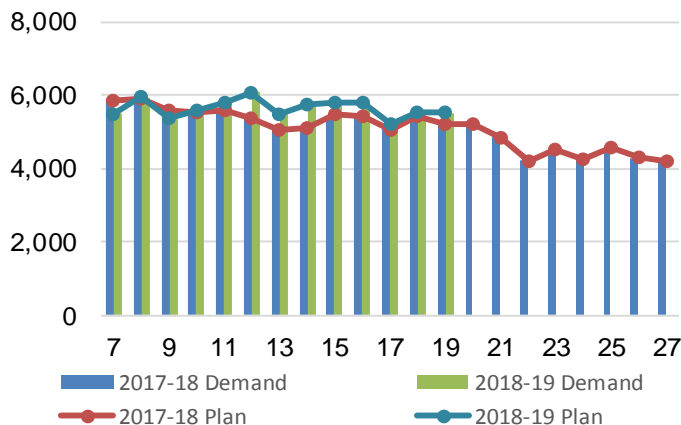
### 2-B 2018-19 Weekly Country Deliveries vs 2017-18



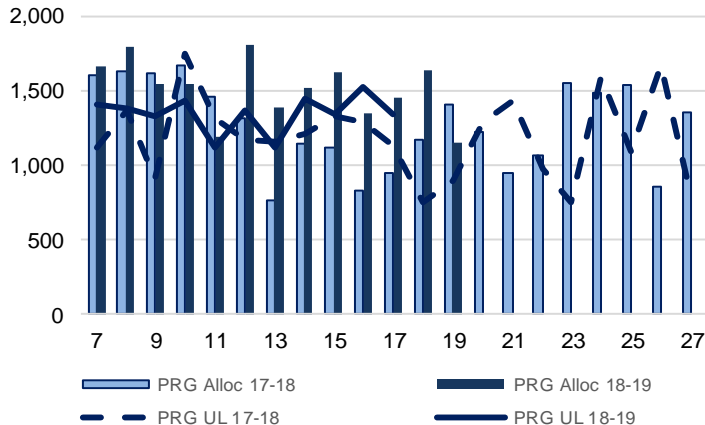
### 3. Railcar Supply

**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 19 of 2018-19. 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.

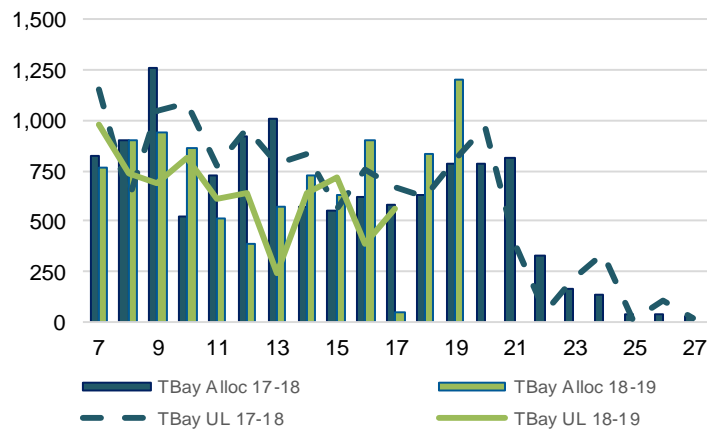
**3-A: Canadian National Planned Car Allocation vs. Demand (cars) To Week 19 2018-19 Crop Year**



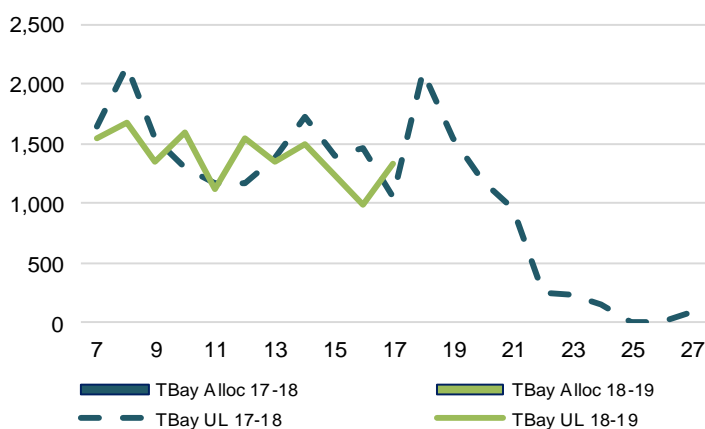
**3-B3: Canadian National Planned Car Allocation to Western Ports Vs. Corridor Unloads at Port (cars) – Prince Rupert**



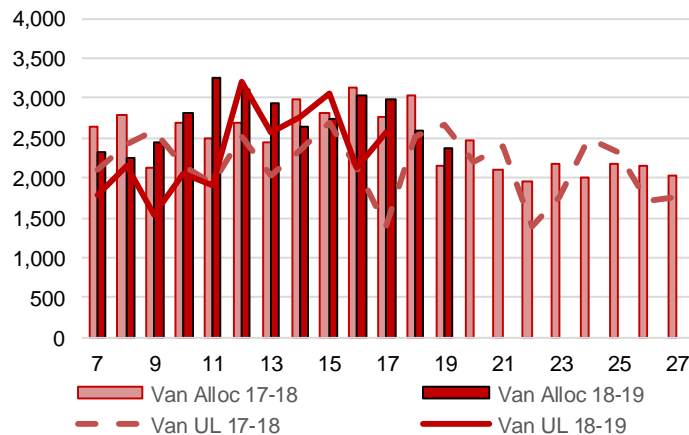
**3-B1: Canadian National Planned Car Allocation to Western Ports Vs. Corridor Unloads at Port (cars) – Thunder Bay**



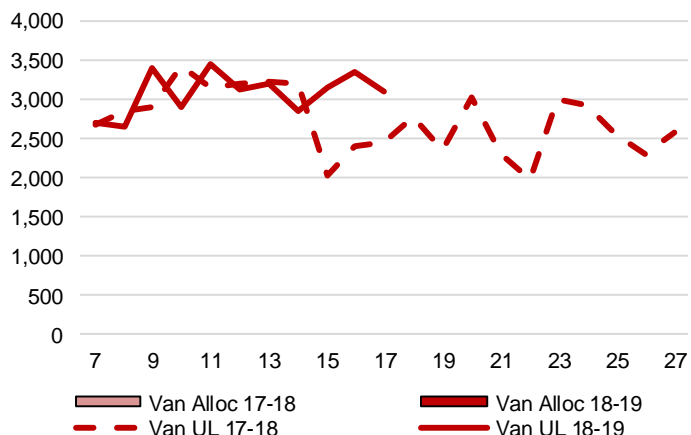
**3-C1: Canadian Pacific Planned Car Allocation to Western Ports vs. Corridor Unloads at Port (cars) – Thunder Bay**



**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 17, 4-Week Moving Average and Variances

|                    | Vancouver | Prince Rupert | West Coast | Thunder Bay | Churchill | Total |
|--------------------|-----------|---------------|------------|-------------|-----------|-------|
| 2018-19            | 5,668     | 1,340         | 7,008      | 1,893       | -         | 8,901 |
| 2017-18            | 3,856     | 1,131         | 4,987      | 1,722       | -         | 6,709 |
| 4-Wk Avg.          | 5,743     | 1,411         | 7,153      | 1,837       | -         | 8,990 |
| Var % to Last Year | 47%       | 18%           | 41%        | 10%         | n/a       | 33%   |
| Var % to 4-Wk Avg. | -1%       | -5%           | -2%        | 3%          | n/a       | -1%   |

### 4-B Terminal Unloads by Port – This Year-to-Date as at Week 17 and Variances

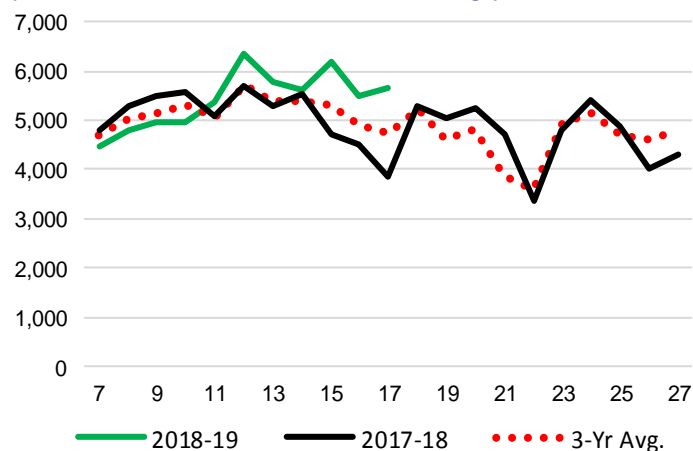
| YTD Unloads (cars) | Vancouver | Prince Rupert | West Coast | Thunder Bay | Churchill | Total   |
|--------------------|-----------|---------------|------------|-------------|-----------|---------|
| 2018-19            | 82,948    | 20,232        | 103,180    | 32,183      | -         | 135,363 |
| 2017-18            | 80,540    | 18,205        | 98,745     | 34,049      | -         | 132,794 |
| 3-Yr Avg           | 80,360    | 19,870        | 100,230    | 34,628      | -         | 134,857 |
| Var % to Last Year | 3%        | 11%           | 4%         | -5%         | n/a       | 2%      |
| Var % to 3-Yr Avg  | 3%        | 2%            | 3%         | -7%         | n/a       | 0%      |

| YTD Unloads ('000 tonnes) | Vancouver | Prince Rupert | West Coast | Thunder Bay | Churchill | Total    |
|---------------------------|-----------|---------------|------------|-------------|-----------|----------|
| 2018-19                   | 7,492.6   | 1,882.0       | 9,374.6    | 3,006.8     | -         | 12,381.4 |
| 2017-18                   | 7,265.1   | 1,640.9       | 8,906.0    | 3,121.1     | -         | 12,027.1 |
| 3-Yr Avg.                 | 7,250.8   | 1,809.6       | 9,060.5    | 3,193.1     | -         | 12,253.5 |
| Var % to Last Year        | 3%        | 15%           | 5%         | -4%         | n/a       | 3%       |
| Var % to 3-Yr Avg.        | 3%        | 4%            | 3%         | -6%         | n/a       | 1%       |

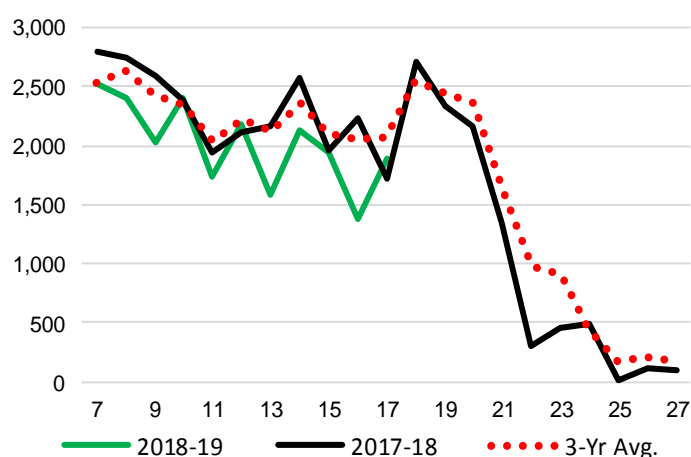
### 4-C Vancouver Unloads (cars)

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



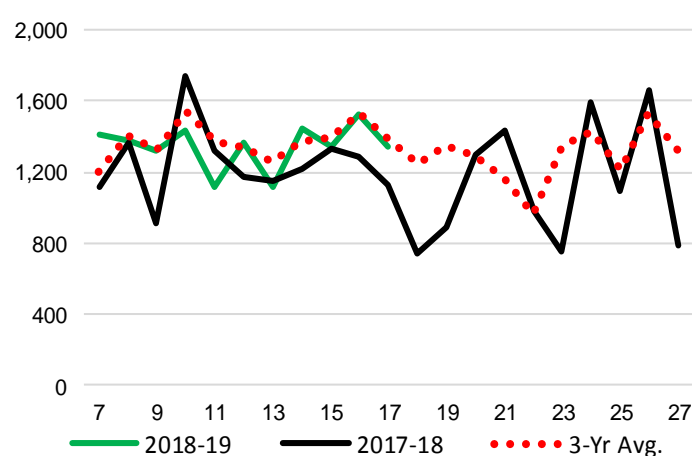
### 4-E Thunder Bay Unloads (cars)

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

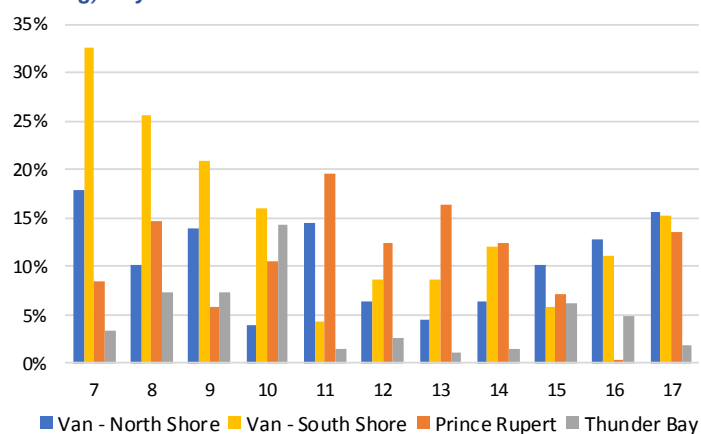


### 4-D Prince Rupert Unloads (cars)

(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 17



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 14**

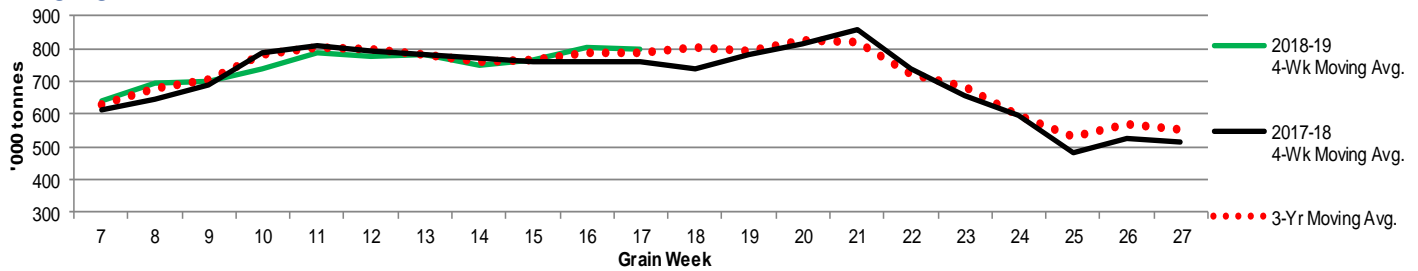
| Months             | Aug    | Sep    | Oct    | Nov    | Dec    | Jan    | Feb    | Mar    | Apr    | May    | Jun    | Jul    |
|--------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Weeks              | 1-5    | 6-9    | 10-14  | 15-18  | 19-22  | 23-27  | 28-31  | 32-35  | 36-39  | 40-44  | 45-48  | 49-53  |
| 2018-19            | 31,421 | 32,599 | 44,576 | -      | -      | -      | -      | -      | -      | -      | -      | -      |
| 2017-18            | 30,257 | 34,807 | 35,650 | 40,849 | 29,069 | 30,453 | 19,212 | 26,541 | 32,503 | 38,863 | 26,637 | 27,864 |
| 3-Yr Avg.          | 30,958 | 33,617 | 38,742 | 40,240 | 32,245 | 28,408 | 23,481 | 32,560 | 33,611 | 34,667 | 28,510 | 26,188 |
| Var % to Last Year | 4%     | -6%    | 25%    |        |        |        |        |        |        |        |        |        |
| Var % to 3-Yr Avg. | 1%     | -3%    | 15%    |        |        |        |        |        |        |        |        |        |

**5. Shipments**

**5-A Shipments from Port Terminals ('000 tonnes) – This Year-to-Date as at Week 17 and Variance to Last Year-to-Date**

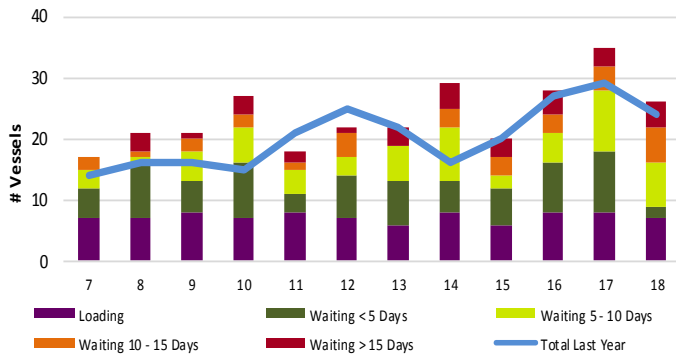
|                    | Vancouver | Prince Rupert | West Coast | Thunder Bay | Churchill | Total    |
|--------------------|-----------|---------------|------------|-------------|-----------|----------|
| 2018-19            | 7,024.7   | 1,857.8       | 8,882.5    | 2,784.7     | 26.9      | 11,694.1 |
| 2017-18            | 7,246.5   | 1,613.2       | 8,859.7    | 2,943.1     | -         | 11,802.8 |
| 3-Yr Avg.          | 7,103.1   | 1,760.0       | 8,863.1    | 3,006.7     | 9.0       | 11,878.8 |
| Var % to Last Year | -3%       | 15%           | 0%         | -5%         | n/a       | -1%      |
| Var % to 3-Yr Avg. | -1%       | 6%            | 0%         | -7%         | 200%      | -2%      |

**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.**

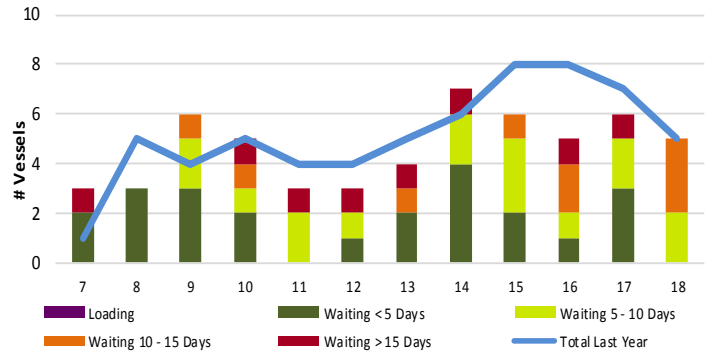


**6. Vessels**

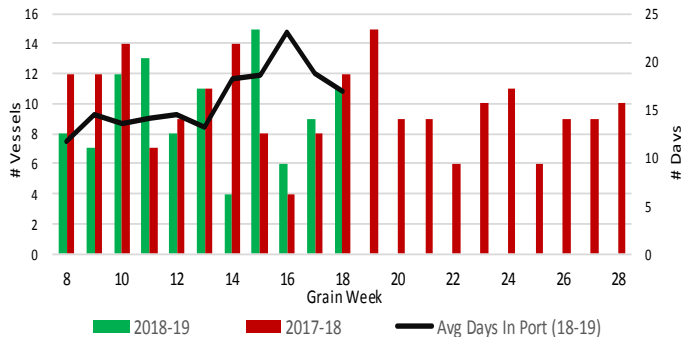
**6-A Vessel Lineup at Vancouver as of Week 18 2018-19**



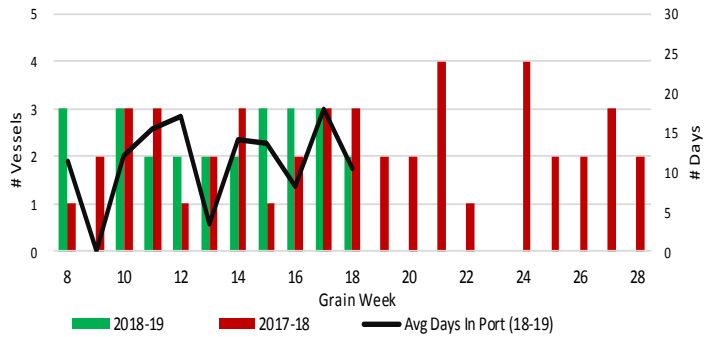
**6-C Vessel Lineup at Prince Rupert as of Week 18 2018-19**



**6-B Vessels Cleared at Vancouver up to Week 18 2018-19**



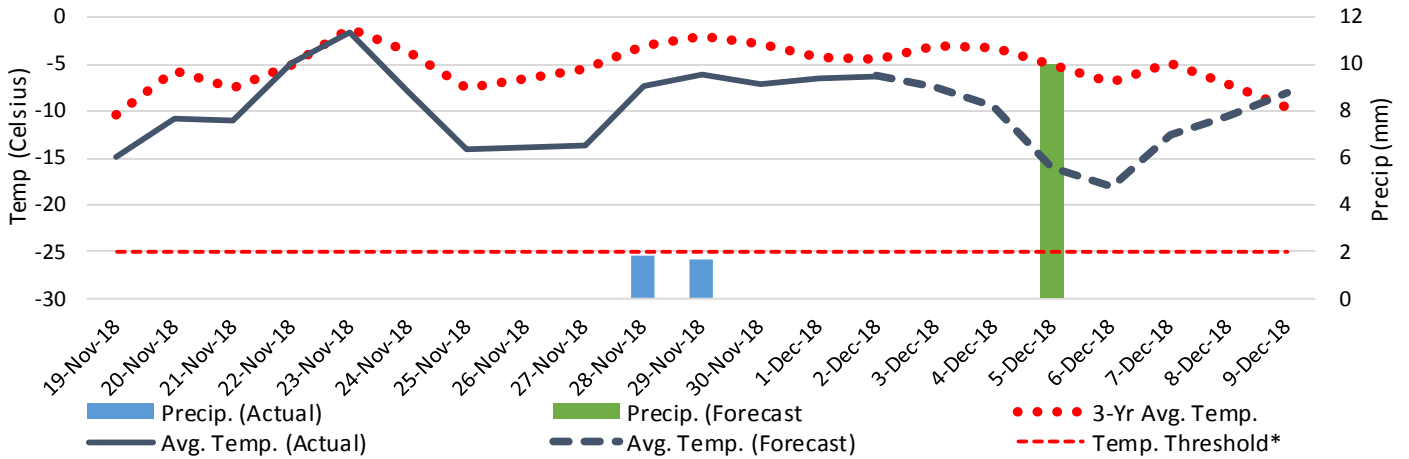
**6-D Vessels Cleared at Prince Rupert up to Week 18 2018-19**



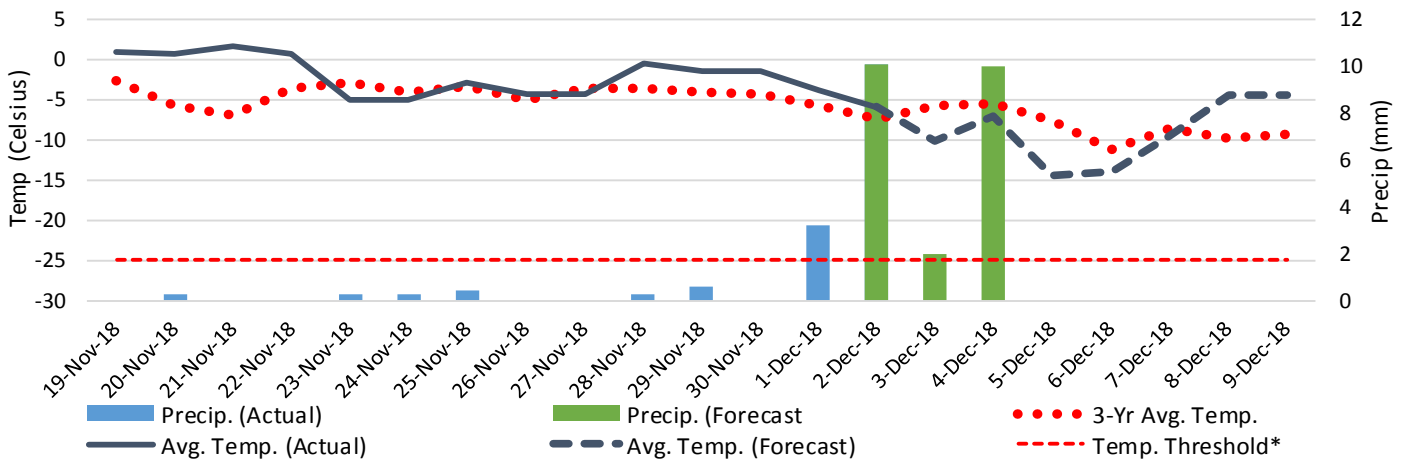
Note: To determine Avg Days in Port, Quorum first establishes which vessels cleared port in each specific grain week. Then, the number of days each cleared vessel spent in port is calculated by subtracting the date of arrival from the date of departure. Lastly, an average of these days is produced for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

# 7. Weather

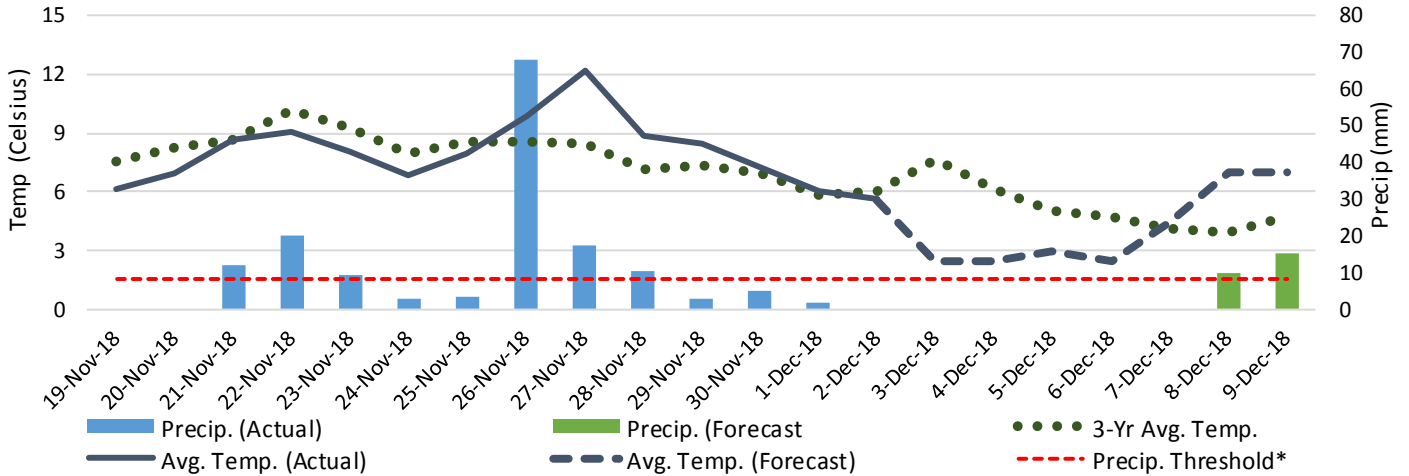
7-A Actual and Forecasted Weather at Winnipeg up to Week 19



7-B Actual and Forecasted Weather at Edmonton up to Week 19



7-C Actual and Forecasted Weather at Vancouver up to Week 19



\*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)