



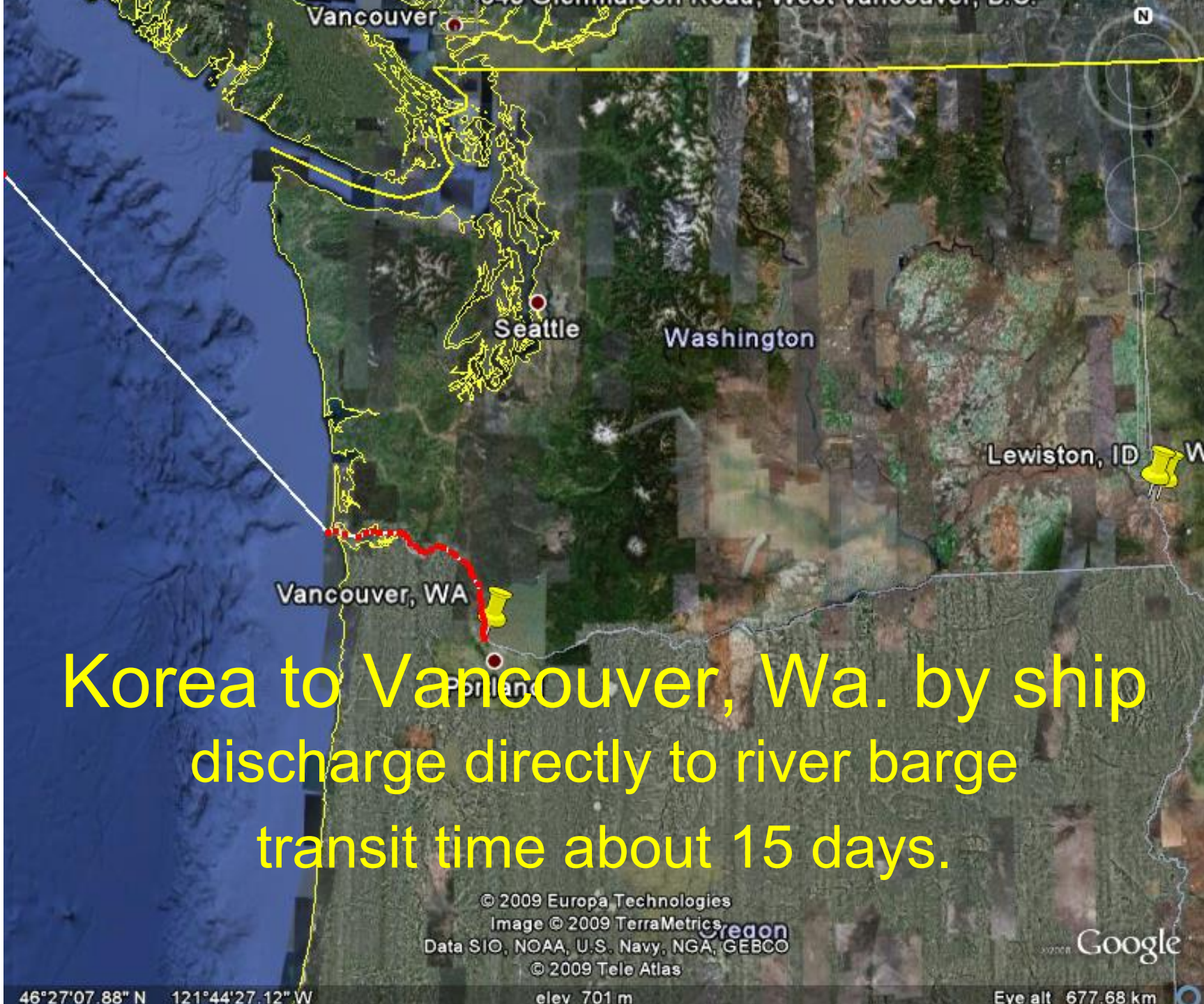
Vancouver

Lewiston/Wilma

Calgary

Fort McMurray

COLUMBIA SNAKE OPTION



Korea to Vancouver, Wa. by ship
discharge directly to river barge
transit time about 15 days.

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Google

46°27'07.88" N 121°44'27.12" W

elev 701 m


Eye alt 677.68 km

Traditional routes from the Far East to Ft. McMurray

- **Houston, Tx.**
 - Ocean voyage 9,979 nm – 32 days at 14 kn.
 - Road distance 2,538 mi. (w/o considering designated routes and deviations).
- **Duluth, Mn.**
 - Ocean voyage 13,494 nm – 43 days at 14 kn.
 - Road distance 1,435 mi (w/o considering designated route and deviations).
- **Saving by using Columbia/Snake Option 5,300 nm and 1,537 mi.**
- **Saving by using Columbia/Snake Option 8,831 nm and 431 mi.**

Columbia/Snake Option for offshore cargoes/modules

- Shore cranes available to handle the largest loads.
- Direct ship to barge transfer possible, depending on ship's gear or beam.
- Fleet of flat deck barges available for Ocean to River transfer. Max. barge size 400 x 84 ft.
- Experienced tug operators available to navigate river route (all year).
- US Corps of Engineers maintain min. 14ft draft available year-round.
- Private and public docks available with storage in Wilma and Lewiston.
- Ample private storage areas available adjacent to docks for staging and value adding if needed.
- Approx. 2.5 days transfer from Vancouver, Wa. to Wilma/Lewiston.



Vancouver, Wa. to Wilma/Lewiston
by river barge.
transit time abt 2.5 days
open all year-round

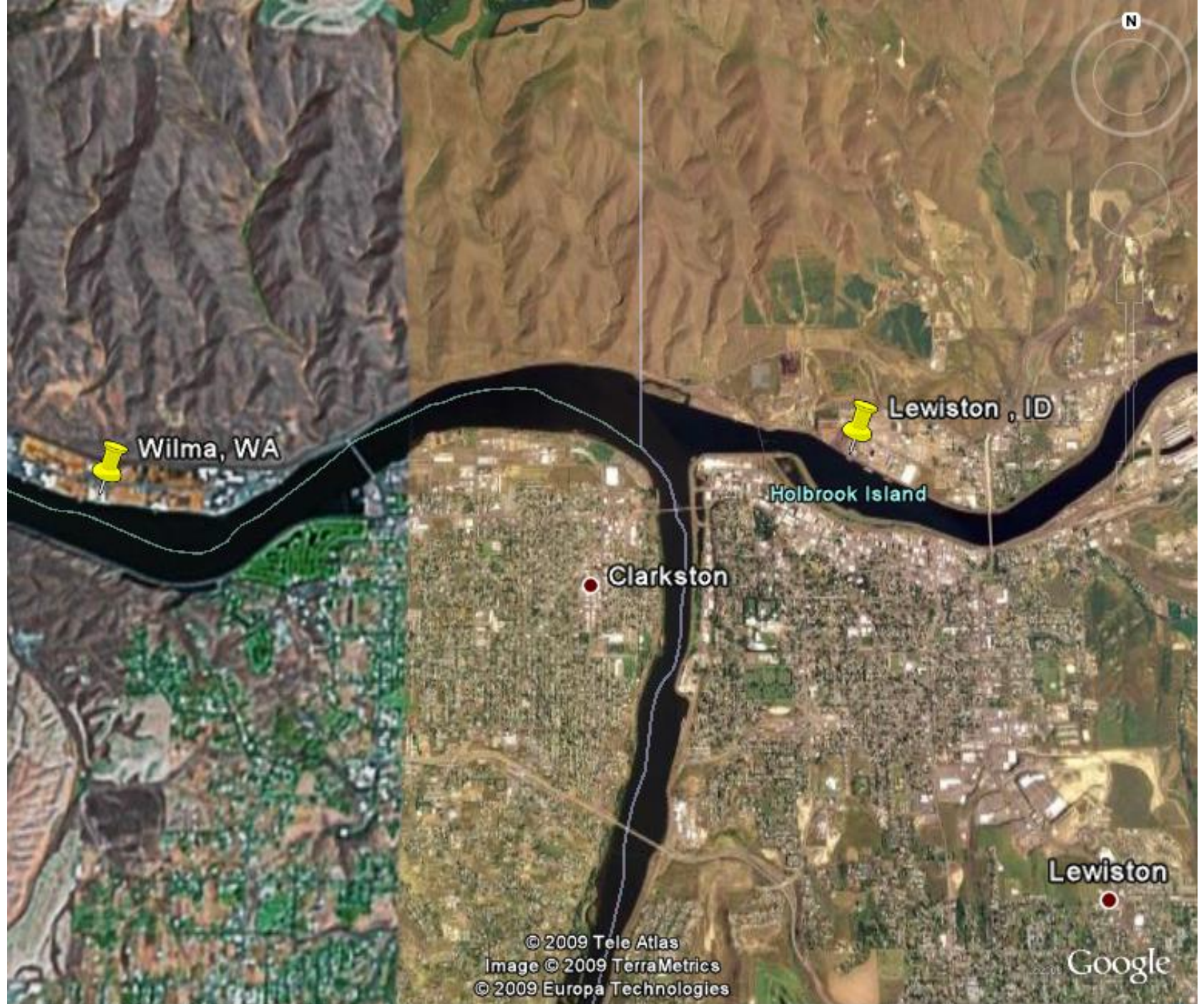
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Google

45°35'55.79" N 120°03'56.69" W

elev 681 m

Eye alt 804.81 km



Wilma, WA

Lewiston, ID

Holbrook Island

Clarkston

Lewiston

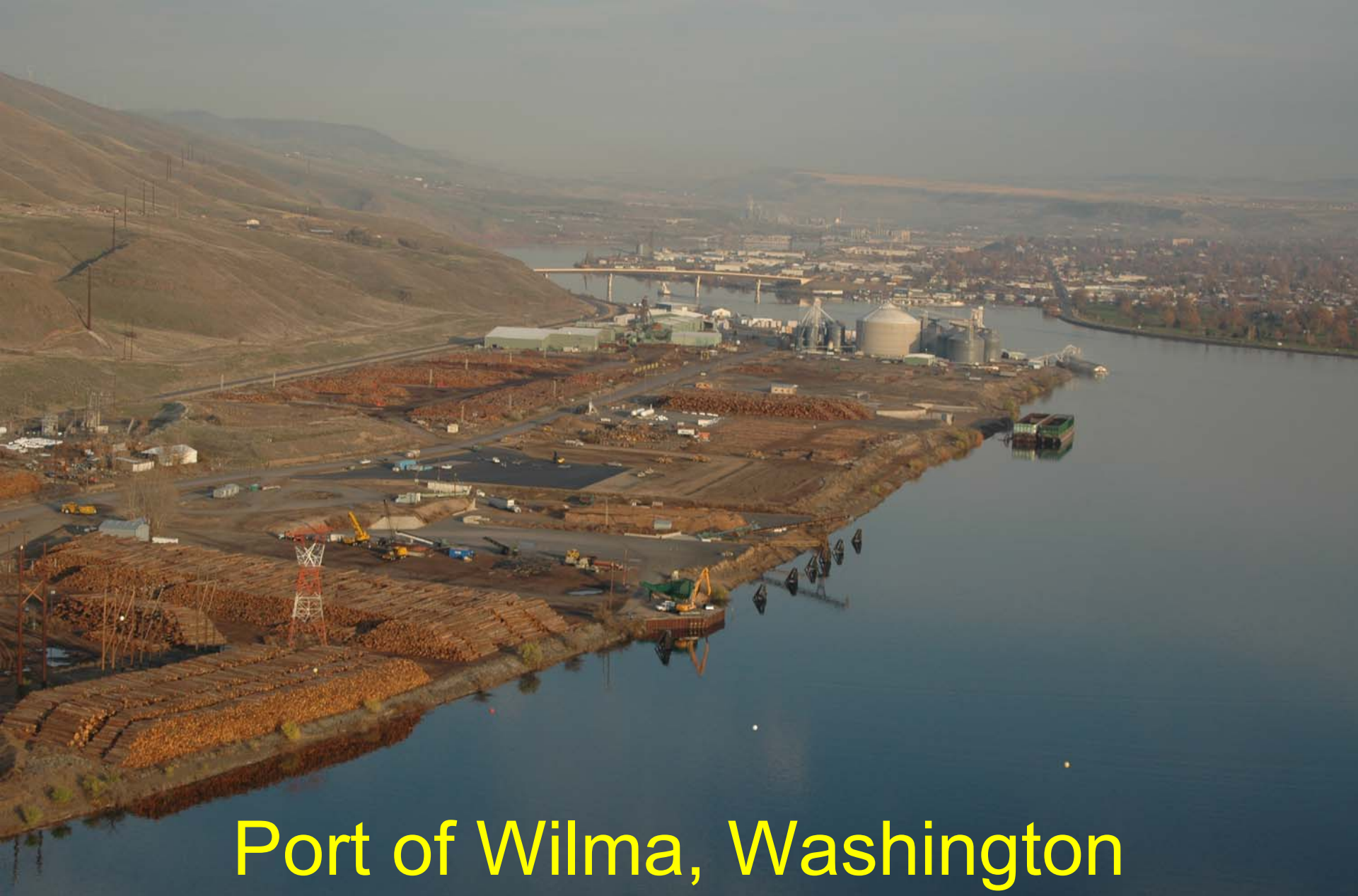
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Google

46°25'11.96" N 117°02'38.95" W

elev 230 m

Eye alt 9.30 km



Port of Wilma, Washington

(Clarkston and Lewiston in background)



Wilma, Wa. TGM Terminal & Dock

Pilings show future dock expansion area. Right hand side shows terminal area under construction (Nov/08), now completed.



Port of Lewiston, ID



The practical test stage 1

Can. Flag coastal barge Vancouver to Bellingham.

Load on rising tide – Wheels blocked and temporary lashing only.



The practical test stage 2:

- Unload vessel in Bellingham, WA. on tide at ramp.
- Reload vessel in Bellingham on US flag barge.
- Lash vessel for ocean passage to Columbia River.
- Switch ocean-going tug to river push tug Vancouver, Wa.
- Sail 360 miles inland from Vancouver, Wa. on Columbia/Snake Rivers
- Discharge vessel by roro in Lewiston, ID
- Re-enter Canada with Canadian conveyance.





Barge arrival in Lewiston, ID



Complete Discharge

Savings compared to Houston, Tx:

- * Ocean-River Voyage: 5,300 nautical miles shorter
- * Trucking: 1,537 miles shorter
- * No port stevedoring, no Panama canal fees
- Much shorter weather exposure
- Smaller carbon foot print
- Complied with Can. flag requirements
- * Carrier: **Dargas Shipping Ltd.**

Canadian flag service
Great Lakes/St. Lawrence
via Columbia/Snake

to ALBERTA



Wilma, Wa to Sweetgrass, Mt

Wilma, WA

ID

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Image © 2009 Province of British Columbia
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Google

47°45'03.59" N 114°05'34.32" W

elev 1609 m

Eye alt 434.08 km



Sweetgrass to Ft. McMurray

Alberta

Calgary

Canada

Saskatchewan

Image © 2009 TerraMetrics
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Image © 2009 Province of British Columbia
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Sweetgrass, Montana Google

52°58'57.59" N 114°56'00.42" W

elev 1024 m

Eye alt 966.87 km

Geography

Channel depth 43' FW by 2010
106 miles from ocean
Furthest up river deep draft port

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Google



Port of Vancouver USA

COLUMBIA SNAKE OPTION

Facilities- Terminal 2

- Heavy lift berth 2/3 @ 1000 lbs/sf
- Approx 25 acres open storage
- Truck, rail & barge served
- Over 200,000 sf covered storage



Port of Vancouver USA

COLUMBIA SNAKE OPTION

Facilities- Terminal 3

- Berth 8/9 @ 750 lbs/sq ft
- Approx 50 acres open storage
- Truck, rail & barge served
- Over 340,000 sf covered storage



Port of Vancouver USA

COLUMBIA SNAKE OPTION

Facilities- Terminal 5

- Potential 90 acres available
- 30 acres storage ready by April 2009
- Truck & Rail served



Port of Vancouver USA

COLUMBIA SNAKE OPTION

Equipment – Port Owned

- 2 x 140 mt Liebherr MHC
- Max lifts up to 210 mt
- 280 mt possible
- 110 ft 75 mt spreader bar (under construction)



Equipment – Stevedore Owned

- 3 reach stackers (1 up to 120,000 lb capacity)
- 5 top picks
- Multiple heavy lift f/l up to 65,000 lb cap
- 65 and 100 mt heavy lift trailers
- Multiple heavy lift spreader bars up to 120 mt



Vancouver Work Force

ILWU Local 4

- 134 'A' men
- 67 'B' men
- 74 'ID' Casuals
- 14 'UID' Casuals
- 24 Crane operators
- 6 gangs days
- 2 gangs nights
- Training
 - ✓ Reach stacker
 - ✓ Top pick/pay loader
 - ✓ 'B' man hold man training
 - ✓ Welding training
 - ✓ Mobile harbor crane



Lewiston/Wilma



Port of Vancouver USA

COLUMBIA SNAKE OPTION

Vancouver USA to Wilma/ Lewiston



- ✓ **Transit distance from the Port of Vancouver to the Lewiston Vicinity is 360 nautical miles**
- ✓ **Standard Navigation lock dimensions on Columbia and Snake Rivers are 675' x 86**
- ✓ **Maximum tow allowance at each navigation lock is 650' x 84'**



Bonneville Locks

Close



Video



Zoom



Zoom In



Zoom Out



Reset

Click and hold to pan photo.

Vancouver



COLUMBIA SNAKE OPTION

✓ **Federal authorized navigation channel depth at “Minimum Operating Pool”
MOP is 14 feet**

✓ **Navigation – buoys, beacons, and range boards**

Vancouver

Lewiston/Wilma



Columbia/Snake Rivers Issues

- ✓ Annual navigation lock maintenance closures occur in March.
- ✓ Overhead Obstructions – Lowest point is Tucannon Railroad Bridge (52' vertical clearance), located below Little Goose Dam
- ✓ Seasonal river flows increase for salmon migration augmentation



Columbia/Snake Rivers Issues – Continued

✓ Ice Harbor cut

✓ Winter safety

Vancouver

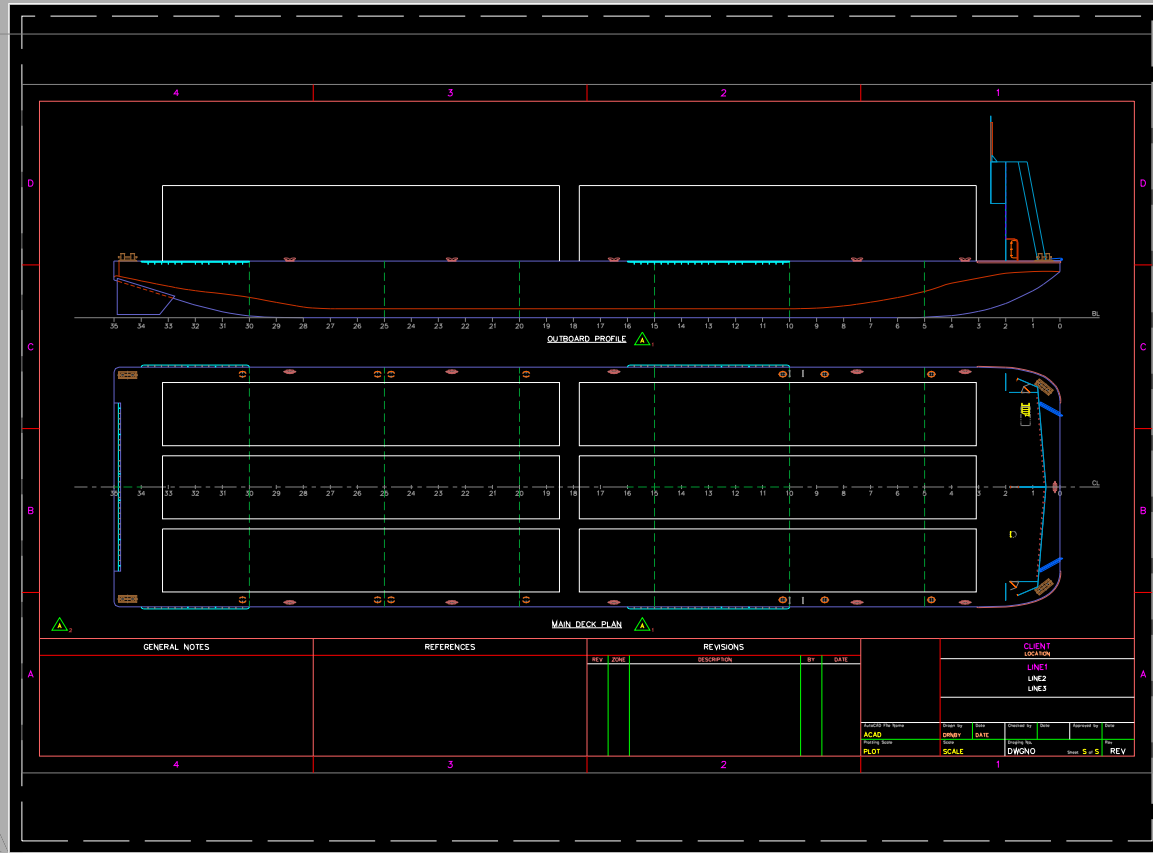
Calgary

Lewiston/Wilma



286 Drawing

Fort McMurray



Vancouver



COLUMBIA SNAKE OPTION

Fort McMurray



Vancouver



Lewiston/Wilma



COLUMBIA SNAKE OPTION



Joe Poire, Port of
Whitman
Executive Director

Mitch Dimke, TGM
Owner, Chief Operations
Officer

Project Scope

- **Loading Dock expansion**
 - 3x dock expansion
 - Ability to crane pick and roll-off/on
- **Crane addition**
 - Ability to easily move cargo
 - 75ft pick from pin to centerline of barge
 - 400,000lb capacity
- **Service expansion**
 - On-site staging area for value add
 - Facilitate sub-contractors on site

Fort McMurray

Project Development

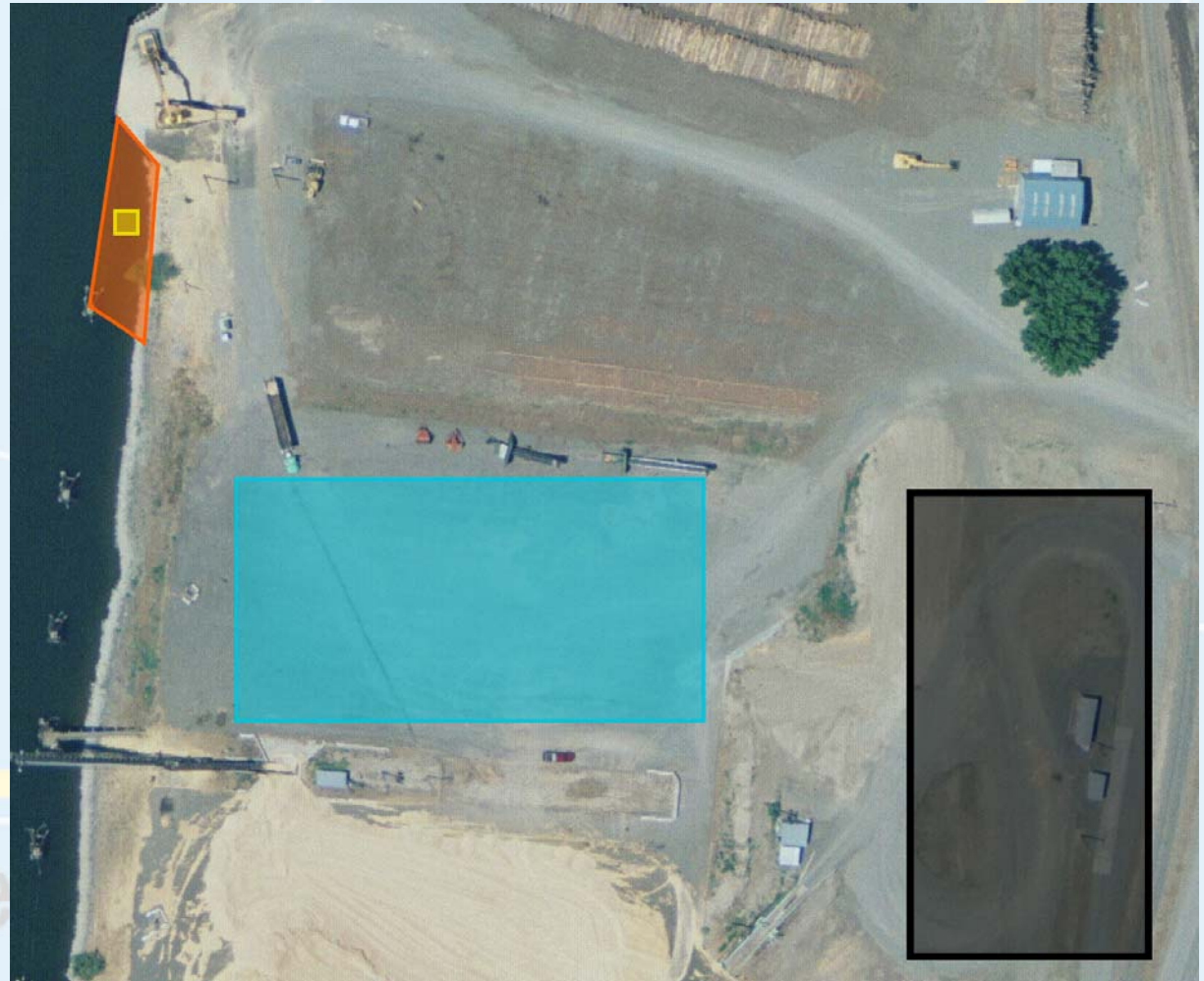


COLUMBIA SNAKE OPTION

Fort McMurray

Project Development

-  Dock Expansion
-  Crane Addition
-  Service Area
-  Service Expansion

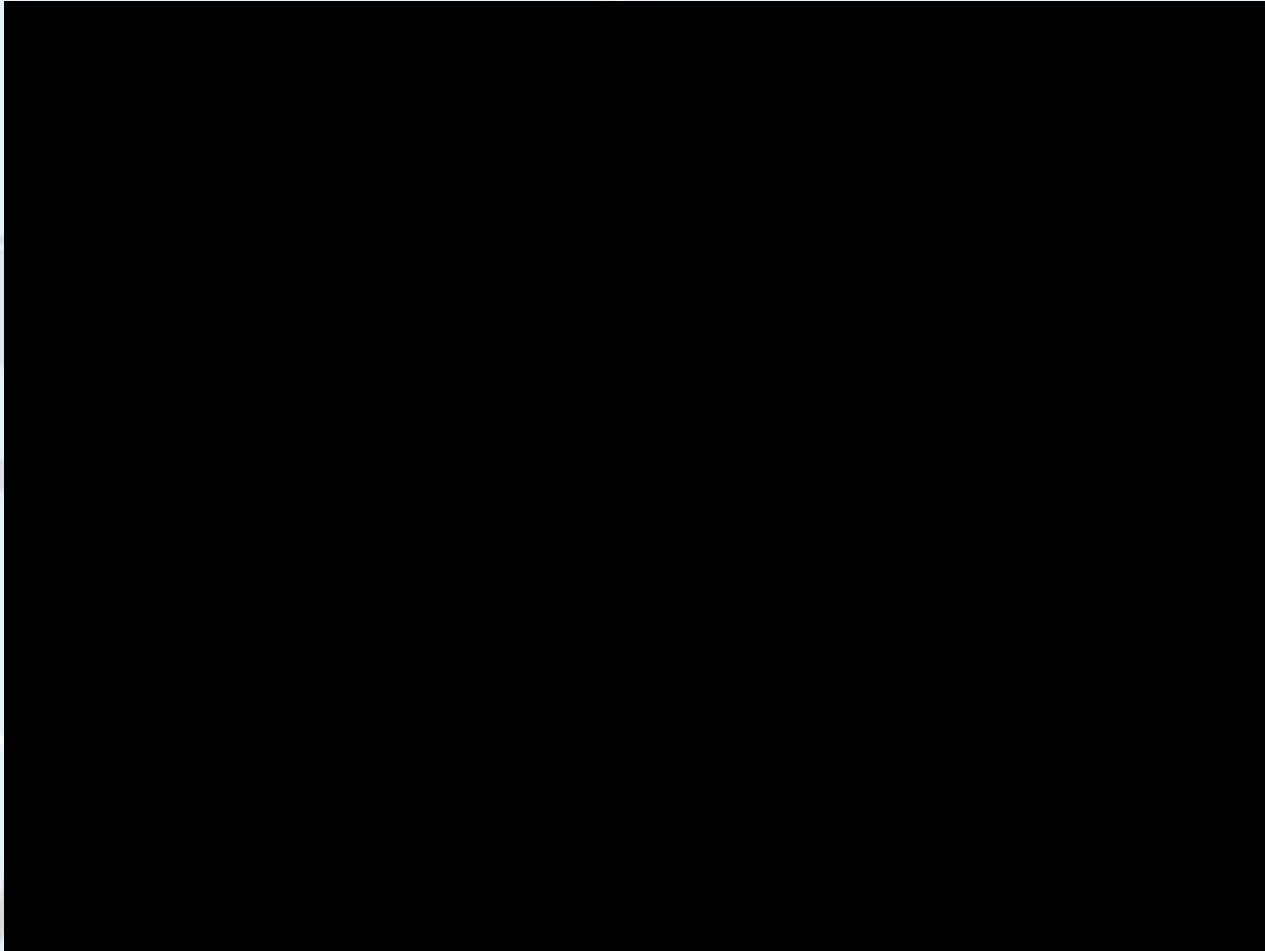


Vancouver

COLUMBIA SNAKE OPTION

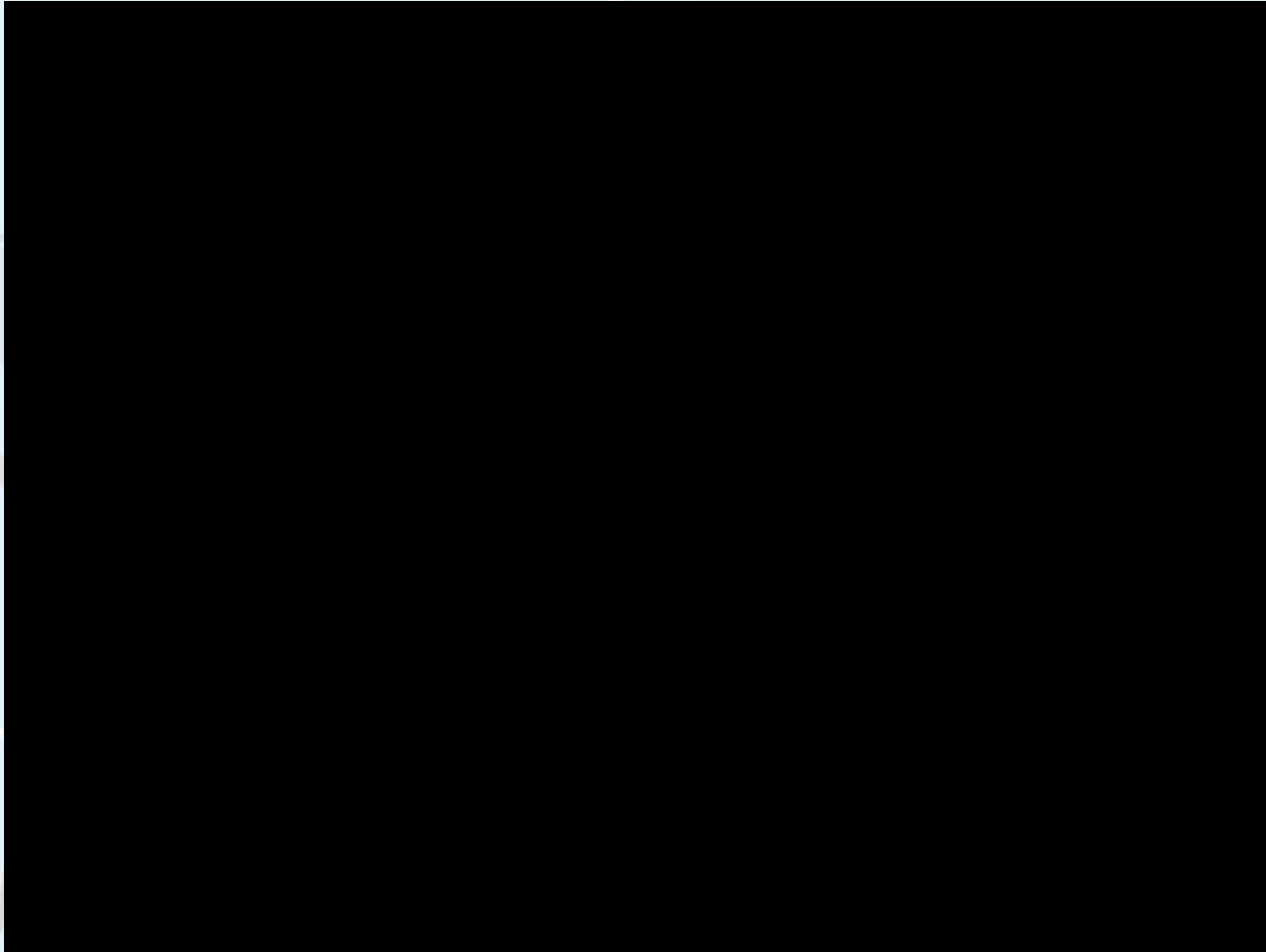
Fort McMurray

Expansion Video 1



Fort McMurray

Expansion Video 2



COLUMBIA SNAKE OPTION

Project Resources

Port of Whitman Capabilities

- **Public Private Partnership Financial Models**
 - \$11M IRB Bond with Grain Company
 - Customized lease with financed tenant improvements
- **Port of Wilma Capacities**
 - Port Bonding Capacity
 - B+ General Obligation Bond Rating
 - \$4M Un-voted Bonding Capacity
- **Available Ready Property**
 - Competitive Lease rates
 - Multi-Modal Transportation Availability
- **Best Utilization of “Public” Port Authority - Private Sector Expertise**
- **Port Emphasis**

Project Resources cont'd

TGM Capabilities

- **60 year combined experience – rail, truck, barge material handling**
- **Average 75 barges annually**
- **Current Projects**
 - Fort McMurray to Australia Dragline moving & cleaning
 - Material Handling Clearwater Paper Products
 - Containerized Lumber overseas shipments

Project Timeframe

- **Engineering and permitting ongoing – started November 2008**
- **Construction planned accounting for Fish-window**
- **Anticipated completion – Fall 2009**

Project Cost

- **Loading Dock and surface expansion - \$3M**
- **Crane addition - \$4M**
- **Service expansion - \$2M**
 - Asphalt
 - Fencing
 - Security systems

Fort McMurray



Port of
Lewiston

www.portoflewiston.com

Vancouver

Lewiston, Wilma







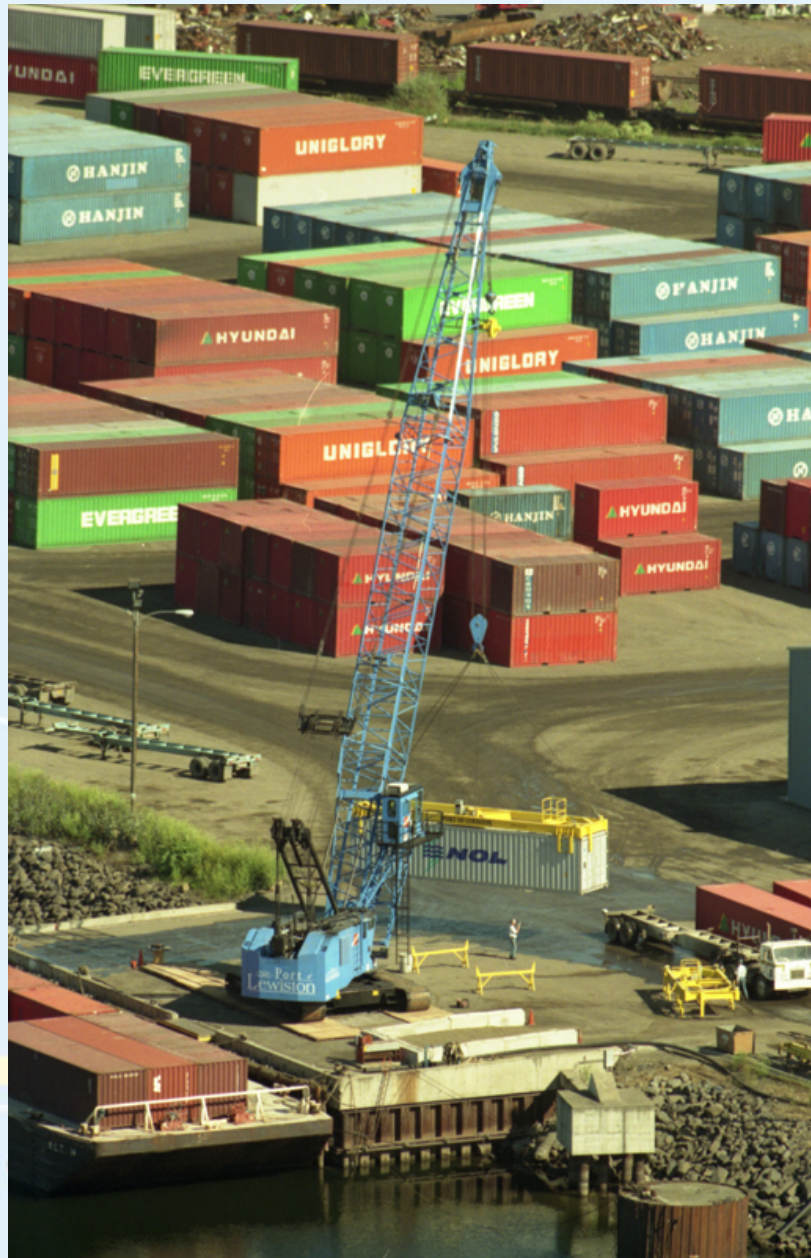


McMurray

Vancouver

Wilma

Port of
Lewiston



cMurray

Vancou

Wilma

COLUMBIA SNAKE OPTION







Port of
Lewiston



cMurray

Vancouver

Wilma

COLUMBIA SNAKE OPTION



