Crude Oil Movement

Dale Jensen
Program Manager, Spills Program
# Total Oil Movement*
**Annually, Washington State**

## OIL MOVED BY YEAR AND MODE

*All oil of any kind including, crude oil, petroleum, gasoline, fuel oil, diesel oil, oil sludge, oil refuse, biological oils and blends. Cargo only. Does not include fueling transfers.

<table>
<thead>
<tr>
<th>Year</th>
<th>Vessel</th>
<th>Rail</th>
<th>Pipeline</th>
<th>TOTALS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>327,000,000</td>
<td>135,151,402</td>
<td>462,151,402</td>
<td>1,024,203,804</td>
</tr>
<tr>
<td>2005</td>
<td>325,000,000</td>
<td>139,467,621</td>
<td>464,467,621</td>
<td>1,039,467,621</td>
</tr>
<tr>
<td>2006</td>
<td>322,472,266</td>
<td>145,095,543</td>
<td>467,567,809</td>
<td>1,035,151,402</td>
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<tr>
<td>2007</td>
<td>321,168,962</td>
<td>155,993,923</td>
<td>477,162,885</td>
<td>1,035,151,402</td>
</tr>
<tr>
<td>2008</td>
<td>319,199,535</td>
<td>146,175,318</td>
<td>465,374,853</td>
<td>1,031,749,706</td>
</tr>
<tr>
<td>2009</td>
<td>311,555,661</td>
<td>152,229,247</td>
<td>403,584,908</td>
<td>1,067,369,816</td>
</tr>
<tr>
<td>2010</td>
<td>273,552,948</td>
<td>157,229,247</td>
<td>430,782,195</td>
<td>1,161,564,390</td>
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<tr>
<td>2011</td>
<td>270,475,785</td>
<td>157,300,000</td>
<td>439,899,041</td>
<td>1,267,674,826</td>
</tr>
<tr>
<td>2012</td>
<td>12,123,256</td>
<td>158,073,606</td>
<td>453,521,292</td>
<td>1,166,726,826</td>
</tr>
<tr>
<td>2013</td>
<td>16,471,625</td>
<td>161,258,218</td>
<td>444,454,041</td>
<td>1,168,150,884</td>
</tr>
<tr>
<td>2014</td>
<td>32,811,768</td>
<td>177,267,149</td>
<td>458,157,824</td>
<td>1,362,657,741</td>
</tr>
<tr>
<td>2015</td>
<td>230,760,217</td>
<td>50,130,458</td>
<td>1,024,203,804</td>
<td>1,325,060,669</td>
</tr>
</tbody>
</table>

*1 barrel = 42 gallons*
2015 Oil Transportation Safety Act
Policy initiatives

• Contingency Plans – Railroad Rule
• Geographic Response Plan (GRP) Review
• Equipment Cache Grants
• Vessel Traffic Assessments
• Crude Oil Movement Notification Rule
Required Contingency Planning for Rail
Continued Geographic Response Planning
Provide Equipment Cache Grants

Protecting Washington Green River/Duwamish from potential oil spills
Columbia River Vessel Traffic Safety Evaluation & Assessment
Crude Oil Movement Notification Rule
Why it matters

- Responder safety
- Public health and safety
- Environmental resources protection
- Economic resources protection
- Cultural resources protection
Scope of the rule

Establishes *notification requirements* for:

- **Facilities** (receiving crude oil by rail)

- **Pipelines** (transporting crude oil in or through the state)

Establishes *reporting procedures* for:

- **Ecology** to share information with emergency responders, local governments, tribes and the public
Facility requirements

Must report on all scheduled crude oil deliveries each week
Rail routes for reporting

Note: Route 2 includes the Columbia River corridor on both the Washington and Oregon sides of the river.
Pipeline requirements

Submit to Ecology twice annually (01/31 and 07/31)

Must report:

- Contact Information
- Volume
- By place of origin (state or province)
Ecology reporting procedures

**Quarterly Reports**
- Aggregated crude-by-rail data
- Crude-by-pipeline information
- Reported spills during transport and delivery

**Advance Notification of Oil Transfer (ANT) System**
- Facilities submit directly into ANT database
- Emergency response community uses to view

**Available to the Public**

**NOT Available to the Public**
Crude oil by rail

- The total quarterly volume of crude oil movement by rail was 14,637,205 barrels (614,762,610 gallons).

- Alberta was the region of origin for 6% of crude oil by rail, while North Dakota was the region of origin for 94% of crude oil by rail.

- The total number of rail cars moving crude oil by rail was 21,497.

**Weekly Total Volumes of Crude Oil by Rail**

*for the period*

*October 1, 2016 to December 31, 2016*
Crude oil by pipeline

For the period July 1, 2016 to December 31, 2016 33,213,696 barrels (1,394,975,232 gallons) entered the state from Alberta, Canada.
Zero reported spills during the transport and delivery of crude oil by rail and pipeline for 4\textsuperscript{th} quarter 2016.
Crude oil by vessel

The total volume from all vessel transfers of crude oil for the 4th quarter of 2016 was 27,283,953 barrels (1,145,926,026 gallons).
Reported Crude Oil Movement by Mode

- Vessel (Inbound): 46.5%
- Rail: 25.1%
- Pipeline: 28.4%

Only used Inbound volumes for vessels.