



A Grain Exporter's Perspective

ICS Annual Dry Bulk Conference 2021

November 18, 2021

Agenda

1. Prairie Crop Production
2. Canola Crush Expansion-what is going on?
3. Anchorage Issues and Low Hanging Fruit



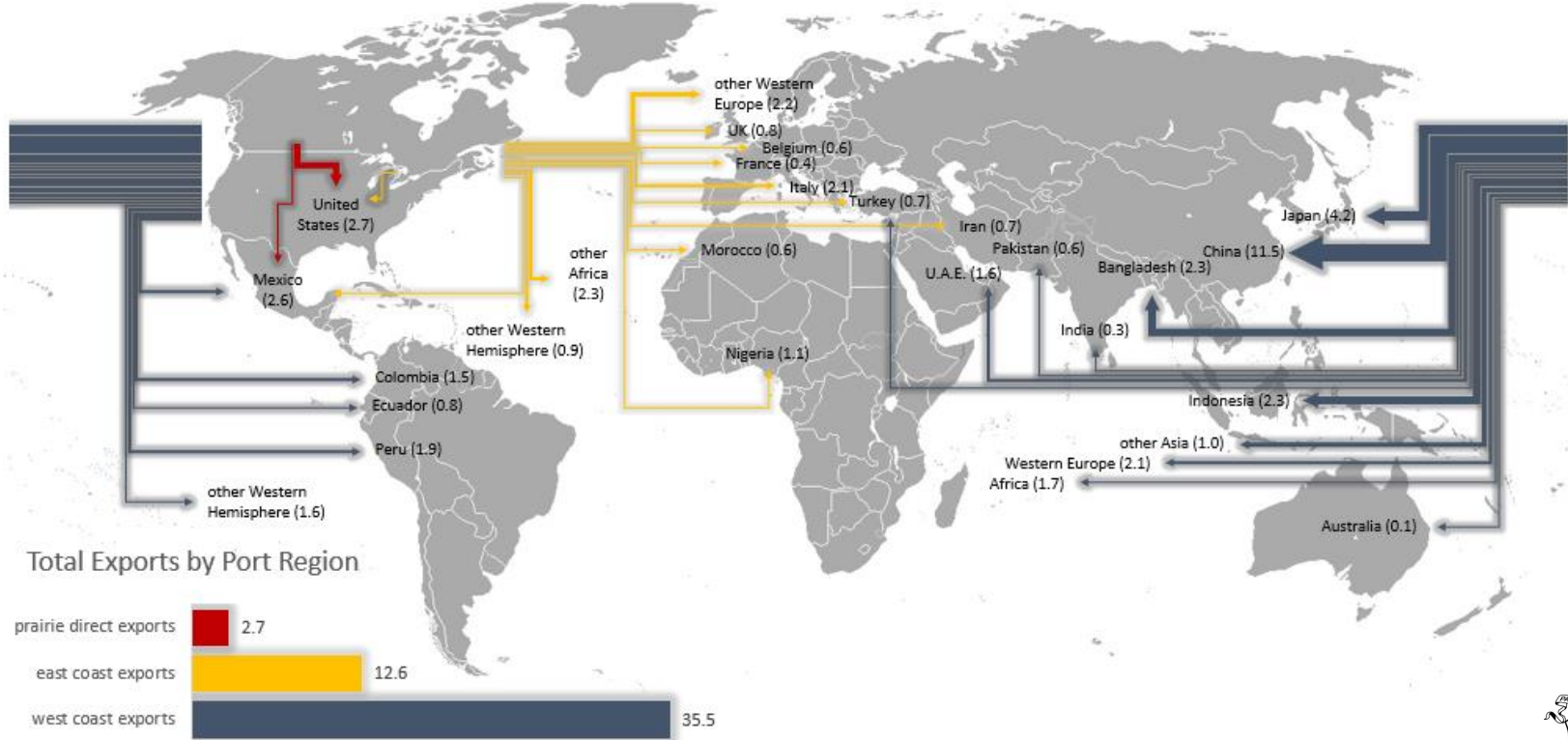


Prairie Crop Production



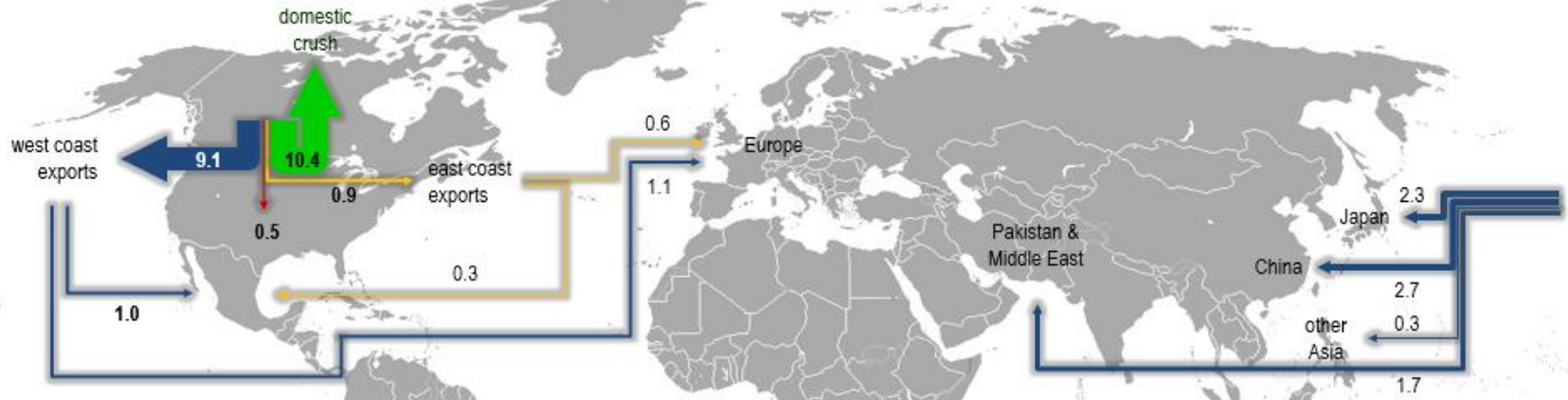
Exports from CGC Licensed Facilities by Port Region and Destination

2020/2021 Crop Year
million metric tonnes



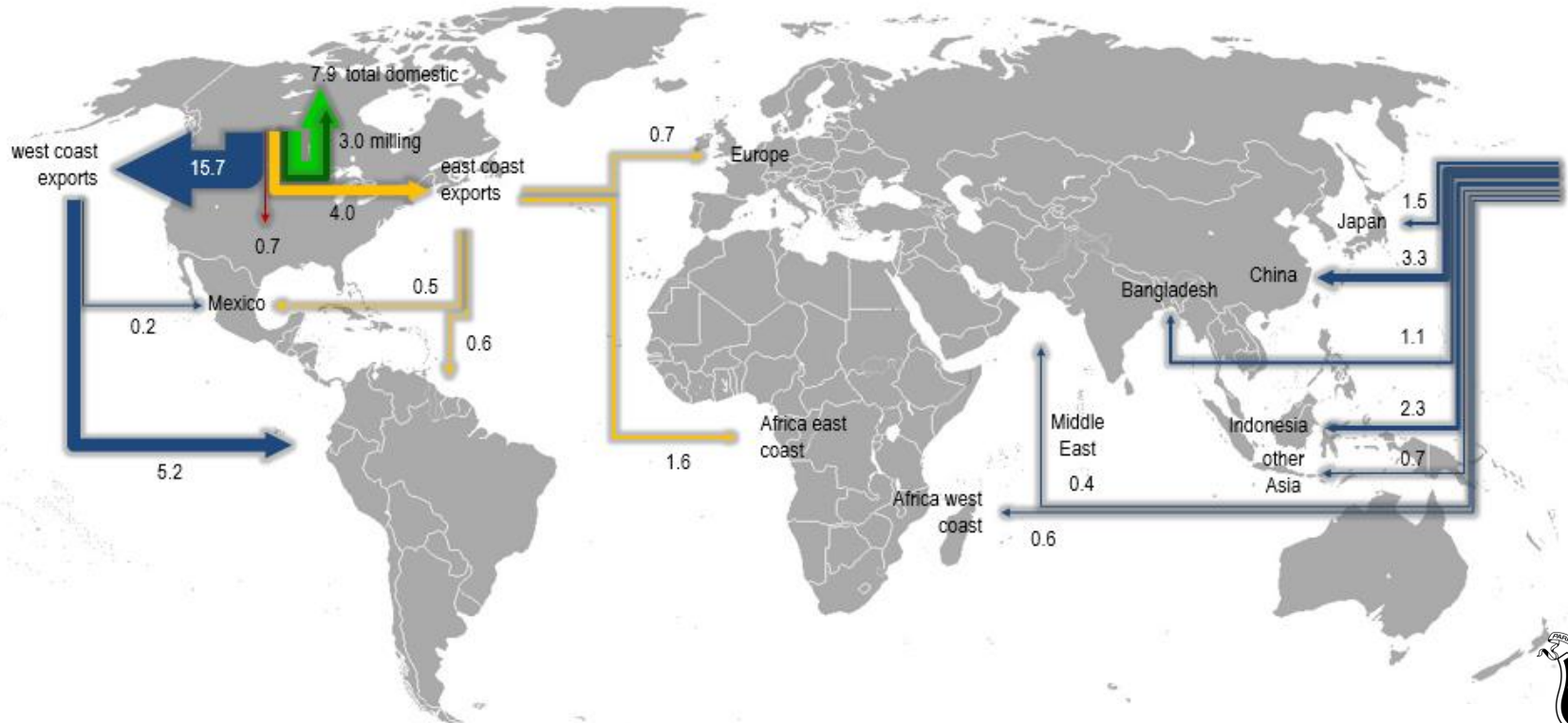
Canola Product Flow

(2020/2021 crop year, in millions of tonnes)



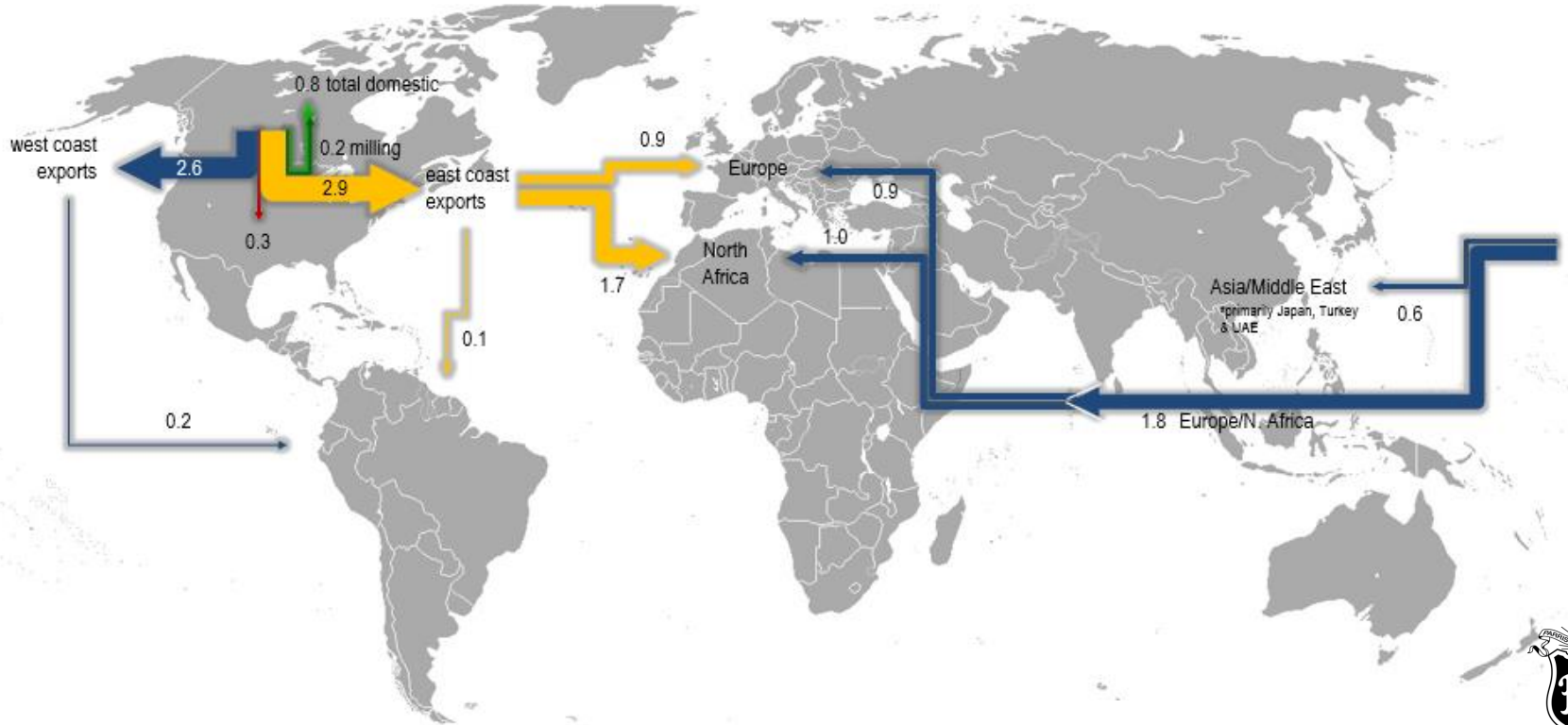
Wheat (exc. Durum) Product Flow

(2020/2021 crop year, in millions of tonnes)



Durum Wheat Product Flow

(2020/2021 crop year, in millions of tonnes)

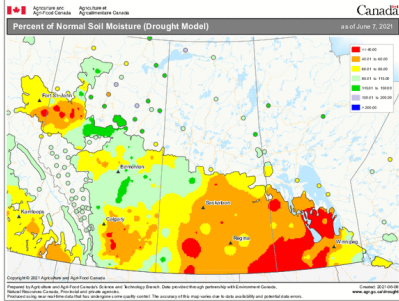


Prairie Region Soil Moisture

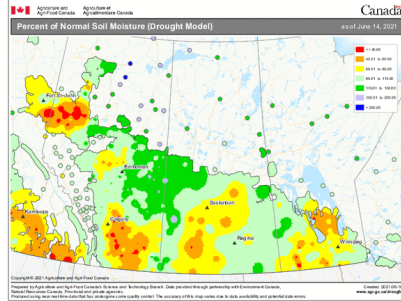
(June & July 2021)

June

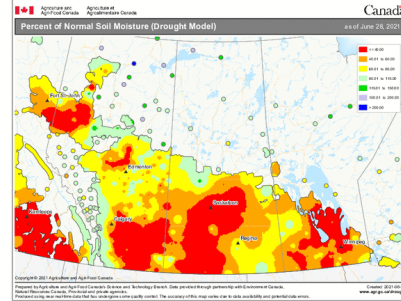
June 7, 2021



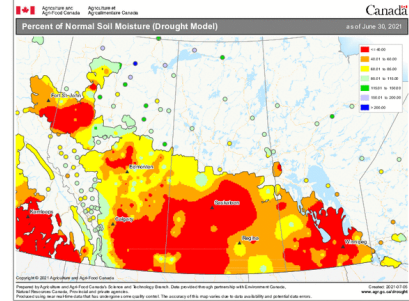
June 14, 2021



June 28, 2021

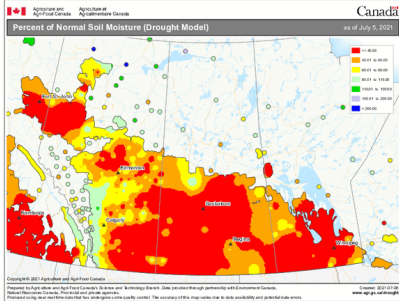


June 30, 2021

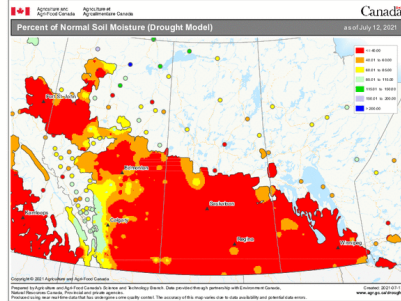


July

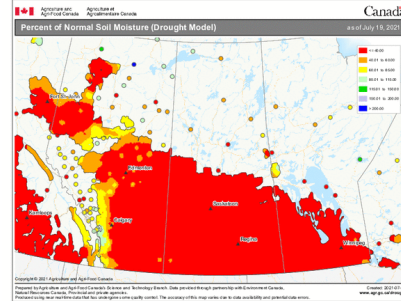
July 5, 2021



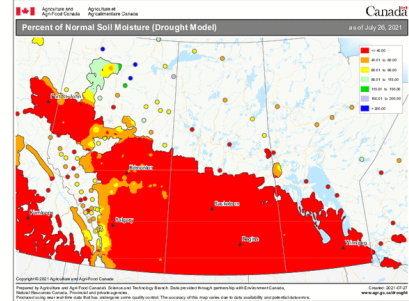
July 12, 2021



July 19, 2021



July 26, 2021

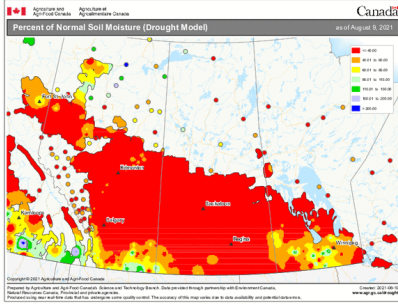


Prairie Region Soil Moisture

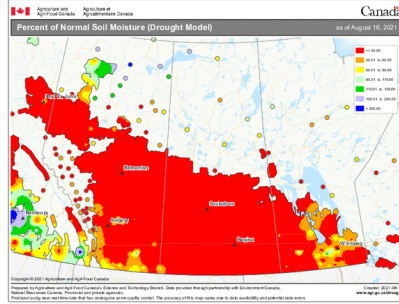
(August & September 2021)

August

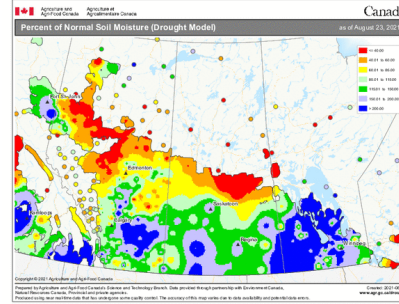
August 9, 2021



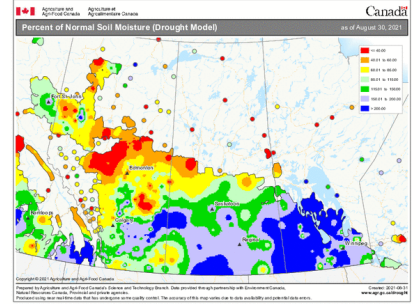
August 16, 2021



August 23, 2021

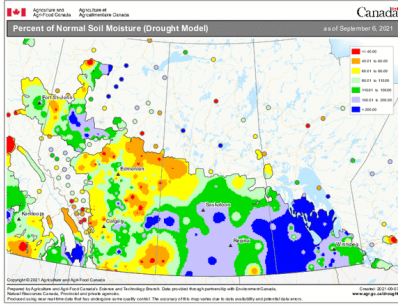


August 30, 2021

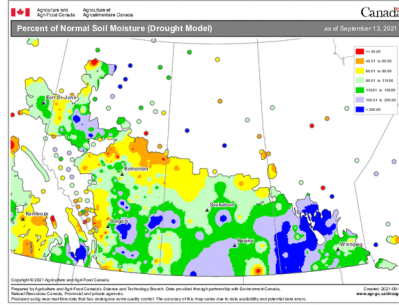


September

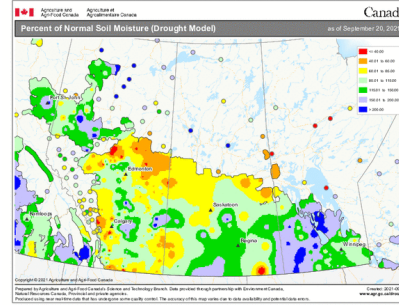
September 6, 2021



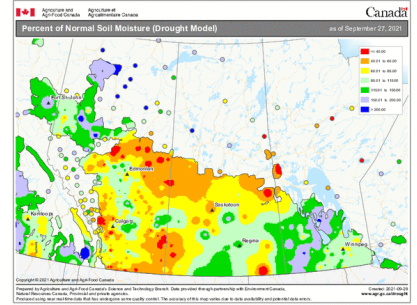
September 13, 2021



September 20, 2021



September 27, 2021

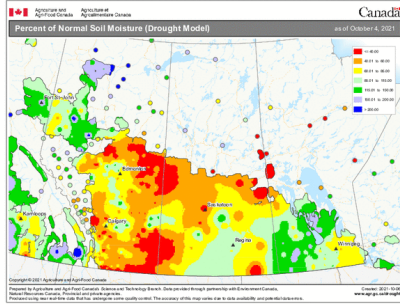


Prairie Region Soil Moisture

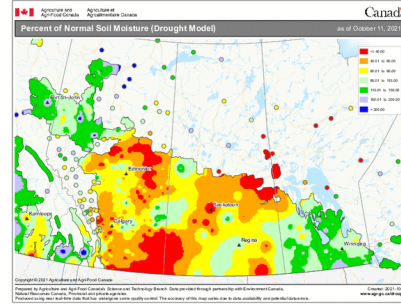
(October 2021)

October

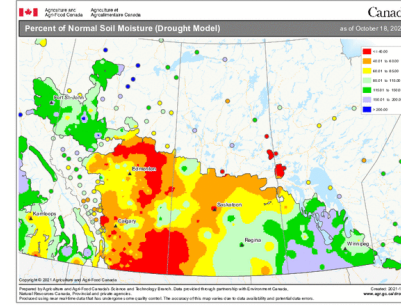
October 4, 2021



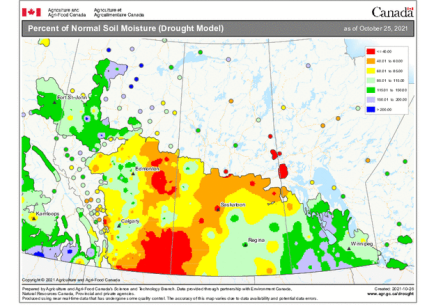
October 11, 2021



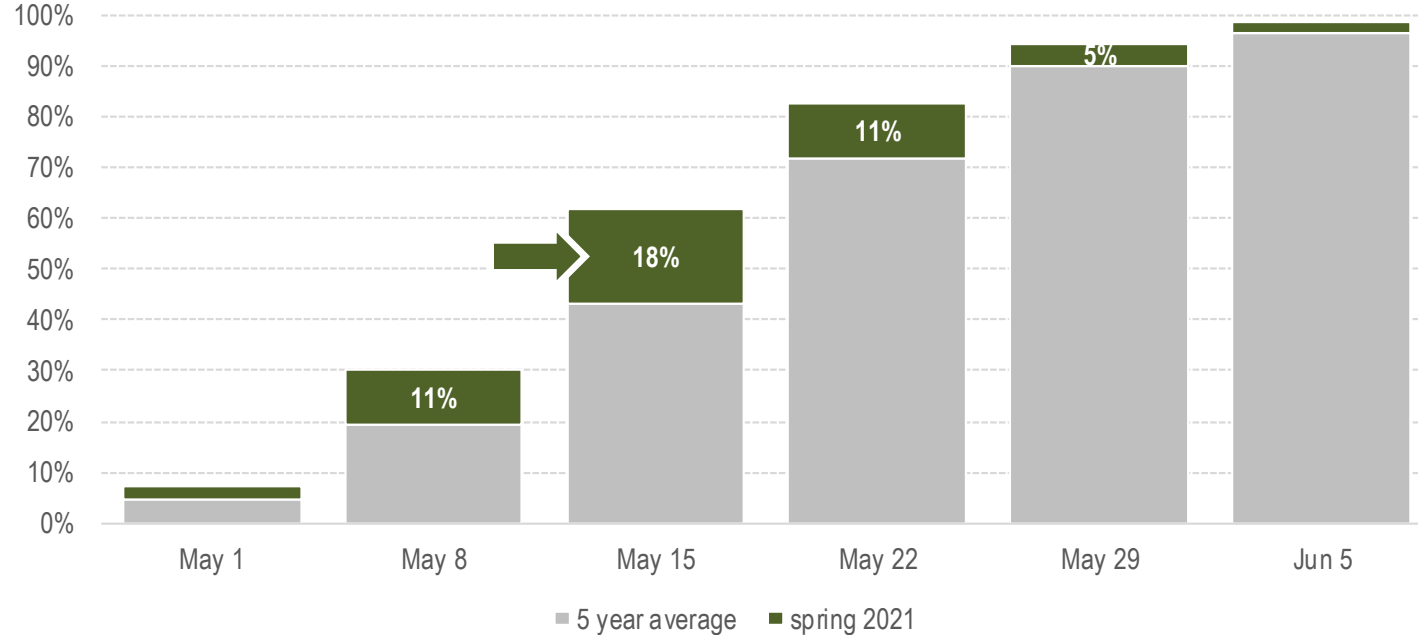
October 18, 2021



October 25, 2021



Prairie Crop Planting Progress vs. 5 Year Average

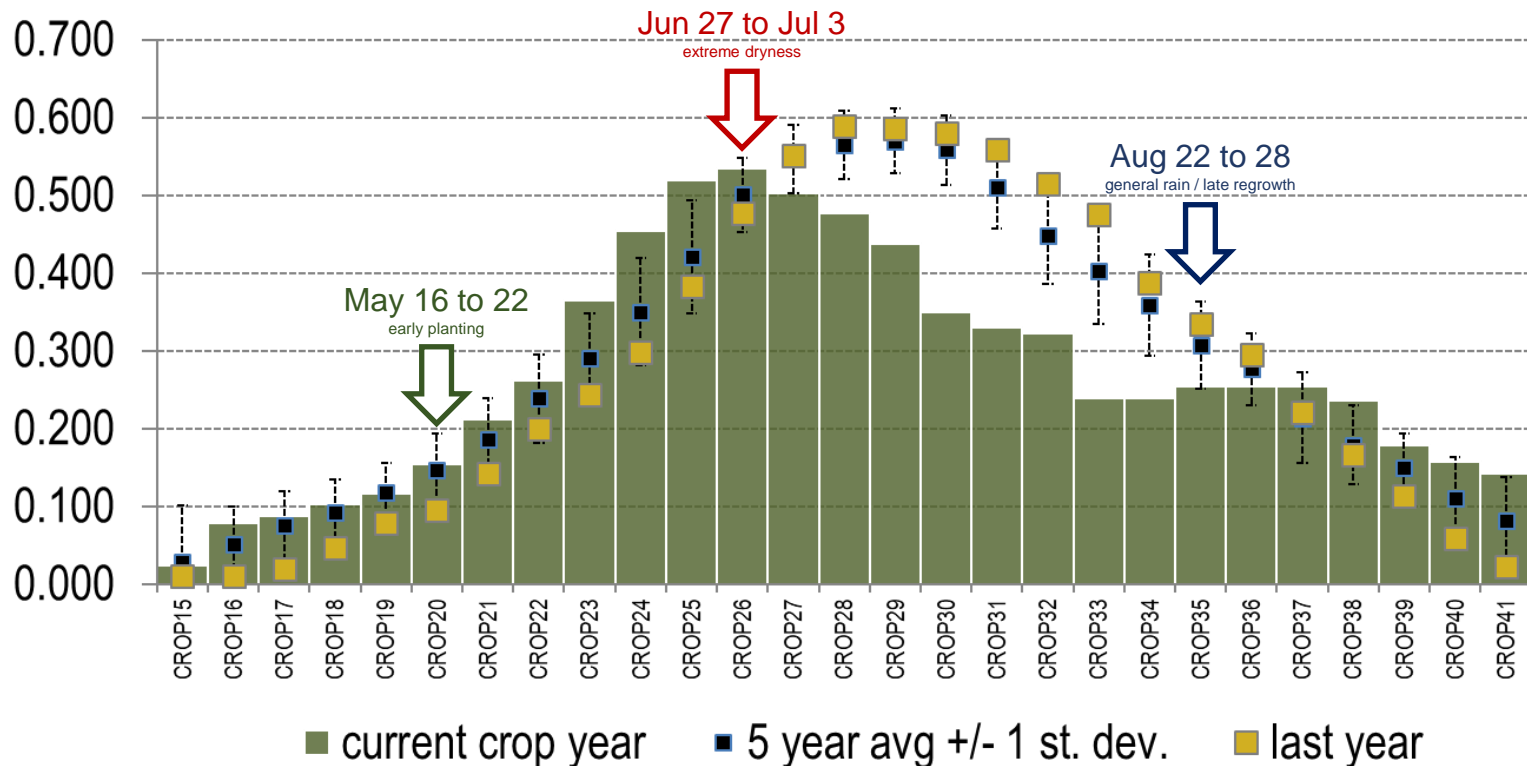


additional 18% of crop area planted by mid May vs. 5 year average



Cropland NDVI: Overall Prairie Region Average

NDVI: Normalized Difference Vegetation Index

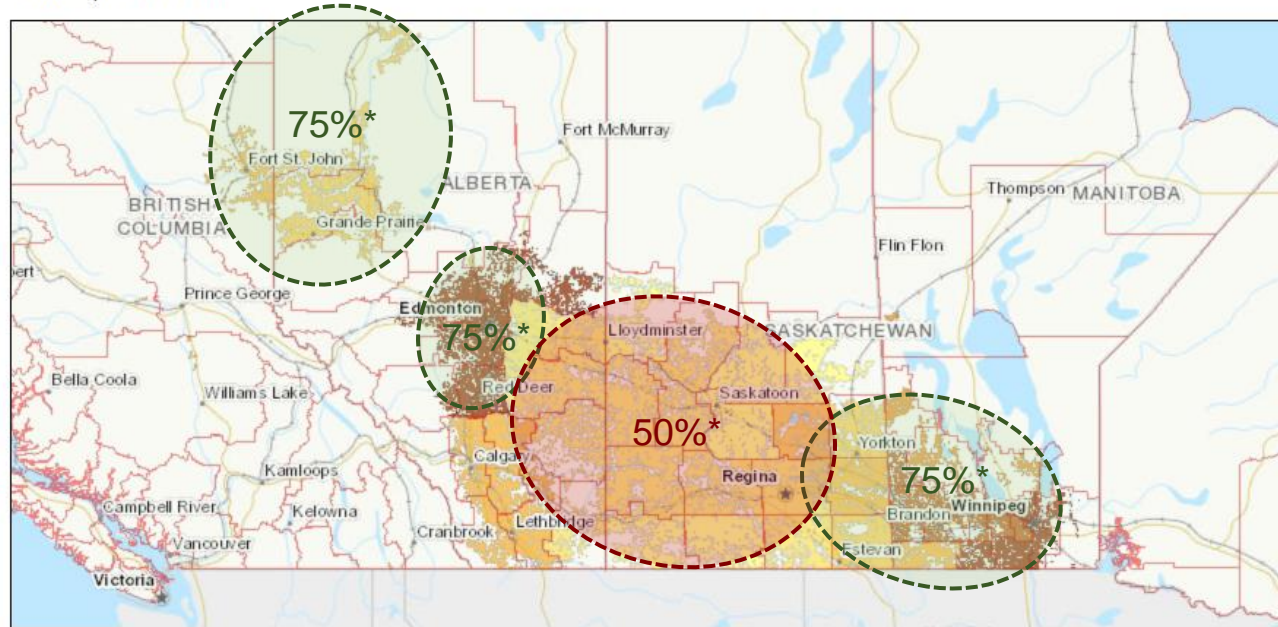


Spring Wheat Yields

Statistics Canada Crop Metric Application

Crop: Spring Wheat

Date: September 2021



*general regional
canola, wheat,
barley, pea yields
vs. 5 year
average based on
Statistics
Canada
September
estimates

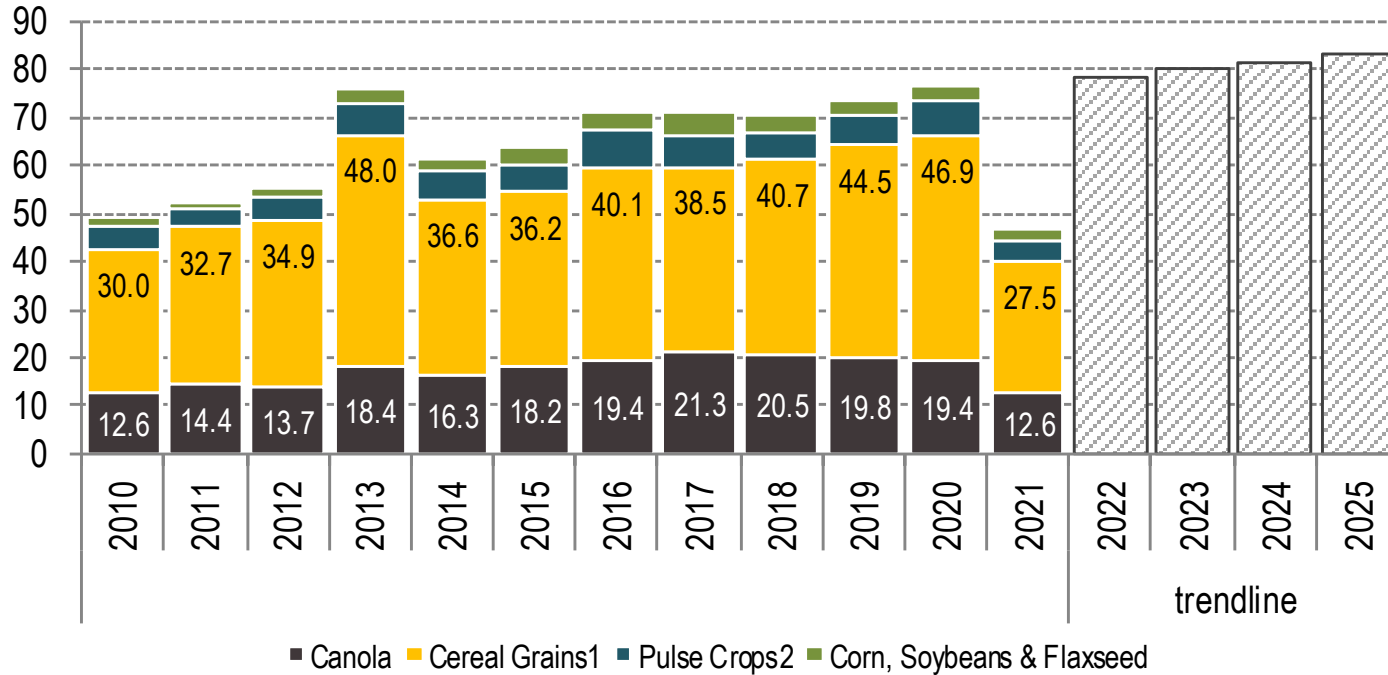
Crop Yield Information

Forecasted Median Crop Yield (Spring Wheat: bushels/acre (tonnes/hectare))



Prairie Production of 9 Major Crops

million tonnes



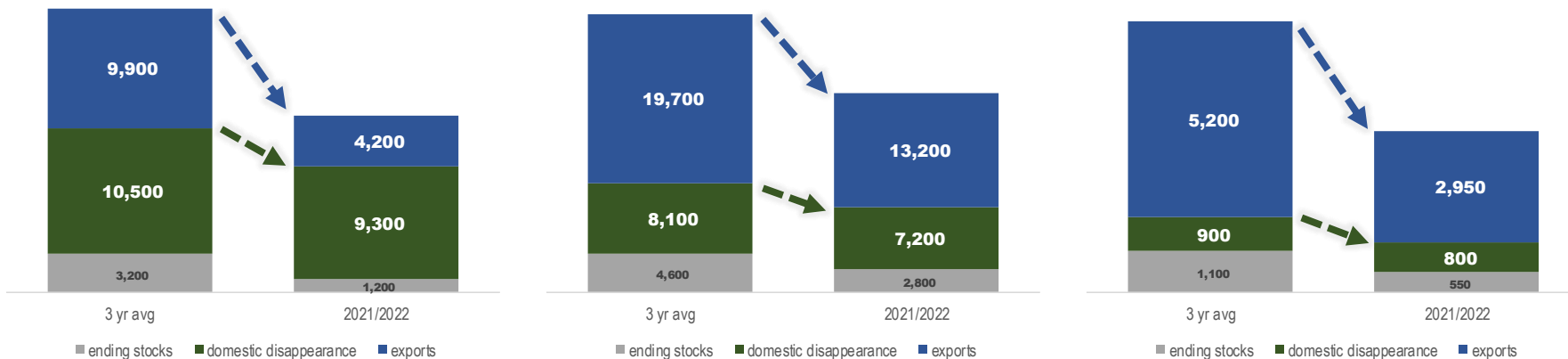
¹ includes all wheat, barley and oats

² includes dry peas and lentils



Exports, Domestic Use and Stocks Scenario

canola, wheat and durum 2021/2022 crop year vs. 3 year average



Canola

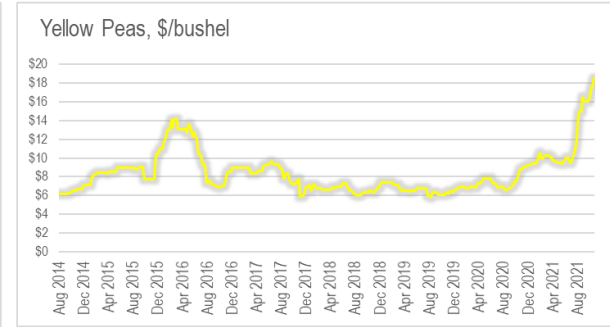
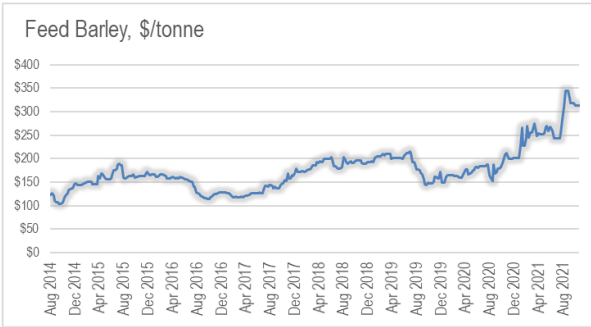
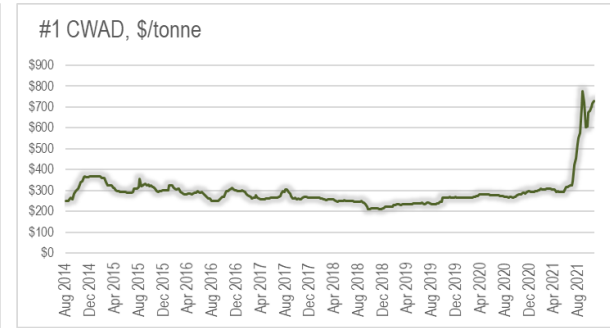
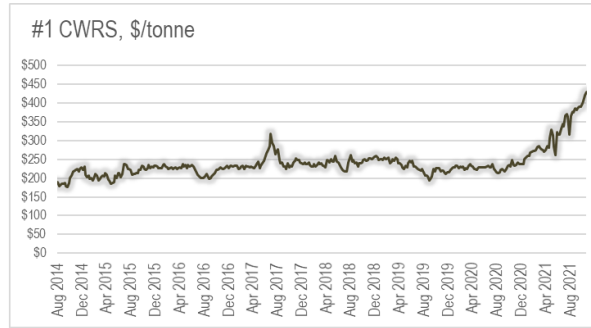
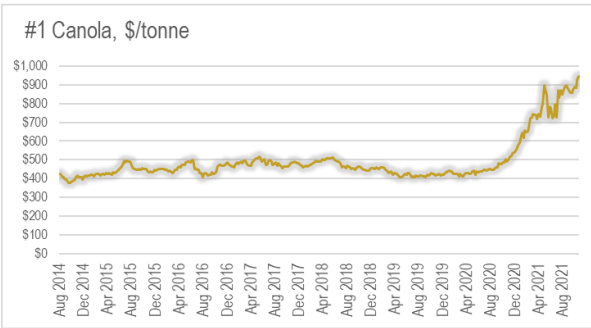
Wheat

Durum



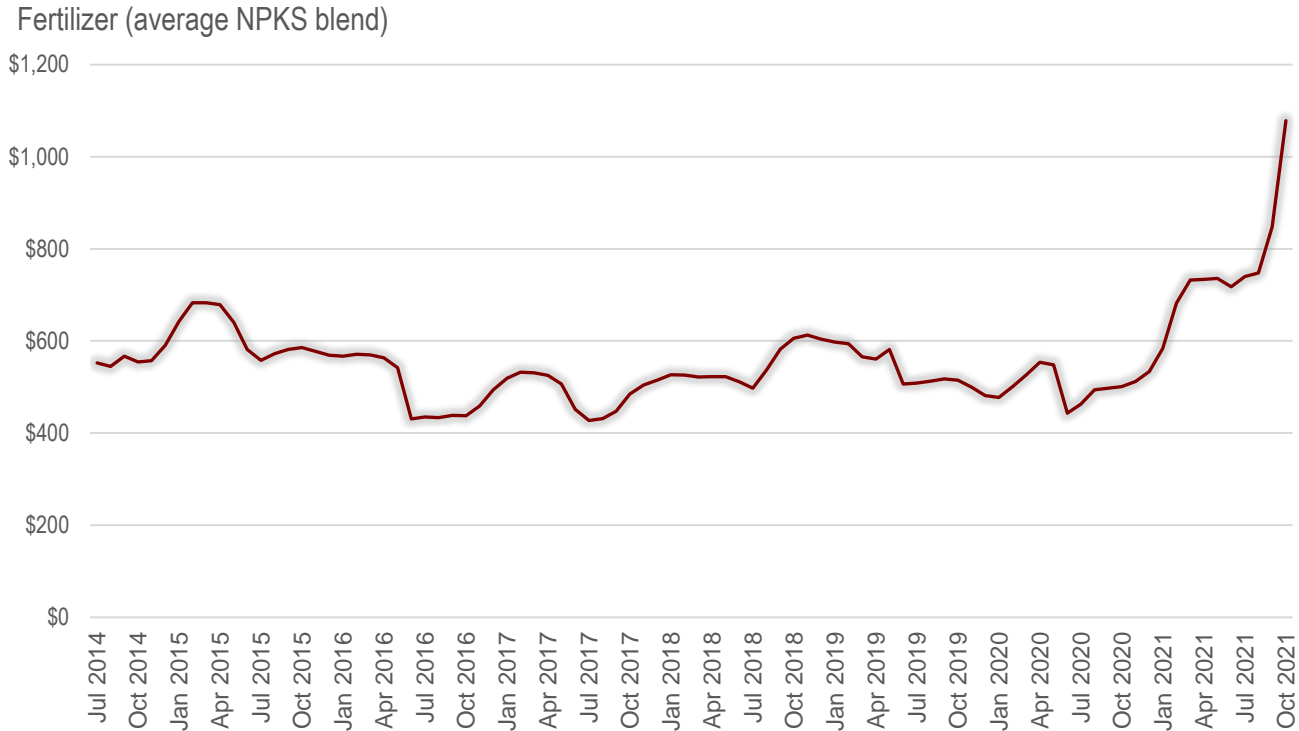
Strong Crop Prices...

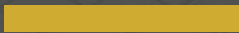
Saskatchewan Cash Prices



...Rising Input Costs

grain cost of production and dollars at risk increasing significantly





Canola Crush Expansion



Canola Headlines

BP invests in renewable diesel production at Cherry Point Refinery

Published 14th October, 2021



EXCLUSIVE Exxon, Chevron look to make renewable fuels without costly refinery upgrades -sources

Imperial to produce renewable diesel at Strathcona refinery

Imperial is moving forward with plans to construct a world-class renewable diesel complex at its Strathcona refinery near Edmonton, Alberta. This new complex is expected to produce more than 1 billion litres per year of renewable diesel from locally sourced and grown feedstocks. The project is expected to realize about 3 million tonnes per year in emissions reductions in the Canadian transportation sector.



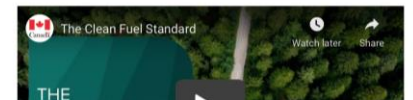
cleanBC
our nature. our power. our future.

Roadmap to 2030

Clean Fuel Standard



The Clean Fuel Standard (CFS) is an important part of Canada's climate plan to reduce emissions, accelerate the use of clean technologies and fuels, and create good jobs in a diversified economy.

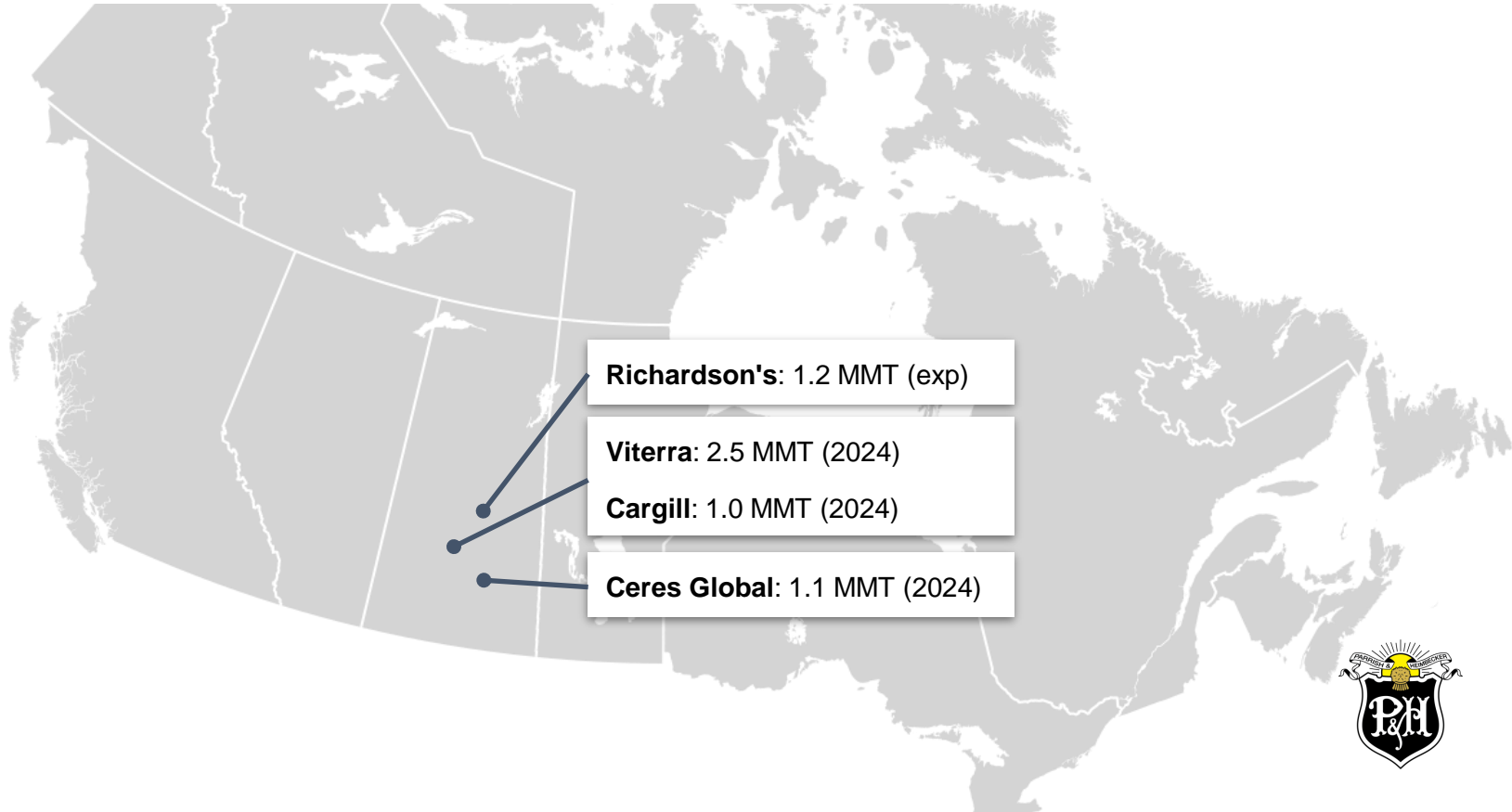


Canola 1o1

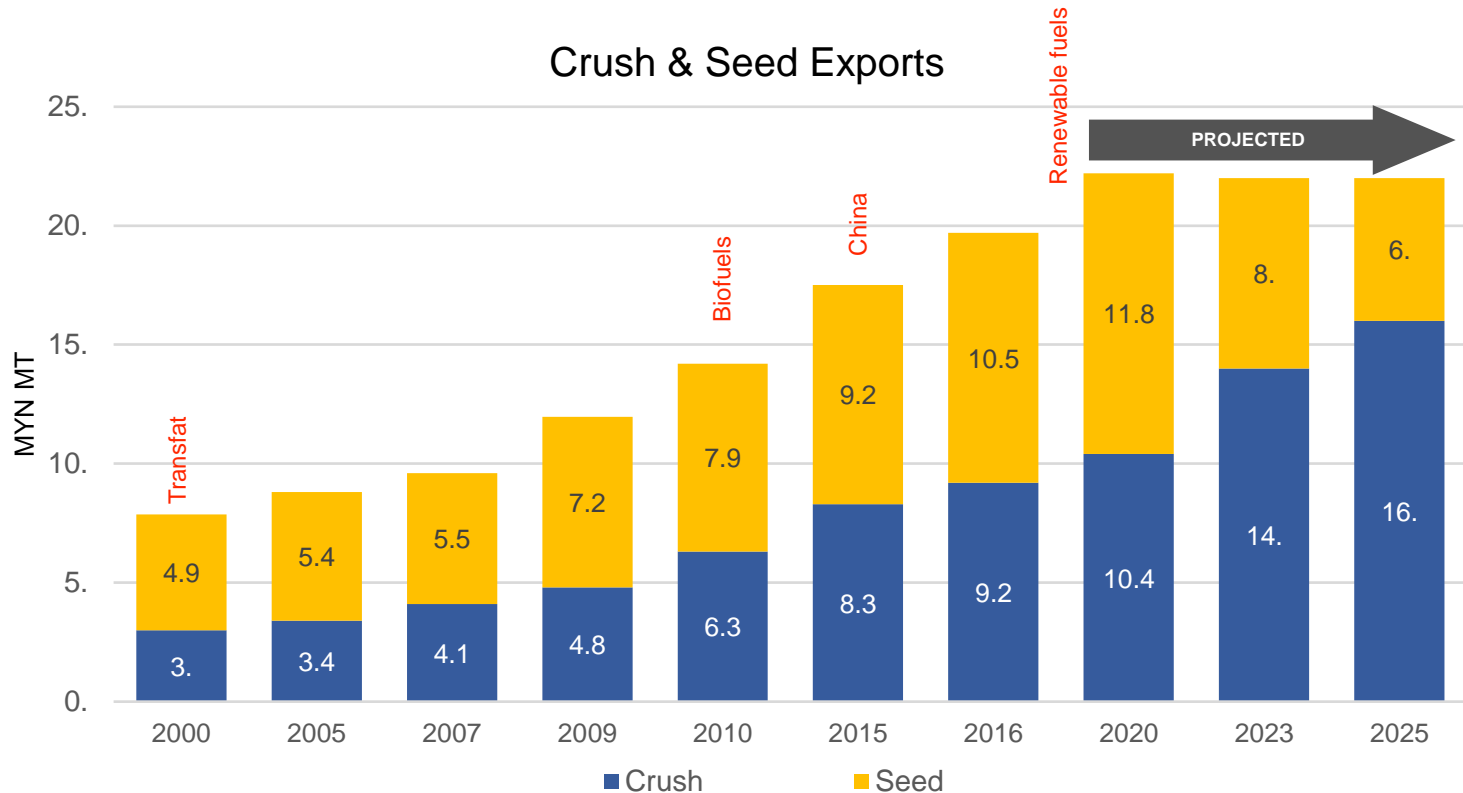
- Canola is a seed that can be separated into about 43% oil and 57% protein meal.
- ~ 12% of the canola grown in Canada is consumed in Canada.
- The protein is pelletized and requires special handling vs grain, and requires special storage and handling.



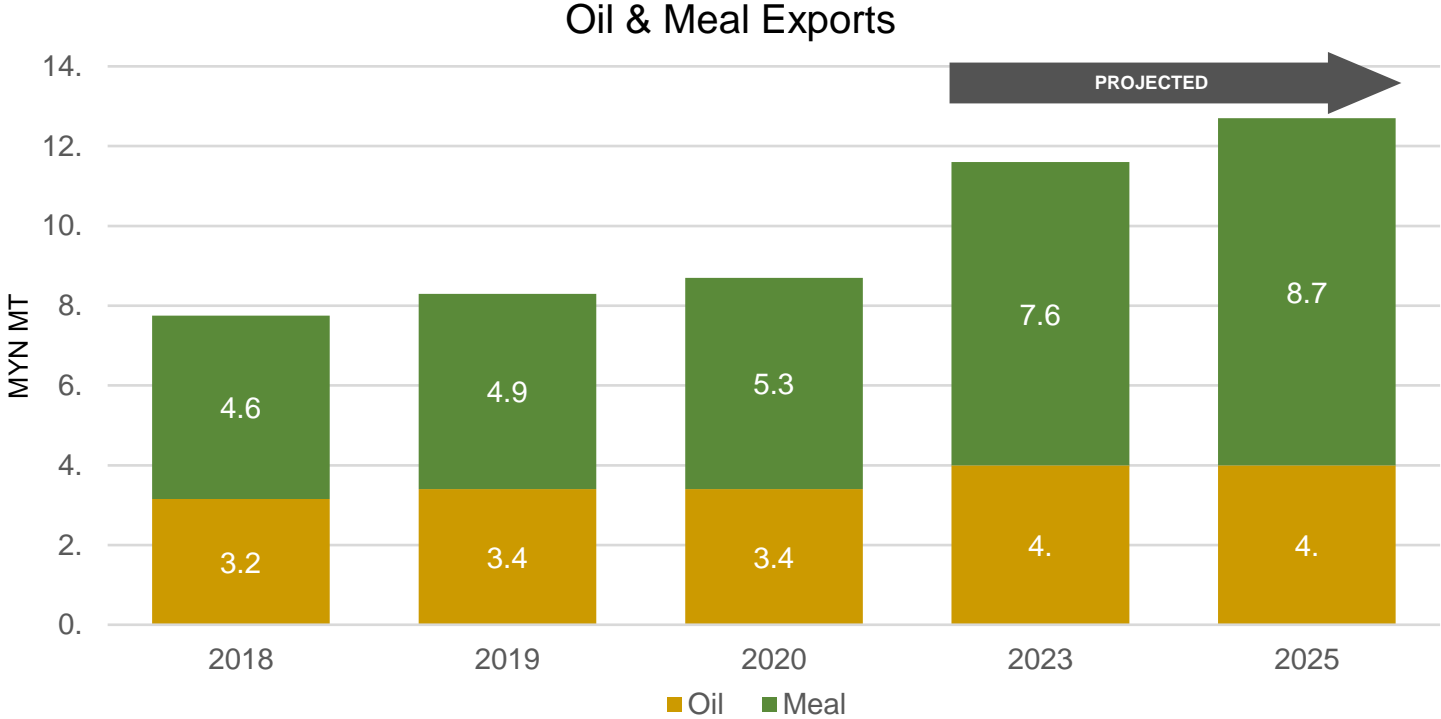
Announced Canola Investments



As Canadian canola crush expands... seed exports projected to drop. Most of that reduction will be through the Port of Vancouver



Partially Offset by Increased Meal & Oil Exports Requiring Specialized Handling Facilities at the West Coast.



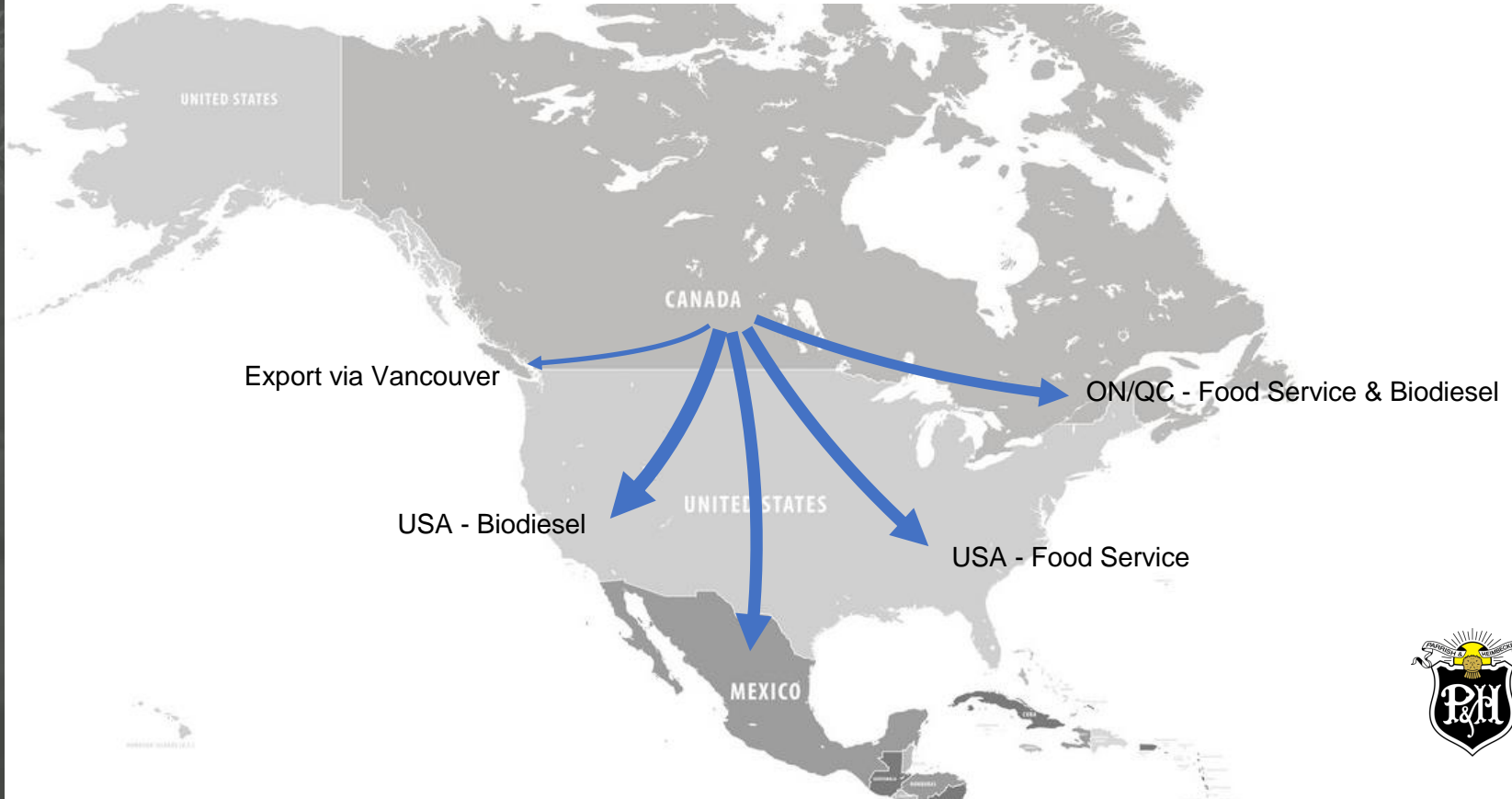
Source: COPA Oil & Meal Total Exports 2018-2020



Where do products go? Meal



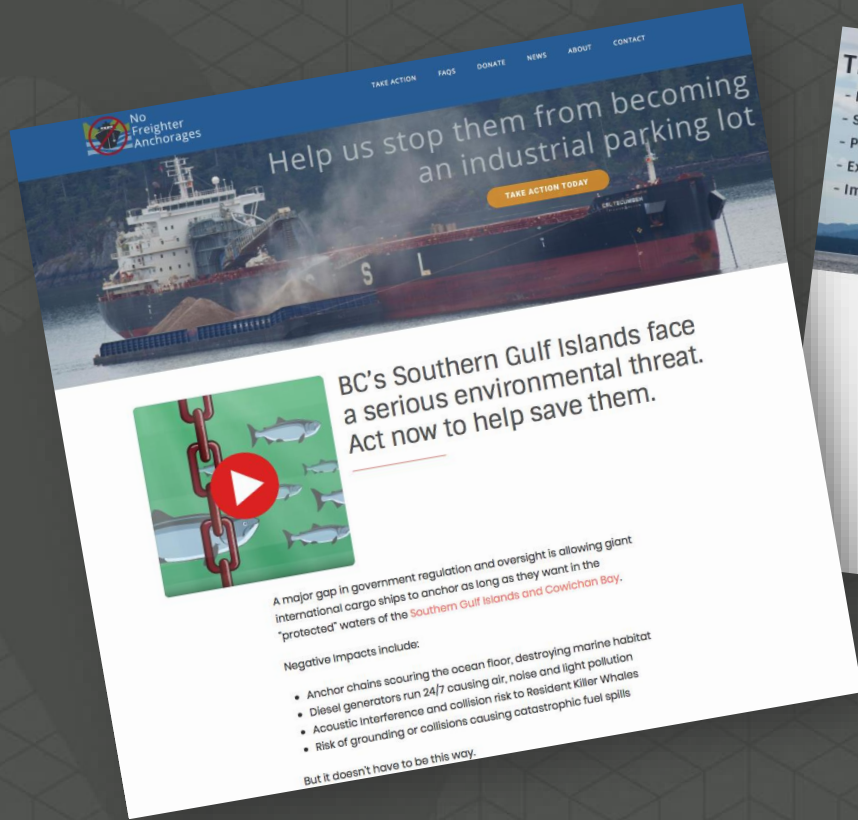
Where do products go? Oil



Anchorage Issues and Low Hanging Fruit



PUBLIC OPPOSITION




TAKE ACTION FAQs DONATE NEWS ABOUT CONTACT

No Freighter Anchorages

Help us stop them from becoming an industrial parking lot

TAKE ACTION TODAY

BC's Southern Gulf Islands face a serious environmental threat. Act now to help save them.

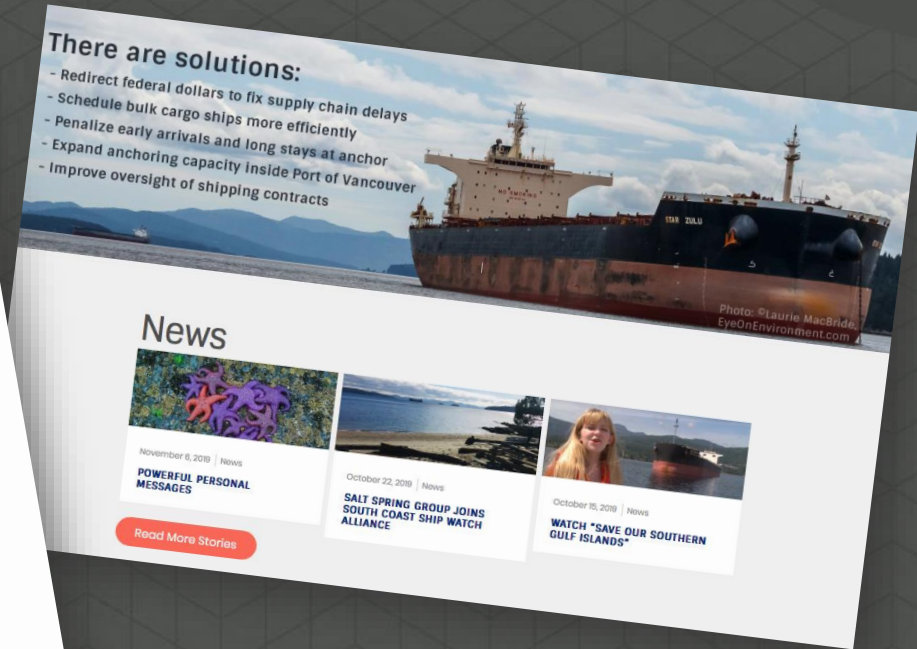


A major gap in government regulation and oversight is allowing giant international cargo ships to anchor as long as they want in the "protected" waters of the [Southern Gulf Islands and Cowichan Bay](#).

Negative Impacts include:

- Anchor chains scouring the ocean floor, destroying marine habitat
- Diesel generators run 24/7 causing air, noise and light pollution
- Acoustic interference and collision risk to Resident Killer Whales
- Risk of grounding or collisions causing catastrophic fuel spills

But it doesn't have to be this way.



There are solutions:

- Redirect federal dollars to fix supply chain delays
- Schedule bulk cargo ships more efficiently
- Penalize early arrivals and long stays at anchor
- Expand anchoring capacity inside Port of Vancouver
- Improve oversight of shipping contracts

Photo: ©Laurie MacBride, EyeOnEnvironment.com

News

November 6, 2019 | News
POWERFUL PERSONAL MESSAGES

October 22, 2019 | News
SALT SPRING GROUP JOINS SOUTH COAST SHIP WATCH ALLIANCE

October 15, 2019 | News
WATCH "SAVE OUR SOUTHERN GULF ISLANDS"

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Active Vessel Traffic Management Goals

- Reduce transits between Van Isle and Van Harbour
- Reduce time spent at Anchorage

Challenge

- Hard to do with growing volumes and complex supply chain with LD rail connections over mountains in a Canadian winter.

Question

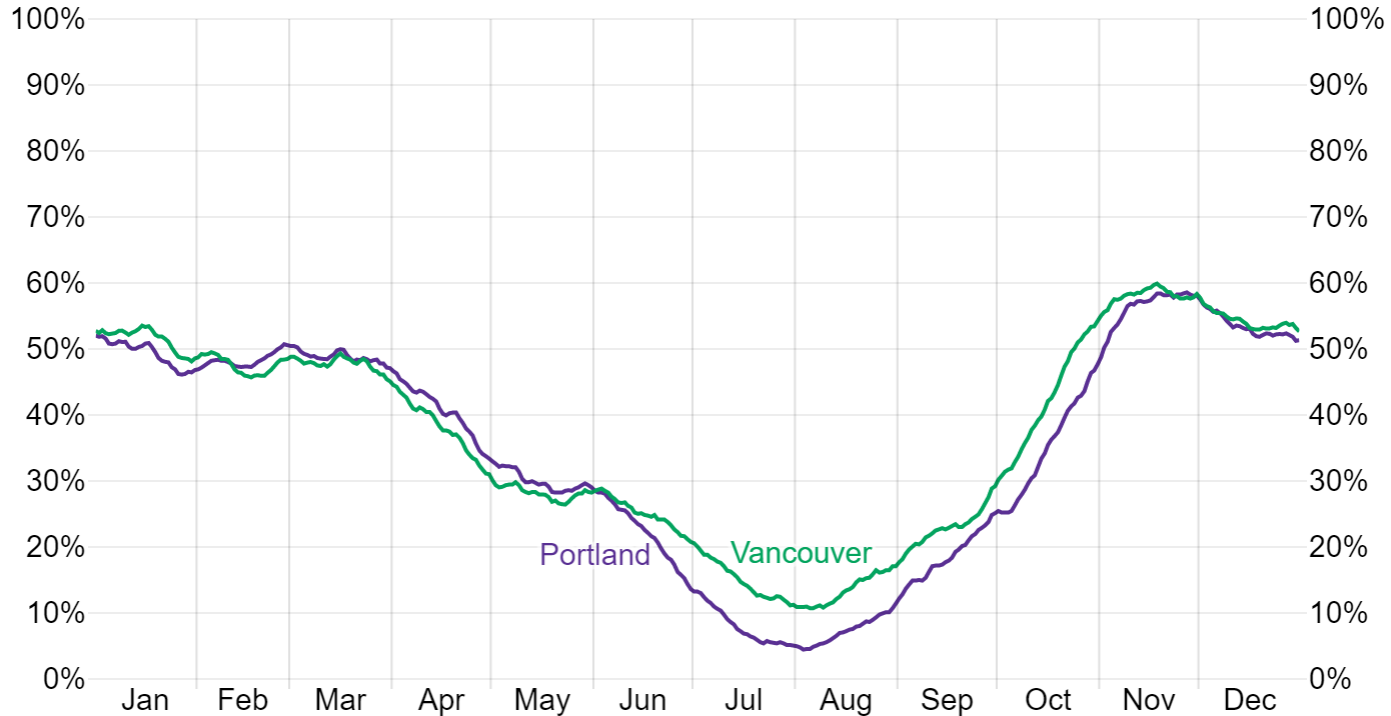
- What if we could improve anchorage utilization for grain vessels with a simple change without spending a dime?



Chance of Precipitation in Portland and Vancouver

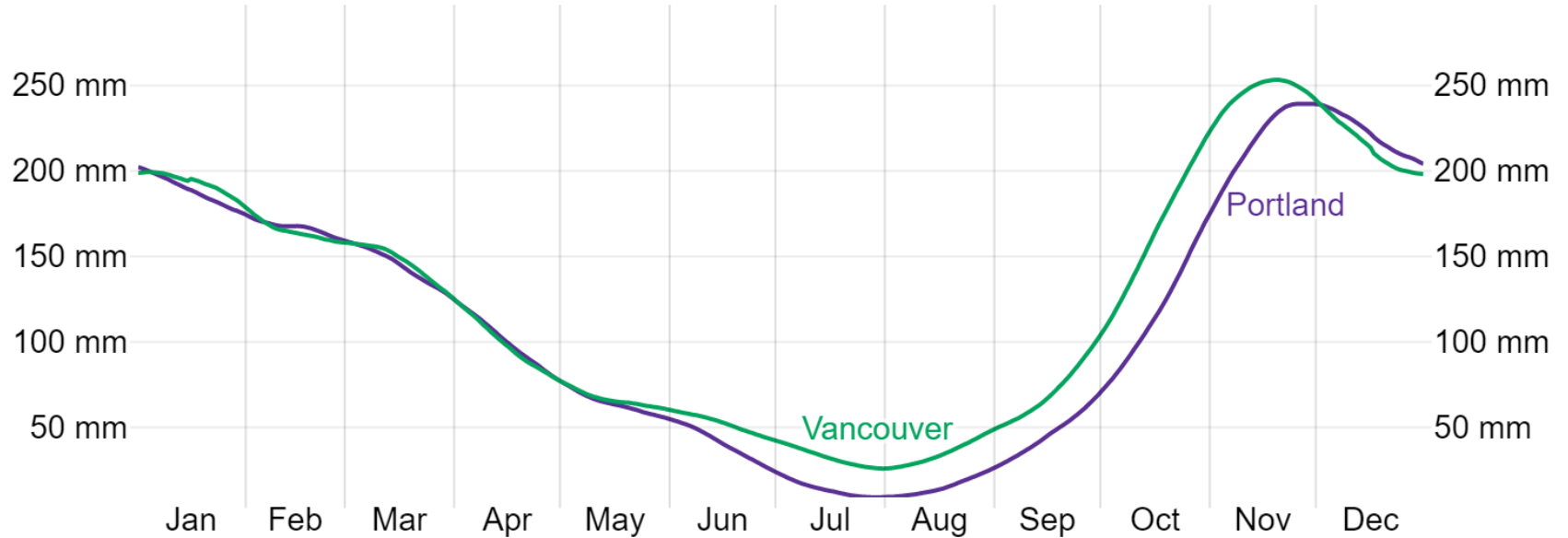
the percentage of days in which precipitation is observed, excluding trace quantities

[WeatherSpark.com](https://weatherspark.com)

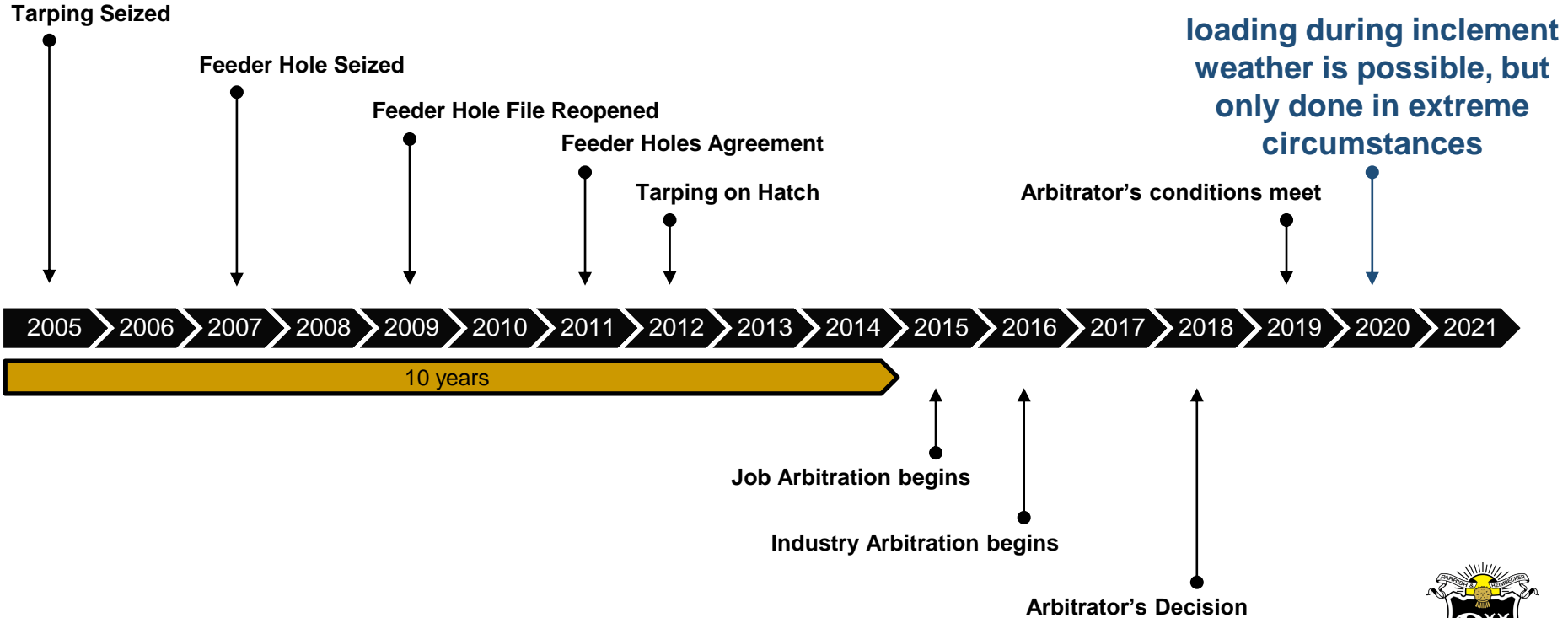


Average Monthly Rainfall in Portland and Vancouver

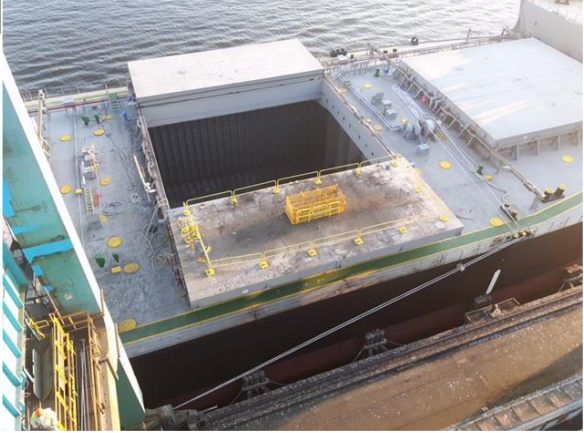
[WeatherSpark.com](https://weatherspark.com)



Simplified Timeline: Feeder Hole Loading

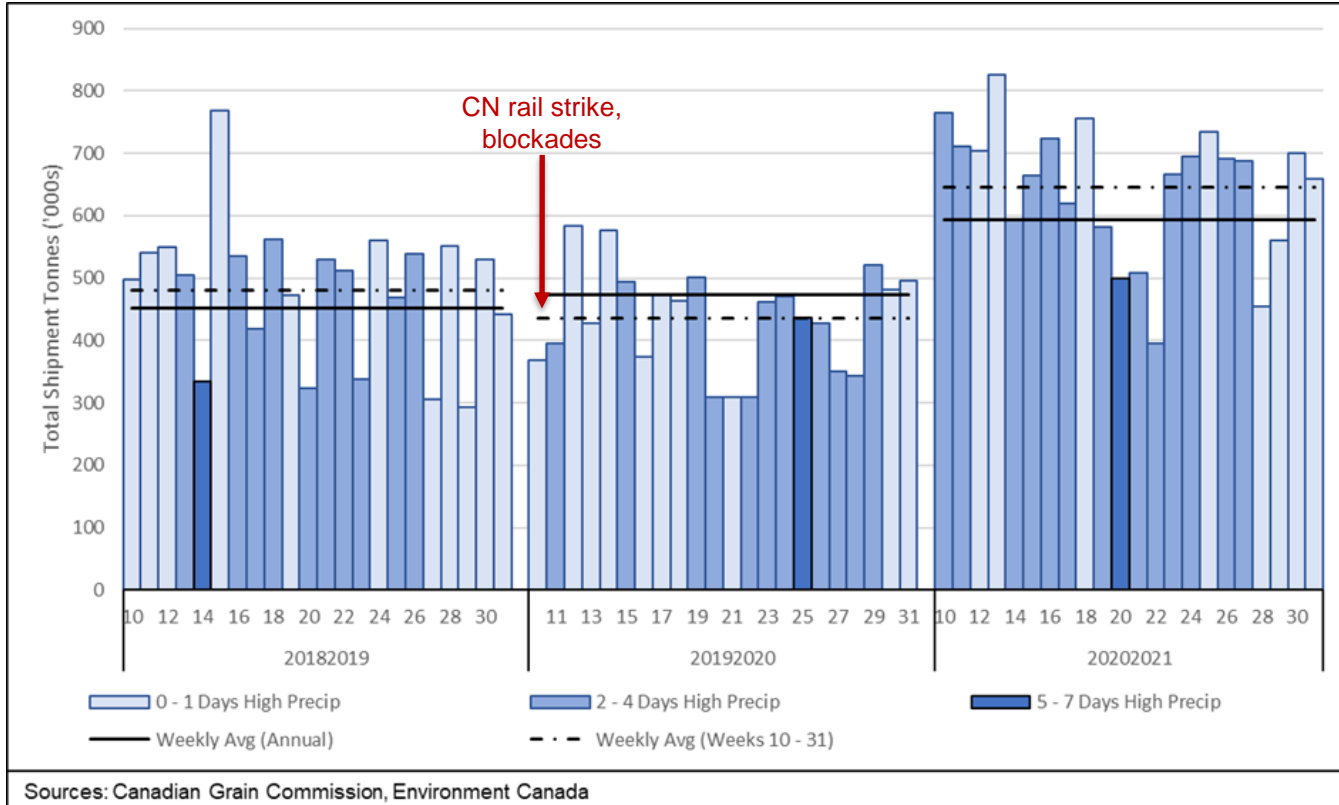


Feeder Hole Loading Protocol



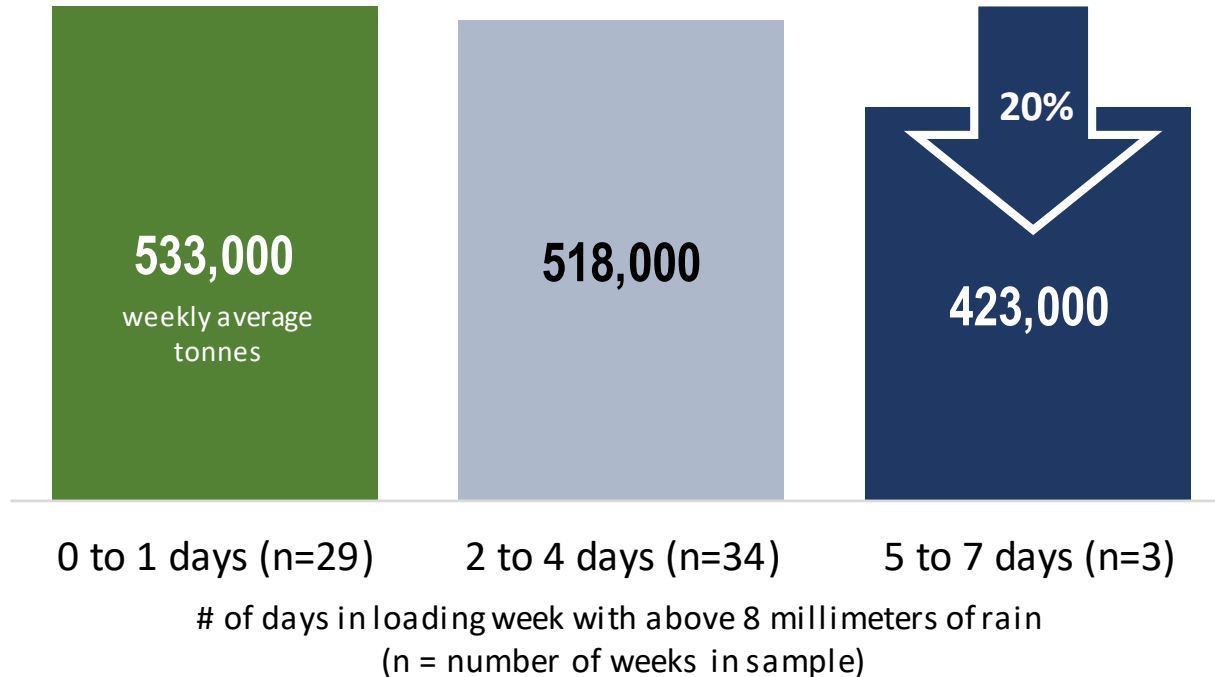
Vancouver Weekly Tonnage Loaded vs. Days with Total Precipitation above 8 millimeters

Source: Quorum Corporation



Vancouver Weekly Tonnage Loaded vs. Days with Total Precipitation above 8 millimeters

Source: Quorum Corporation



Survey of Grain Ships Coming to Vancouver

Source: Colley West Shipping Limited

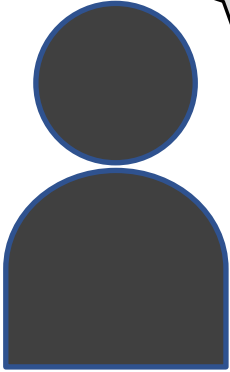
survey of 110 grain ships completed from January to May 2021



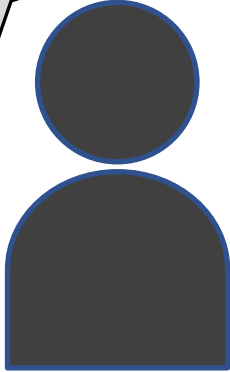
extrapolation for non responses suggests that approximately 75% to 85% of grain ships coming into Vancouver have the ability to load using feeder holes.



Feeder Hole Loading



There's a 70% chance
of rain greater than
5mm in next 24 hours.



Don't bother ordering
labour to load through
feeder holes



CRB Example

- Any delay in loading by vessel shall be subject to a charge of \$12,000.00 for each hour or fraction thereof.
- Cement Hole Loading not an ILWU safety or manning issue
- Any vessel equipped with openings in the hatch covers, commonly referred to as cement holes, will be required to make use of them when needed during loading at the berth. Refusal to use these openings will result in delay of berth charges of \$12,000 per hour or fraction thereof.
- “Rain Letter” not an LOI



Call to Action

- Safety is paramount for all involved.
- Excellent Safety Record in CRB where collective agreement allows continuous operations during rainfall through cement feeder holes
- A more efficient Port means increased capacity and more hours for ILWU not less
- All stakeholders need to come together and get this done perhaps led by VFPA
- Cost of not doing anything is currently \$2K / hr and more time at anchor



Thank you!

