Historical Waterborne Commerce on the Columbia-Snake River System: Commodity Movements, 1991-2010
Sara Simmons, Eric Jessup and Ken Casavant
HISTORICAL WATERBORNE COMMERCE ON THE COLUMBIA-SNAKE RIVER SYSTEM: COMMODITY MOVEMENTS, 1991-2010
INTERIM REPORT #1
Data Sources

- U.S. Army Corps of Engineers Waterborne Commerce Statistics Center
  - Lock Performance Monitoring System (LPMS)
  - Contains detailed information about 37 commodity categories
- Focuses on data for the years 1991 through 2010
  - Bonneville Lock and Dam
Annual Downbound and Upbound Tonnage of All Commodities, 1991-2010

Source: U.S. Army Corps of Engineers Monthly Lock Tonnage Reports

* Indicates that 2010 data consists of the months January through June
Major Commodities Moving on the Columbia-Snake River System, 1991-2010

**Downriver**
- Wheat
- Forest products
- Sand, gravel and stone
- Rye, barley, rice, sorghum and oats
- Vegetable products
- Animal feed and grain mill products
- Paper and allied products

**Upriver**
- Gasoline, jet fuel and kerosene
- Distillate, residual and other fuel oils
- Waste material
- Fertilizer
- Primary non-ferrous metallic products
Seasonality in Major Downriver Commodities, 2008 – 2010

Note: July-December averages do not include 2010 data.
Seasonality in Major Downriver Commodities, 2008 – 2010

Note: July-December averages do not include 2010 data.
Seasonality in Major Downriver Commodities, 2008 – 2010

**Average Monthly Tonnage of Iron Ore and Iron Steel Waste**

**Average Monthly Tonnage of Corn, Rye, Barley, Rice, Sorghum and Oats**

**Note:** July-December averages do not include 2010 data.
Seasonality in Major Downriver and Upriver Commodities, 2008 – 2010

Average Monthly Tonnage of Primary Non-Ferrous Metallic Products

Average Monthly Tonnage of Distillate, Residual and Other Fuel Oils

Note: July-December averages do not include 2010 data.
Seasonality of Major Upriver Commodities, 2008 – 2010

Note: July-December averages do not include 2010 data.
Seasonality of Major Upriver Commodities, 2008 – 2010

Average Monthly Tonnage of Forest Products

Average Monthly Tonnage of Fertilizer

Note: July-December averages do not include 2010 data.
### Average Downbound Movements Through Bonneville, 2008-2010

<table>
<thead>
<tr>
<th>Commodity by Ton</th>
<th>December</th>
<th>January</th>
<th>February</th>
<th>March</th>
<th>Total</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Tonnage</td>
<td>Tonnage</td>
<td>Tonnage</td>
<td>Tonnage</td>
<td>Tonnage</td>
<td>Percent</td>
</tr>
<tr>
<td>Forest Products, Lumber, Logs and Woodchips</td>
<td>33,300</td>
<td>40,878</td>
<td>51,587</td>
<td>35,733</td>
<td>161,498</td>
<td>9.59</td>
</tr>
<tr>
<td>Sand, Gravel and Stone</td>
<td>18,767</td>
<td>216</td>
<td>5,091</td>
<td>20,343</td>
<td>44,417</td>
<td>2.64</td>
</tr>
<tr>
<td>Iron Ore, Iron Steel Waste and Scrap</td>
<td>7,250</td>
<td>5,153</td>
<td>4,850</td>
<td>2,737</td>
<td>19,989</td>
<td>1.19</td>
</tr>
<tr>
<td>Primary Non-Ferrous Metallic Products</td>
<td>2,452</td>
<td>3,491</td>
<td>3,077</td>
<td>2,022</td>
<td>11,042</td>
<td>0.66</td>
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<tr>
<td>Wheat</td>
<td>297,001</td>
<td>373,447</td>
<td>403,156</td>
<td>254,009</td>
<td>1,327,614</td>
<td>78.86</td>
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<tr>
<td>Corn, Rye, Barley, Rice, Sorghum and Oats</td>
<td>6,250</td>
<td>2,167</td>
<td>2,900</td>
<td>3,782</td>
<td>15,098</td>
<td>0.90</td>
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<tr>
<td>Vegetable Products and Animal Feed</td>
<td>10,912</td>
<td>13,328</td>
<td>13,824</td>
<td>7,065</td>
<td>45,128</td>
<td>2.68</td>
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<tr>
<td>Other Minor (27) Commodities</td>
<td>16,217</td>
<td>13,408</td>
<td>15,435</td>
<td>13,697</td>
<td>58,758</td>
<td>3.49</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>392,148</strong></td>
<td><strong>452,088</strong></td>
<td><strong>499,921</strong></td>
<td><strong>339,387</strong></td>
<td><strong>1,683,543</strong></td>
<td><strong>100.00</strong></td>
</tr>
</tbody>
</table>

### Average Up Bound Movements Through Bonneville, 2008-2010

<table>
<thead>
<tr>
<th>Commodity by Ton</th>
<th>December</th>
<th>January</th>
<th>February</th>
<th>March</th>
<th>Total</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Tonnage</td>
<td>Tonnage</td>
<td>Tonnage</td>
<td>Tonnage</td>
<td>Tonnage</td>
<td>Percent</td>
</tr>
<tr>
<td>Gasoline, Jet Fuel, and Kerosene</td>
<td>53,259</td>
<td>50,620</td>
<td>63,936</td>
<td>40,591</td>
<td>208,407</td>
<td>33.01</td>
</tr>
<tr>
<td>Distillate, Residual and Other Fuel Oils</td>
<td>64,862</td>
<td>72,091</td>
<td>78,927</td>
<td>66,122</td>
<td>282,002</td>
<td>44.67</td>
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<tr>
<td>Fertilizer (Nitrogenous, Potassic, Phosphoric)</td>
<td>4,511</td>
<td>3,504</td>
<td>4,031</td>
<td>6,481</td>
<td>18,527</td>
<td>2.93</td>
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<tr>
<td>Forest Products, Lumber, Logs and Woodchips</td>
<td>3,350</td>
<td>7,567</td>
<td>6,800</td>
<td>2,267</td>
<td>19,983</td>
<td>3.17</td>
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<tr>
<td>Primary Non-Ferrous Metallic Products</td>
<td>2,664</td>
<td>3,832</td>
<td>2,235</td>
<td>1,809</td>
<td>10,539</td>
<td>1.67</td>
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<tr>
<td>Waste Material, Garbage, Landfill and Sewage</td>
<td>19,980</td>
<td>23,989</td>
<td>21,550</td>
<td>15,559</td>
<td>81,077</td>
<td>12.84</td>
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<tr>
<td>Other Minor (31) Commodities</td>
<td>4,649</td>
<td>856</td>
<td>3,692</td>
<td>1,550</td>
<td>10,746</td>
<td>1.70</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>153,274</strong></td>
<td><strong>162,459</strong></td>
<td><strong>181,170</strong></td>
<td><strong>134,379</strong></td>
<td><strong>631,281</strong></td>
<td><strong>100.00</strong></td>
</tr>
</tbody>
</table>
Questions?

Thank you for your responses, support and interest as we prepare our study.

Please contact us with any questions or concerns you may have.

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  - (509) 335-5536