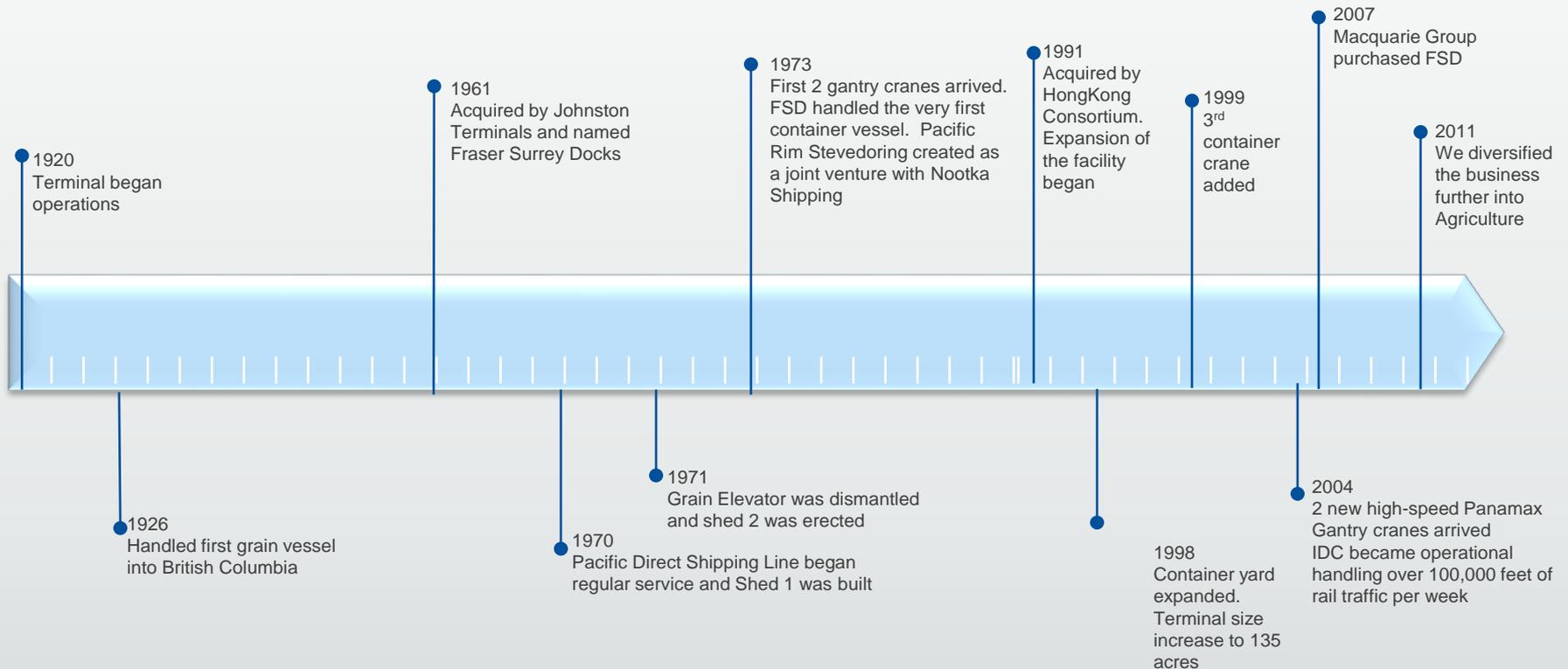




Jeff Scott | FRASER SURREY DOCKS LP

A Presentation to the Port Community Liaison Committee

The History of Fraser Surrey Docks



Macquarie's Global Ports Investments



Through its global portfolio, Macquarie has strong experience in terminal management and extensive relationships with shipping customers.



Vancouver

183-acre break bulk and container terminal



Pisto

Oil terminals and storage facilities in Northern France



TanQuid

German's largest independent oil and chemical tank provider



Gdansk

Largest container terminal in Poland



Nanjing LTT

Mixed cargo terminal in China, along Yangtze River



Hanjin Terminals

Terminals in Kaohsiung, Osaka, Tokyo, Seattle and Long Beach ports



Busan

Busan New Port, located within Busan Port, the largest port in Korea & a regional shipping hub



IMT Terminals

Liquid bulk handling and storage facilities in US and Canada



Penn Terminals

80-acre break bulk and container terminal



Halifax

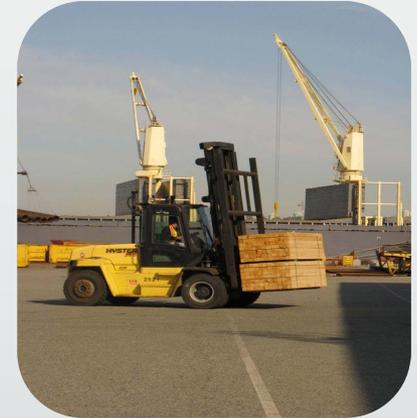
72-acre container terminal



NYK Ports

Terminals in Los Angeles, Montreal, Houston, and New Orleans plus 25 stevedoring operations

A true *Multi-Purpose* Terminal



FSD Capabilities

FSD Infrastructure:

200 Acre terminal including 300,000 square foot of weather sensitive cargo storage

7 Berths (3 for Containers, 2 for Steel and Project Cargo, 1 for Agri, and 1 Dolphin Berth)

4 Dock gantry cranes (3 currently operational) – 80MT lifting capacity

Large fleet of onsite dock equipment for any job, including Reachstackers, Lift-trucks, Bombcarts, Tractor-trailers, Gantry Cranes and Top Picks

Experienced and highly capable labour force, available 24/7

FSD Truck and Rail Access:

2 Dedicated congestion free truck gates, allowing quicker turn times of Breakbulk, Project Cargo and Container Traffic.

With 50,000 feet of rail, FSD has the most efficient rail solution in the Vancouver Gateway

Direct rail access on berth face for cargo going to and from railcars

Our intermodal rail yard has direct access to the Port of Vancouver Holding Tracks which link the terminal to the major railways (CN, CP, and BNSF)

Our own switch crews and 2 locomotive on dock, operated by FSD

Containers

- Current footprint provides an annual operational capacity of 450,000 TEU
- 4 Panamax size gantry cranes with a max. lifting capacity of 66 metric tons with the container spreader
- Large yard with consistent productivity
- Over 300 reefer plugs on dock
- On dock intermodal solution with 9,000 feet of working track



Agri-bulk

- Grains: Barley, Oats, Wheat
- Legumes: Soybeans, Lentils, Peas
- Oilseeds: Flax Seed, Canola Seed
- Animal Feed: Canola Meal, Alfalfa
- Currently handling 1.2 million MTPA



Quick Fact: FSD supports local farmers by sending our extra agriculture products to them at no cost.



EXPORTS OF
GRAIN AND
SPECIALTY
CROPS



Fraser Grain Terminal

- P&H is pursuing a 3.5m mtpa facility to be constructed within the smaller rail loop (Bekeart property) with expansion to 6m mtpa.
- Estimated cost is \$130m. The costs would include a traveling Ship Loader on Berth 2 (Estimate \$30 million).
- P&H has already purchased the Leasehold for the property

Anticipated schedule:

- Permitting – July 2018
 - Construction – 24 months
 - Operational – Q2 2019
-
- Rail requirements are split between manifest and 125 car unit trains. Facility would be the first and only Dry Bulk Agri Facility on the West Coast of Canada to service a unit train without breaking the train.
 - The facility could operate up to 4m mtpa without the construction of the full loop track.
 - The 3.5m mtpa agri volume is considered base line (along with the 10m mtpa of coal) and still provide the following Terminal capacity:
 - Two full loops (master plan) would still be available.
 - The full amount of real estate in the large loop is still available (75.5 acres)
 - All upper berths would still be available. Full build out (6m mtpa) assumes all operations from Berth 2.

Steel

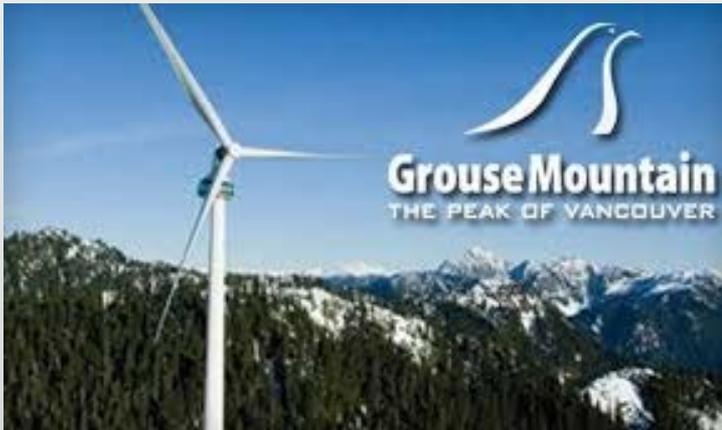
- Can handle over 1.1 million tonnes per year
- Steel represents a large percentage of the total Breakbulk volumes at FSD
- Reputation as the premiere steel handling terminal in the Vancouver Gateway
- Proven track record in handling all steel cargo types
- Experienced and reliable labour force who are motivated to increase productivity while handling cargo safely
- Large yard area with ability to flex between containers and breakbulk



General/Project Cargo

We are a logistics partner with key local, provincial and federal projects:

- Kerr run-of-river hydroelectric project
- Mount Milligan Copper-Gold Mine Cargo
- Husky Sunrise Energy Project
- Conocophillips Surmont phase 2
- Keystone XL pipe project
- Grouse Mountain Wind Energy Turbine project
- Evergreen Line Rail



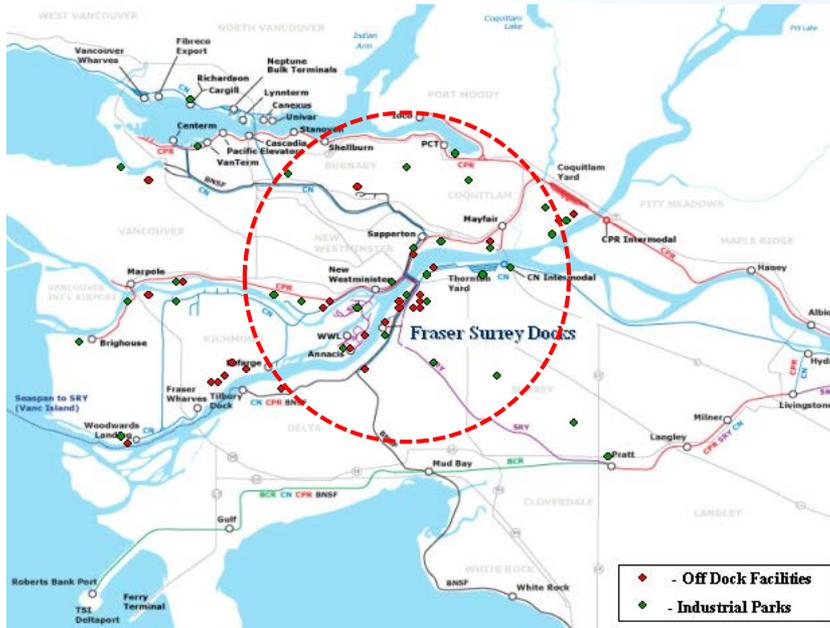
Location of Fraser Surrey Docks

- 6 hours sailing from Pilots station in the Coast Salish Sea linking to the Pacific Ocean Close to the major industrial parks & distribution centers used by container trade
- 2 hours sailing along the Fraser River directly to Pacific Ocean



Terminal Features Overview

- Strategically located in a central location with equal proximity to Vancouver downtown and USA border
- Excellent proximity to all major highways in the area including the adjacent South Fraser Perimeter Road highway
- Access to all mainline railroads (CP, CN, BNSF, SRY) and close proximity to CN and CP rail yards





FRASER RIVER
INDUSTRIAL ASSOCIATION

Fraser River Industrial Association

- Formed in 2015
- In response to the “Economic Importance of the Lower Fraser River” report commissioned by local chambers and boards of trade in July 2014
- Bring together relevant stakeholders to manage and promote the sustainability of the Fraser River for Industrial users

Fraser River Industrial Association is an alliance of marine-dependent businesses operating in and around the lower Fraser River.



Our Mandate

The Fraser River Industrial Association seeks to raise the profile of the lower Fraser River as a key component of our local, provincial and national economies and draw attention to opportunities for sustainable growth and expansion of the Gateway. FRIA will identify opportunities for cohesive action on issues of mutual interest.

FRIA is a representative voice of businesses that operate along the lower Fraser River and will serve as a forum for the exchange of industry news and information.

Fraser River History

- 8,000 BC Sto:lo First Nations
- 1792 Galiano and Valdes first European explorers
- 1808 Simon Fraser navigates and charts the river in its entirety
- 1827 First fur trading post established at Fort Langley
- 1858 Gold found at bottom of Fraser River
- 1864 Dredging of the Fraser River commences
- 1870 First salmon cannery built
- 1891 Construction of CPR - first bridge built over Fraser River
- 1894 7.85m Record flood in Mission - dyking system constructed
- 1913 Rockslides at Hell's Gate during CN Rail construction
- 1920 Sumas Lake drained to create 10,000 acres of farmland
- 1948 Massive flood breaks dykes and floods communities
- 1979 Debris trap installed near Hope to catch 100,000 cubic meters of wood annually
- 1998 Fraser River named a Canadian Heritage River
- 2012 A 500 kilo, 3.7 meter sturgeon caught and released in Fraser River
- 2015 Fraser River Industrial Association is formed

THE MIGHTY FRASER

The Lower Fraser River stretches from the mouth of the Fraser to the beginning of the Fraser Canyon, at Hope;

1,375 km	The longest river in BC
3,475 m ³	Average flow of water per second
20 Million	Tons of sediment discharged into the sea annually
300,000	People live in the flood plain of the lower Fraser River
2.9 Million	2/3 Of British Columbians live in the Fraser Basin

10%

80%

Economic activity along the river accounts for 80% of the provincial and 10% of the national gross domestic product

25%

Drains 25% of the province

The longest river in BC

FRASER RIVER PORT FACTS

In 2016, the lower Fraser River port, shipping and related activities supported:

55,500 jobs

\$3.4 billion in wages

\$5.6 billion in GDP

\$12 billion in Economic Output

PORT OF VANCOUVER

- Canada's largest and busiest port
- Canada's main ocean gateway to the Pacific
- Trades approximately \$200 billion in goods annually
- Handled 142.1 million tonnes of cargo in 2017



54%

Port jobs pay well. The average annual compensation per person related to port activity is \$68,000 – 54% greater than the average Canadian wage.

How can the Fraser River help?

- Immediate and cost effective access to existing infrastructure
- Availability of land, in industrial settings ready to support growth and expansion
- Existing marine highway to alleviate congestion and provide access from sand heads to Mission
- Existing link to the Asia-Pacific, and can facilitate Canada's increasing trade and support BC's Economy



Rivers are Important to our Overall Existence

- **Key transportation routes**
- **Facilitate trade and commerce**
- **Allowed for exploration and development of communities**
- **Movement of people and communities**
- **Recreation areas**
- **Provide food and sustenance**
- **Carry water and nutrients**
- **Habitat for fish, wildlife, birds and organisms**
- **Drainage for surface water**
- **Recreation areas**
- **Energy source**

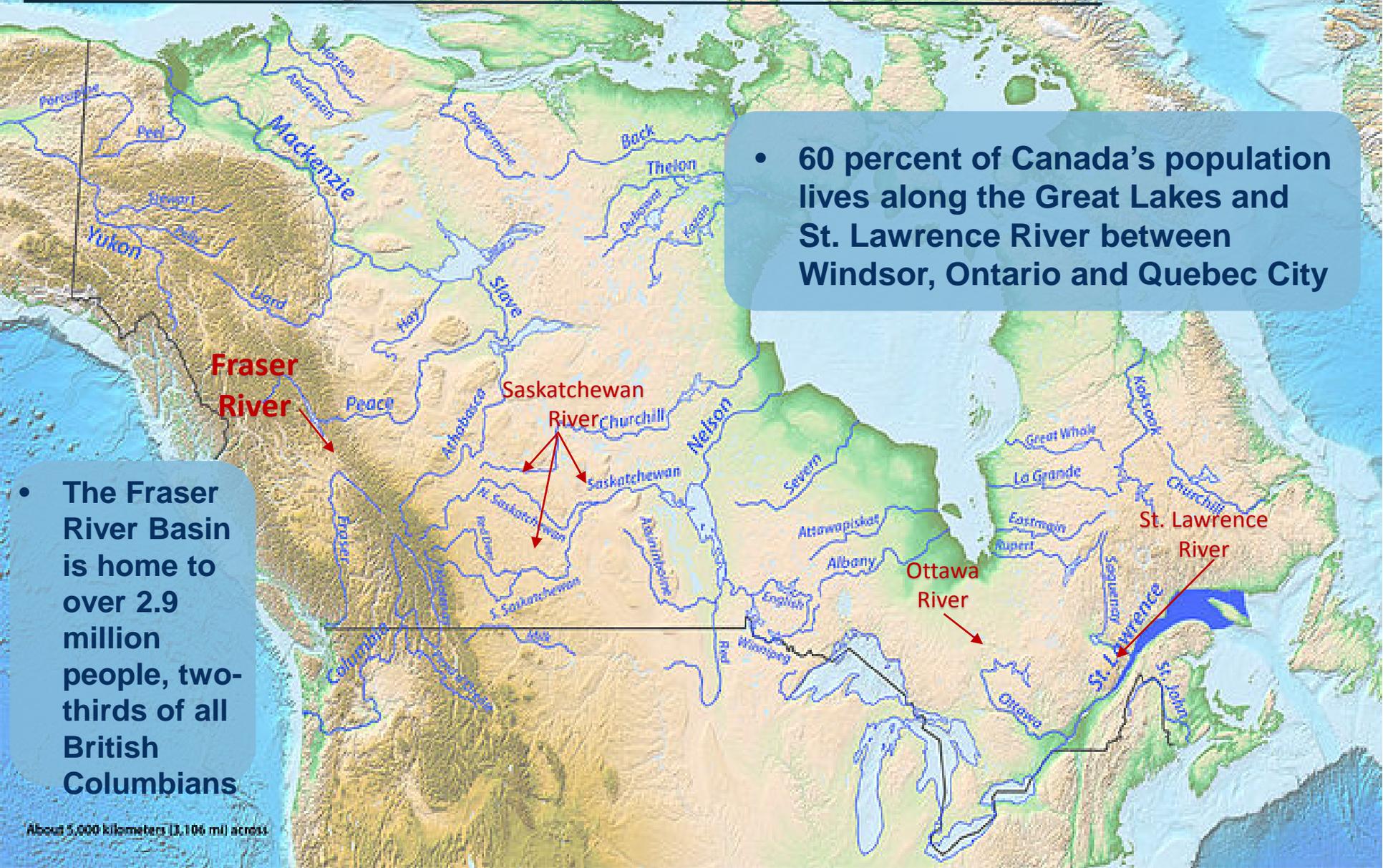
Rivers of the World



Major Rivers in the United States



Major Rivers in Canada



- 60 percent of Canada's population lives along the Great Lakes and St. Lawrence River between Windsor, Ontario and Quebec City

- The Fraser River Basin is home to over 2.9 million people, two-thirds of all British Columbians

About 5,000 kilometers (3,106 mi) across

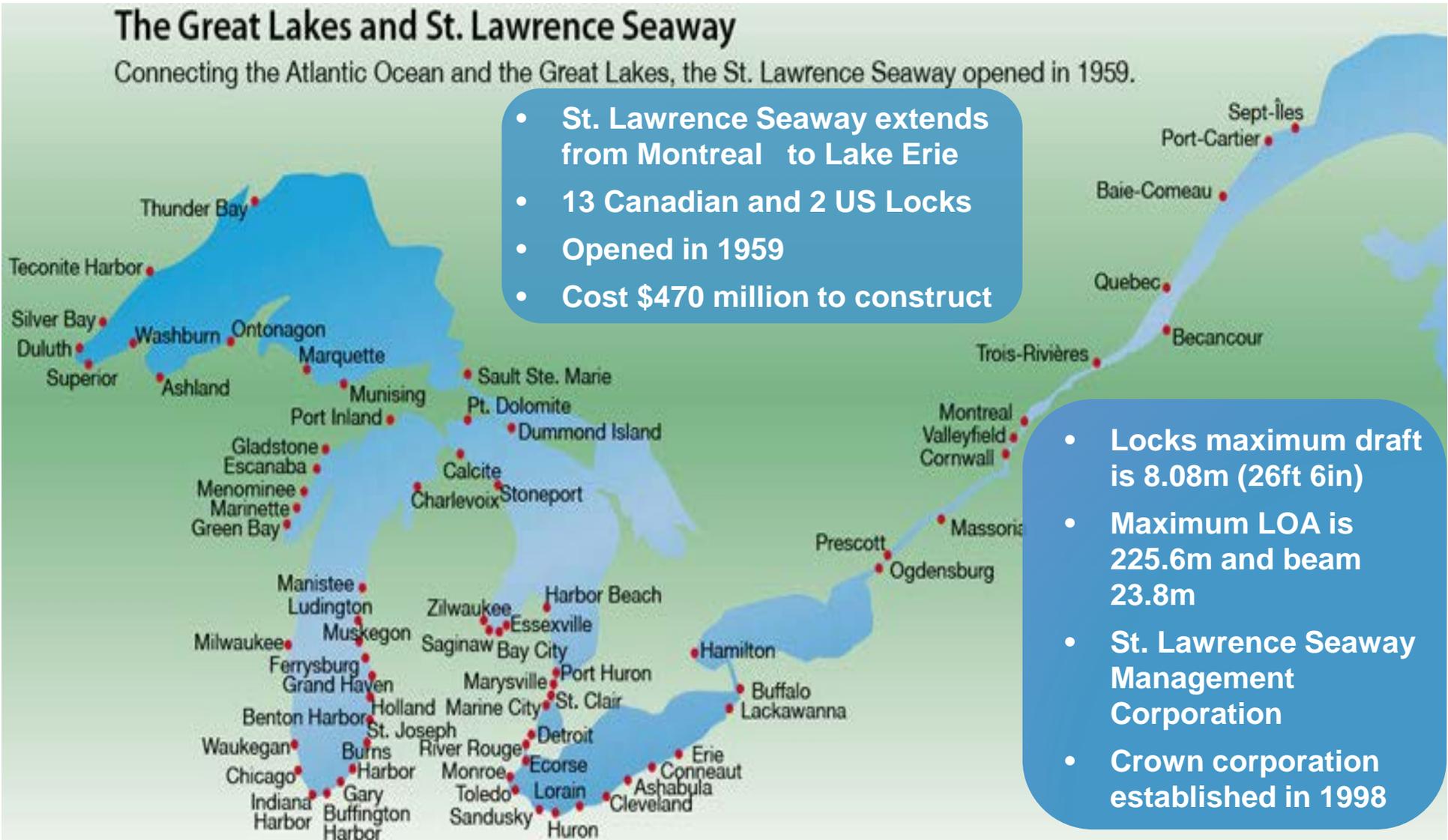
St. Lawrence Seaway

The Great Lakes and St. Lawrence Seaway

Connecting the Atlantic Ocean and the Great Lakes, the St. Lawrence Seaway opened in 1959.

- St. Lawrence Seaway extends from Montreal to Lake Erie
- 13 Canadian and 2 US Locks
- Opened in 1959
- Cost \$470 million to construct

- Locks maximum draft is 8.08m (26ft 6in)
- Maximum LOA is 225.6m and beam 23.8m
- St. Lawrence Seaway Management Corporation
- Crown corporation established in 1998



Comparison between the Fraser River and the St. Lawrence Seaway



	<u>Lower Fraser River</u>	<u>St. Lawrence Seaway</u>
Cargo (million tonnes)	30.8 mt	47.8 mt
Direct Jobs (FTE's)	41,860	63,041
Wages (\$ Billions)	\$2.77 bil	\$2.88 bil

FRIA Strategic Priorities

1. STAKEHOLDER ENGAGEMENT

FRIA is committed to creating and preserving a collaborative engagement process that builds understanding, support and alignment with critical stakeholders, communities, governments, First Nations and commercial enterprises who have an interest in the Lower Fraser River.

2. INDUSTRIAL LAND

FRIA supports the more efficient use of industrial lands around the Lower Fraser River and will advocate for the sustainable expansion of these lands through regional growth initiatives.

3. CHANNEL IMPROVEMENT INITIATIVE

FRIA supports regulatory changes to protect and optimize the use of the Lower Fraser River, including navigation safety enhancement, dredging, dike protection, debris reduction and protection of the environment.

4. LAND TRANSPORTATION ACCESS & CONGESTION

FRIA promotes fluidity and efficient access to commercial and industrial lands. Industry along the Lower Fraser River believes that the implementation of effective transportation strategies can only be achieved through a joint Lower Mainland Transportation Committee with representation from Industry, First Nations, government, stakeholders and community.

FRIA Strategic Priorities

5. **MARINE & PUBLIC SAFETY**

FRIA is committed to safe commercial activity along the Lower Fraser River. Industry along the Lower Fraser River will build a robust safety culture beyond the regulations amongst commercial vessel operators, across all fleets, through the implementation of consistent safety practices by all service providers and clients.

6. **STEWARDSHIP**

FRIA recognizes and respects the unique ecosystems and biodiversity of the Lower Fraser River and supports the implementation of programs, policies and procedures that protect people, wildlife and habitats.

7. **PORT COMPETITIVENESS**

FRIA advocates for fee levels and structures that encourage investment and ensure the ongoing competitiveness of businesses that operate on the Lower Fraser River.

8. **STREAMLINED REGULATORY PROCESS**

FRIA advocates for a streamlined and coordinated regulatory framework that will promote efficient permitting for industrial activities in and along the Lower Fraser River. Industry along the Lower Fraser River will work with all regulators and levels of government to ensure expansion and enhancement projects follow a rigid and stringent set of guidelines .

www.fria.ca



Thank-
you!



VAFFC / Vancouver Area
Fuel Facilities Corporation
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