

Grain Monitoring Program

Weekly Performance Update

September 11, 2018

For Grain Week 5 (2018-19 CY)

Summary

| | This Week | Last Week | Var. from Last Year | |
|--|-----------------------|----------------|----------------------------|------|
| 1. Stocks in Store ('000 tonnes) | | | | |
| Country Elevators | ↑ 3,177.2 | 3,068.8 | 4% | |
| % of Working Capacity | 66% | 64% | | |
| Terminal Elevators | ↑ 1,101.6 | 1,029.5 | 7% | |
| % of Working Capacity | 63% | 59% | | |
| 2. Country Deliveries ('000 tonnes) | | | | |
| Country Deliveries | ↓ 1,043.5 | 1,203.0 | -13% | |
| 3. Railcar Supply to Western Ports (Cars) | | | | |
| CN Allocation Plan | ↑ 4,893 | 4,174 | 12% | |
| CN Unloads | ↓ 3,224 | 3,319 | 20% | |
| CP Allocation Plan | n/a | n/a | n/a | |
| CP Unloads | ↑ 3,259 | 3,216 | -20% | |
| 4. Port Performance (Cars) | | | | |
| Total Weekly Unloads | ↓ 6,483 | 6,535 | -4% | |
| 4-Week Rolling Average | ↑ 6,626 | 6,063 | n/a | |
| Var. to 4-Week Rolling Average | ↓ -2% | 8% | n/a | |
| YTD Unloads | ↑ 30,734 | 24,251 | 2% | |
| Weekly Out-of-Car Time | ↓ 22.1% | 28.9% | 58.5% | |
| 5. Terminal Shipments Year-to-Date ('000 tonnes) | | | | |
| Vancouver | ↑ 1,455.1 | 1,116.2 | -24% | |
| Prince Rupert | ↑ 391.9 | 316.8 | 18% | |
| Thunder Bay | ↑ 561.1 | 482.9 | -15% | |
| Total Western Canada | ↑ 2,408.1 | 1,915.9 | -17% | |
| 6. Vessels as at Sep 9, 2018 | | | | |
| | Week 6 | Week 5 | Var. from Last Year | |
| Vancouver | Vessel Lineup in port | ↓ 19 | 20 | 12% |
| | Vessels Cleared | ↑ 10 | 7 | 43% |
| | Vessels Arrived | ↑ 9 | 3 | n/a |
| Pr. Rupert | Vessel Lineup in port | ↓ 2 | 3 | 100% |
| | Vessels Cleared | — 2 | 2 | 0% |
| | Vessels Arrived | ↓ 1 | 2 | n/a |
| Vessels Inbound Sep 10, 2018 to Sep 16, 2018 (Week 7) | | | | |
| Vancouver | 7 | | | |
| Prince Rupert | 3 | | | |

1. Stocks in Store: (Page 2)

- Country stocks increased to 3.2 MMT in Week 5 utilizing 66% of the system's working capacity. Space in primary elevators is good.
- Total western port terminal stocks increased to 1.1 MMT in Week 5, utilizing 63% of the working capacity.

2. Country Deliveries: (Page 2)

- Producer deliveries were 1,043,500 tonnes in Week 5.

3. Railcar Supply: (Page 3)

- Railcar allocation plans are supplied by CN to Week 7 of the 2018-19 grain year (see page 3 for details).

4. Port Performance: (Page 4)

- Total western port unloads were 2% lower the 4-week moving average and 4% lower than Week 5 last year.
- West Coast unloads were 4,554 cars (Vancouver 3,845 and Prince Rupert 709), 7% lower than the 4-week moving average and 11% lower than Week 5 last year.
- Thunder Bay unloads were 1,929 cars, 12% higher than the 4-week moving average and 20% higher than Week 5 last year.
- Year-to-date total western port unloads are 2% higher than same period last year. The corresponding tonnage is 3% higher.
- The total average terminal out-of-car time (OCT) decreased to 22.1% from 28.9% in the previous week. The OCT time for Week 5 was 12.9% in Vancouver and 55.8% at Prince Rupert. At the time of publishing the report, Thunder Bay has not yet reported their OCT.

5. Shipments: (Page 5)

- Year-to-date Western Canadian shipments from port terminal elevators at Week 5 are 17% lower than the same period last year and 22% lower than the 5-year average.

6. Vessels: (Page 5)

- Week 6 lineup at Vancouver decreased to a total of 19 vessels (The current one-year average at Vancouver is 21 vessels). Of the 19, 7 were at berth, 6 were anchored at English Bay, 4 were anchored off Vancouver Island, and 1 was anchored at Burrard Inlet.
- Prince Rupert vessel lineup decreased to 3 vessels (The current one-year average at Prince Rupert is 4 vessels).
- Vessels cleared from Vancouver were 10, and from Prince Rupert were 2 in Week 6 of the 2018-19 crop year.

1. Stocks in Store

1-A1 Country Stocks ('000 tonnes) – Week 5

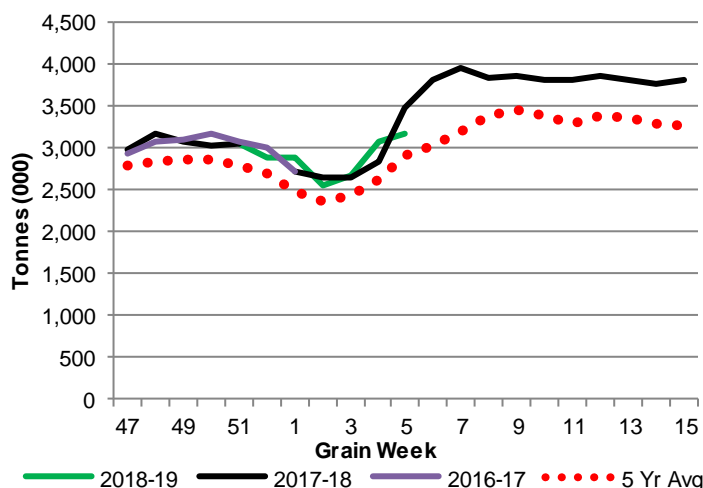
| | MB | SK | AB | BC | Total |
|----------------------------|---------|---------|---------|------|---------|
| 2018-19 | 791.6 | 1,805.2 | 570.1 | 10.3 | 3,177.2 |
| 2017-18 | 830.2 | 1,746.5 | 878.5 | 24.9 | 3,480.1 |
| 5 Yr Avg | 648.0 | 1,490.5 | 750.9 | 20.6 | 2,910.0 |
| Var % - LY | -5% | 3% | -35% | -59% | -9% |
| Var % - 5 Yr Avg | 22% | 21% | -24% | -50% | 9% |
| Storage Capacity | 1,584.6 | 3,865.1 | 1,913.7 | 41.1 | 7,404.5 |
| Estimated Working Capacity | 1,030.0 | 2,512.3 | 1,243.9 | 26.7 | 4,813.0 |
| 18-19 % of Wkg Cap | 77% | 72% | 46% | 39% | 66% |

1-B1 Terminal Stocks ('000 tonnes) – Week 5

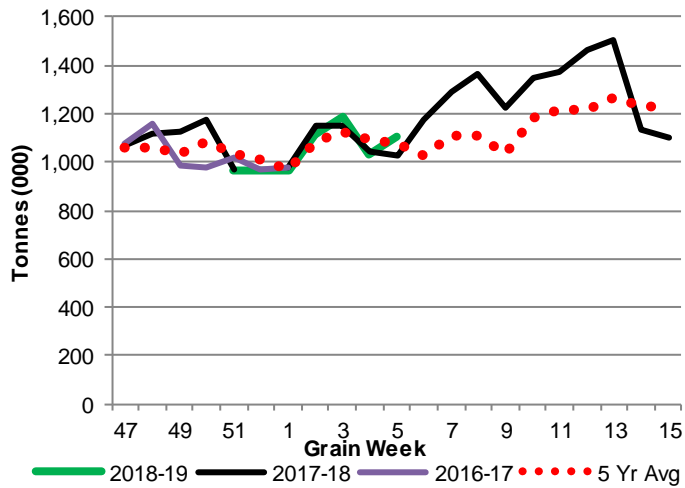
| | VC | PR | West Coast | CH | TB | Total |
|----------------------------|-------|--------|------------|-------|---------|---------|
| 2018-19 | 434.1 | 97.2 | 531.3 | 29.5 | 540.8 | 1,101.6 |
| 2017-18 | n/a | n/a | 563.6 | 29.5 | 435.6 | 1,028.7 |
| 5 Yr Avg | n/a | n/a | 557.1 | 57.2 | 464.1 | 1,078.4 |
| Var % - LY | n/a | n/a | -6% | 0% | 24% | 7% |
| Var % - 5 Yr Avg | n/a | n/a | -5% | -48% | 17% | 2% |
| 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 | 63% | 66% | 64% | 30% | 67% | 63% |

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

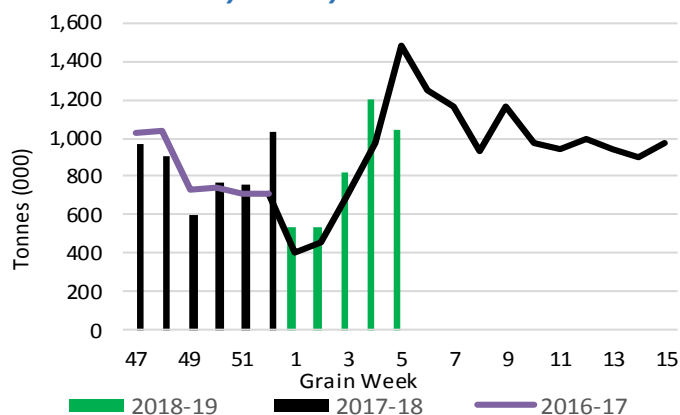


2. Country Deliveries

2-A Weekly Country Deliveries ('000 tonnes) - Week 5

| | MB | SK | AB | BC | Total |
|--------------------|-------|-------|-------|-----|---------|
| 2018-19 | 266.7 | 601.0 | 170.6 | 5.2 | 1,043.5 |
| 2017-18 | 408.7 | 717.8 | 354.8 | 2.9 | 1,484.2 |
| 4 Wk Avg | 254.8 | 471.8 | 171.3 | 4.4 | 902.3 |
| Var % to Last Year | -35% | -16% | -52% | 79% | -30% |
| Var % To 4 Wk Avg | 5% | 27% | 0% | 18% | 16% |

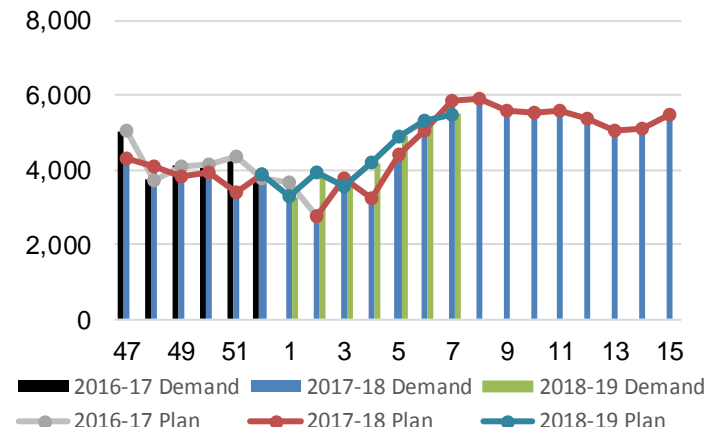
2-B 2018-19 Weekly Country Deliveries vs 2017-18



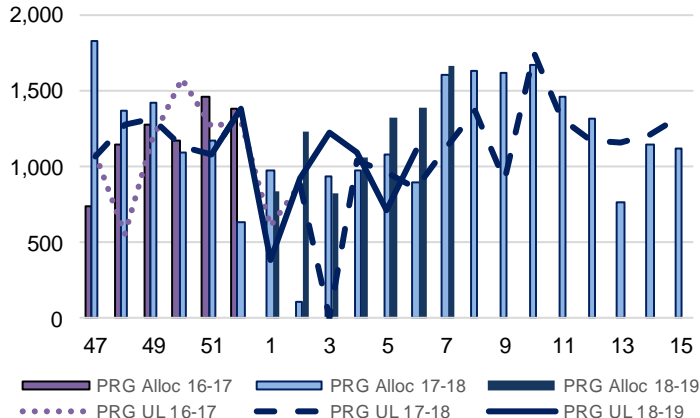
3. Railcar Supply

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 7 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.

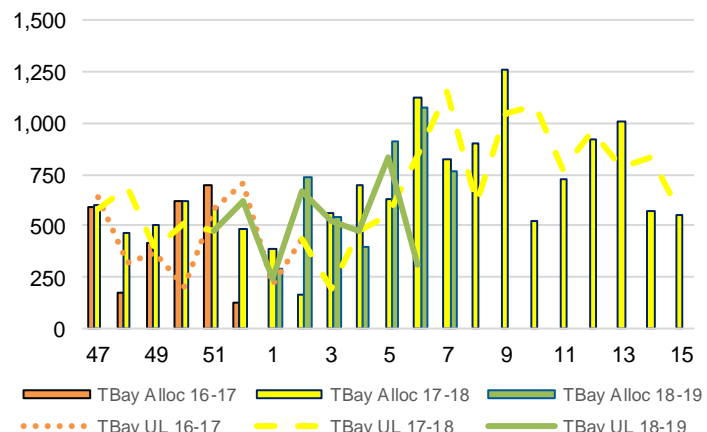
3-A: Canadian National Planned Car Allocation vs. Demand (cars) To Week 7 2018-19 Crop Year



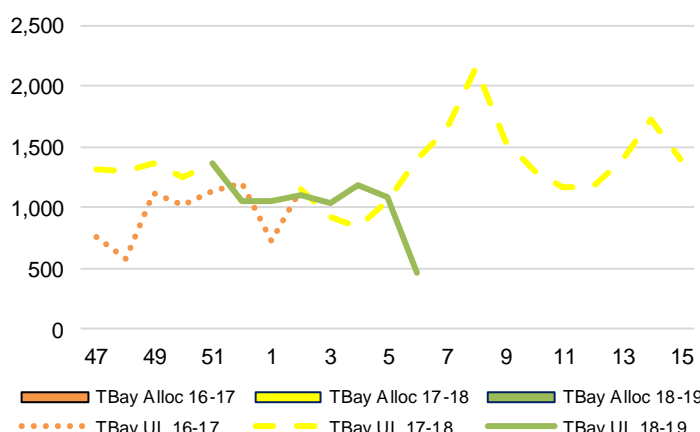
3-B3: Canadian National Planned Car Allocation to Western Ports Vs. Corridor Unloads at Port (cars) – Prince Rupert



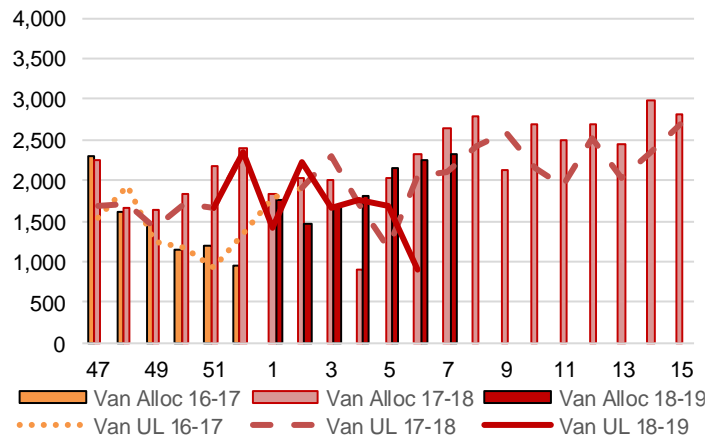
3-B1: Canadian National Planned Car Allocation to Western Ports Vs. Corridor Unloads at Port (cars) – Thunder Bay



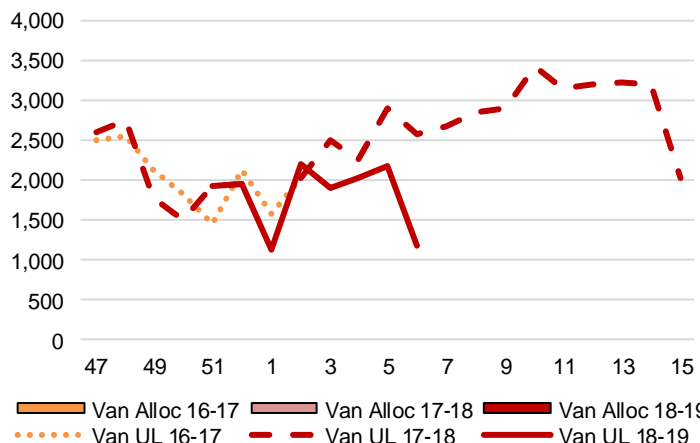
3-C1: Canadian Pacific Planned Car Allocation to Western Ports vs. Corridor Unloads at Port (cars) – Thunder Bay



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 5, 4-Week Moving Average and Variances

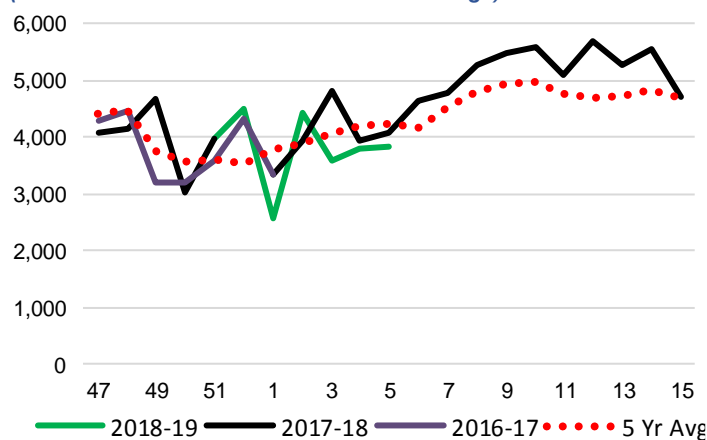
| | Vancouver | Prince Rupert | West Coast | Thunder Bay | Churchill | Total |
|--------------------|-----------|---------------|------------|-------------|-----------|-------|
| 2018-19 | 3,845 | 709 | 4,554 | 1,929 | - | 6,483 |
| 2017-18 | 4,062 | 1,064 | 5,126 | 1,611 | - | 6,737 |
| 4-Wk Avg. | 3,911 | 988 | 4,899 | 1,728 | - | 6,626 |
| Var % to Last Year | -5% | -33% | -11% | 20% | n/a | -4% |
| Var % to 4-Wk Avg. | -2% | -28% | -7% | 12% | n/a | -2% |

4-B Terminal Unloads by Port – This Year-to-Date as of Week 5 and Variances

| YTD Unloads (cars) | Vancouver | Prince Rupert | West Coast | Thunder Bay | Churchill | Total |
|---------------------------|-----------|---------------|------------|-------------|-----------|---------|
| 2018-19 | 18,197 | 4,340 | 22,537 | 8,197 | - | 30,734 |
| 2017-18 | 20,097 | 3,589 | 23,686 | 6,571 | - | 30,257 |
| 5-Yr Avg | 20,123 | 4,918 | 25,041 | 9,098 | 467 | 34,606 |
| Var % to Last Year | -9% | 21% | -5% | 25% | n/a | 2% |
| Var % to 5-Yr Avg | -10% | -12% | -10% | -10% | -100% | -11% |
| YTD Unloads ('000 tonnes) | | | | | | |
| 2018-19 | 1,653.3 | 418.1 | 2,071.4 | 777.3 | - | 2,848.7 |
| 2017-18 | 1,830.0 | 330.3 | 2,160.3 | 618.4 | - | 2,778.7 |
| 5-Yr Avg. | 1,817.1 | 448.9 | 2,266.0 | 848.0 | 41.5 | 3,155.5 |
| Var % to Last Year | -10% | 27% | -4% | 26% | n/a | 3% |
| Var % to 5-Yr Avg. | -9% | -7% | -9% | -8% | -100% | -10% |

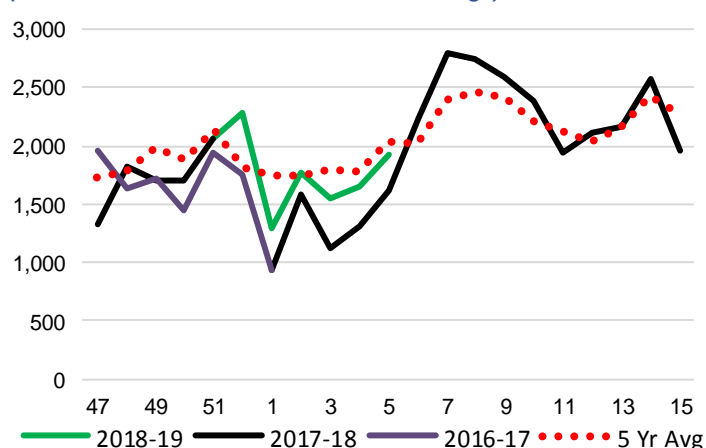
4-C Vancouver Unloads (cars)

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



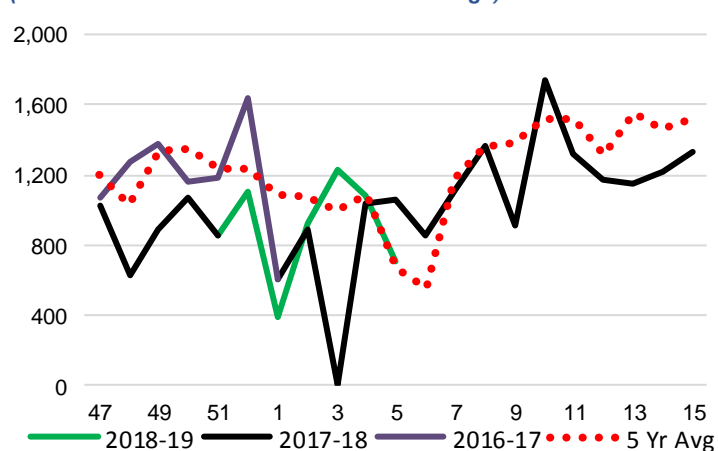
4-E Thunder Bay Unloads (cars)

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

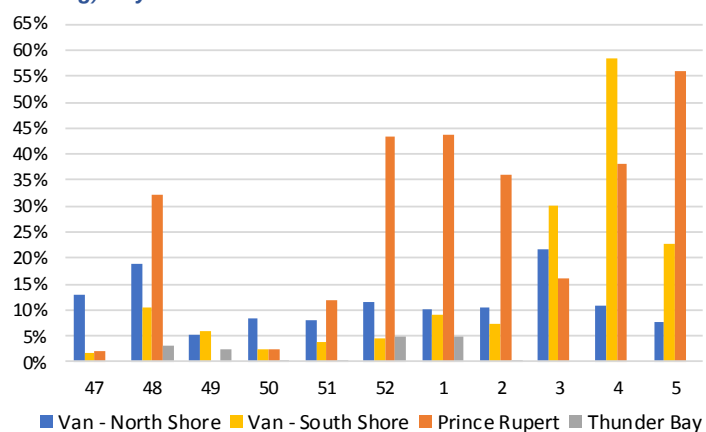


4-D Prince Rupert Unloads (cars)

(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 5



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 5-Year Average to Week 5

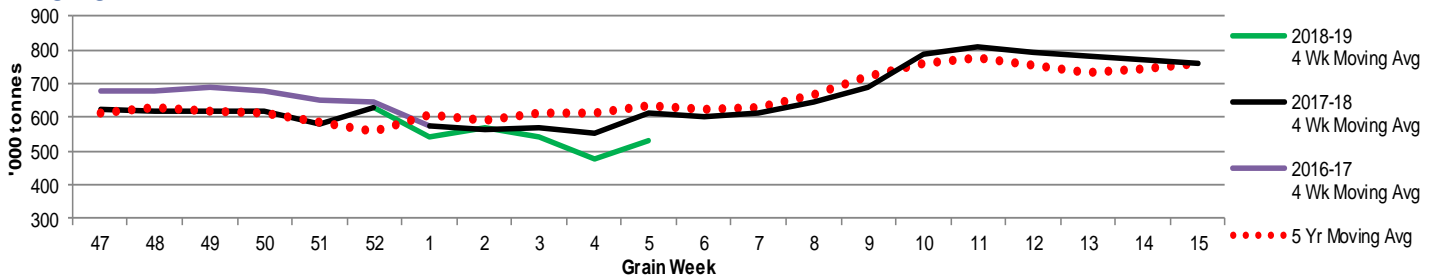
| Months | Aug | Sep | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul |
|--------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Weeks | 1-5 | 6-9 | 10-14 | 15-18 | 19-22 | 23-27 | 28-31 | 32-35 | 36-39 | 40-44 | 45-48 | 49-53 |
| 2018-19 | 30,734 | - | - | - | - | - | - | - | - | - | - | - |
| 2017-18 | 30,257 | 34,807 | 35,650 | 40,849 | 29,069 | 30,456 | 19,212 | 26,541 | 32,503 | 38,863 | 26,637 | 27,864 |
| 5 Yr Avg | 31,445 | 33,837 | 37,910 | 36,806 | 30,329 | 26,146 | 22,477 | 29,475 | 35,187 | 34,031 | 30,073 | 30,853 |
| Var % to Last Year | 2% | | | | | | | | | | | |
| Var % to 5 Yr Avg | -2% | | | | | | | | | | | |

5. Shipments

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

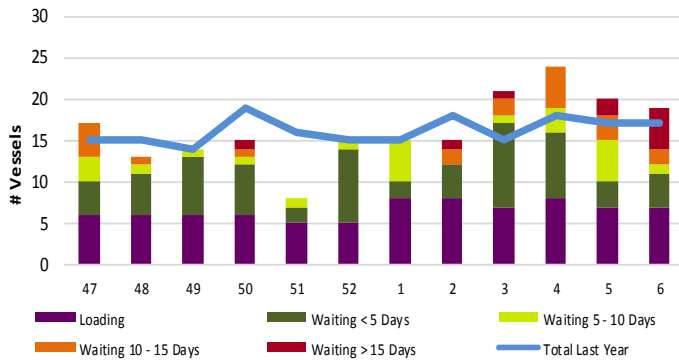
| | Vancouver | Prince Rupert | West Coast | Thunder Bay | Churchill | Total |
|---------------------|-----------|---------------|------------|-------------|-----------|---------|
| 2018-19 | 1,455.1 | 391.9 | 1,847.0 | 561.1 | - | 2,408.1 |
| 2017-18 | 1,904.7 | 332.8 | 2,237.5 | 660.8 | - | 2,898.3 |
| 5 Year Avg | 1,801.0 | 449.0 | 2,250.0 | 819.8 | 28.2 | 3,098.0 |
| Var % to Last Year | -24% | 18% | -17% | -15% | n/a | -17% |
| Var % to 5 Year Avg | -19% | -13% | -18% | -32% | -100% | -22% |

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

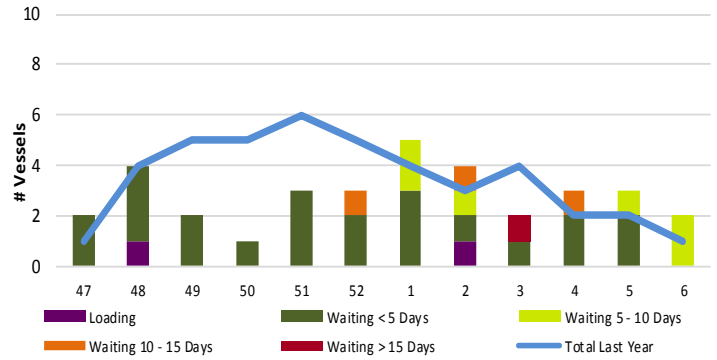


6. Vessels

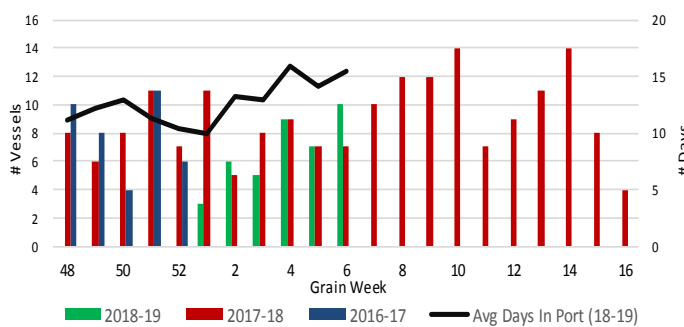
6-A Vessel Lineup at Vancouver as of Week 6 2018-19



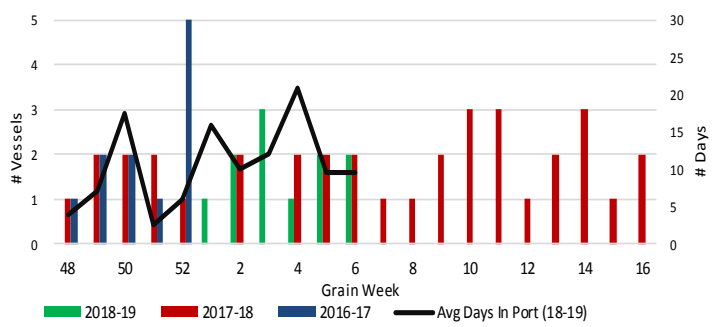
6-C Vessel Lineup at Prince Rupert as of Week 6 2018-19



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



6-D Vessels Cleared at Prince Rupert up to Week 6 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.