

Combined Meeting

Puget Sound Harbor Safety Committee and Puget Sound Partnership Oil Spill Work Group

Vessel Traffic Risk Assessment (VTRA)

Steering Committee

Estimates, Notes and Decisions on “What if” Scenarios

May 2, 2013 – 9:30am to 2pm (*estimates revised 5/7)

In attendance: Todd Hass (Puget Sound Partnership), John Veentjer (Marine Exchange), Bob McFarland (USCG-D13), Meridena Kaufman (USCG-Sector PS), Del Mackenzie and Jonathan Ward (Puget Sound Pilots), Chad Bowe chop (Makah Tribe), Fred Felleman (consultant for Makah Tribe), Chip Boothe and John Neel (Ecology), Mike Moore (Pacific Merchant Shipping Association), John Robinson (Cardno-Enrix), Frank Holmes (Western States Petroleum Association), Scott McCreery (BP), Mike Doherty (Clallam Co.), Jeff Shaw (Polar Tankers), Mark Homeyer (Crowley), Patrick Higgins and Harlavan Rajasnji (Consulate of Canada), Rene van Dorp (GWU), Jason Merrick (VCU)

Decision: Use the term “What if” scenarios, rather than “Future Scenarios” in order to be more objective and not imply any level of certainty/expectation about the various projects’ likelihood of development.

Revised estimates derived by Hass on 5/7 from 5/2 discussions:

“What If” Scenario 1 – Gateway Pacific Terminal

Bulk carrier = **+487** ships/yr

Derivation: Maximum described in permit.

Oil barge = **+228** ops/yr

Derivation: John Veentjer determined average percentage of bulk carriers that took bunkers from 2010-2012 to be 0.468. Therefore 487 bulk carriers * 0.468 results in 228 additional bunker operations. SC confirmed on 5/2 that one operation equates to one transit. SC still needs to assign estimate of percentage of bunkers (a number out of 228) to each candidate anchorage site for use in geographic model simulation (e.g., Vendovi, March Point, Port Townsend)

“What If” Scenario 2 – Trans Mountain Expansion Project

Oil tanker = **+358** ships/yr

Derivation: Maximum tankers at completion = 34/month, currently 5 tankers/mo; therefore 408/yr minus 60/yr = 358/yr

Bunkering = +100 ops/year = therefore, if 60 transits for ALL BC ops, then 100ops/291ops = 34% of 60 transits = **21 transits/year**

Derivation: John Veentjer determined “Georgia Basin bunkering trend.” Marine Exchange data from 2010-2012 showed that 28% of Puget Sound tankers bunker locally.

administrator 5/1/13 12:22 PM
Comment: From JV: combining ALL BC^{CR} projects yields 2-3 barge voyages, or 4-6 transits/mo. 5 transits/mo *12mo/yr=60/yr

“What If” Scenario 3 – BC Projects grouped

Decision: Exclude Terminal 2, but use max for Deltaport from 2017-2020 instead. Mike Moore showed that net ~8% TEU growth (and >260 arrivals) associated with Terminal 2, was unlikely: (1) in the face of forecasts of 3-4% growth for the industry, (2) increasing capacity of container ships, and (3) without causing offsetting decreases in shipping elsewhere in the Salish Sea system. Consequently, we will use the max for Deltaport from 2017-2020, which is a net increase of 67, rather than the next increase of 15 projected for 2025 if Terminal 2 completed.

Deltaport (3A)

Container ship = **+67/yr**

Derivation: Port Metro Vancouver Environmental Assessment Report, November 2012; Table 2-6, 312 ships/yr (max in 2017, 2020) – 245 ships year (2010) = 67

Bunkering = $67 * 0.41 = +27$ ops/year = **6 transits/year**

Derivation: John Veentjer determined “Georgia Basin bunkering trend.” Marine Exchange data from 2010-2012 showed that 41% of Puget Sound containers bunker locally.

Westshore (3A)

Coal (bulk) ship = **+104/yr**

Derivation: Table 2-6, 350 ships/yr (in 2025) – 246 ships year (2010) = 104

Bunkering = +49 ops/year = **10 transits/year**

Derivation: John Veentjer determined “Georgia Basin bunkering trend.” Marine Exchange data from 2010-2012 showed that 47% of Puget Sound bulkers bunker here.

Neptune (3A)

Bulk = **+176/yr**

Derivation: John Veentjer and Mike Moore were provided with this estimate from Tony Nardi of Neptune, and corroborated by Stephen Brown, President of the Chamber of Shipping of British Columbia. This more than triples the estimate of “approximately one additional ship per week” (or 52/year) described in Port Metro Vancouver permit.

Bunkering = +83 ops/year = **17 transits/year**

Derivation: John Veentjer determined “Georgia Basin bunkering trend.” Marine Exchange data from 2010-2012 showed that 47% of Puget Sound bulkers bunker here.

Fraser Surrey Docks/Texada (3A)

Coal (bulk) ship = **+40/yr**

Derivation: Port Metro Vancouver is reviewing permit for 4 million metric tones of coal per year. 4 million metric tones = 4.4 US Tons. Using ratios from Gateway Pacific Terminal, 53 million US tons/974 movements per year is roughly one movement for every 54,415 US tons. 4.4 million US tons divided by 54,415 = 80.9 movements. If each ship call is two movements, then 80.9 divided by two is 40.45 ships per year, and rounding down makes estimate equal to 40/yr.

Bunkering = +19 ops/year = **4 transits**

Derivation: John Veentjer determined "Georgia Basin bunkering trend." Marine Exchange data from 2010-2012 showed that 47% of Puget Sound bulkers bunker here; so 40 ships * 0.47 bunkers/ship = 19 bunker op.

Richardson Grain (3A)

Bulk = **+28/yr**

Derivation: 2013 application to Port Metro Vancouver for expansion of grain shipping from about 3 million metric tonnes/year currently to more than 5 MMT/year.

The U.S. Army Corps of Engineers calculates one small cape size vessel will hold 70,000 metric tonnes of grain.

Increase in export from 3 MMT/year to 5MMT/year = 2 MMT/year; 2 MMT/year divided by 70,000 = 56 movements = and 56/2 = 28 vessels/year.

Bunkering = +13 ops/year = **3 transits/year**

Derivation: John Veentjer determined "Georgia Basin bunkering trend." Marine Exchange data from 2010-2012 showed that 47% of Puget Sound bulkers bunker here.

Sum of FS 3 Projects numbers in bold

= **415 ships**

= + 191 operations = **40 total bunkering transits**

"What If" Scenario 4 – WA trends

Decision: SC agreed to use the 2010 tank vessel traffic data (including BP) captured in the VTOSS update as the baseline, provided that the levels were in the "historical ballpark;" and to not single out BP traffic in a separate "What if" analysis.

Decision: Because we are conducting "What if" analyses on a VTOSS 2010 base case, it was decided to remove the pairing of "traffic trends" with other "What if" scenarios and instead augment the analysis by including "What if" analyses at half of maximum projected levels. This will provide better perspective on how/if to change traffic management across the range of traffic levels that may arise in the future.

Decision: Researchers and SC are open to including statistics on Tacoma projects/traffic until early/mid June, but no definitive new numbers have been obtained/are expected.