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Historical Waterborne Commerce on the  
Columbia-Snake River System:  
Commodity Movements, 1991-2010  
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and Ken Casavant

HISTORICAL WATERBORNE  
COMMERCE ON THE  
COLUMBIA-SNAKE RIVER  
SYSTEM: COMMODITY  
MOVEMENTS, 1991-2010  
*INTERIM REPORT #1*

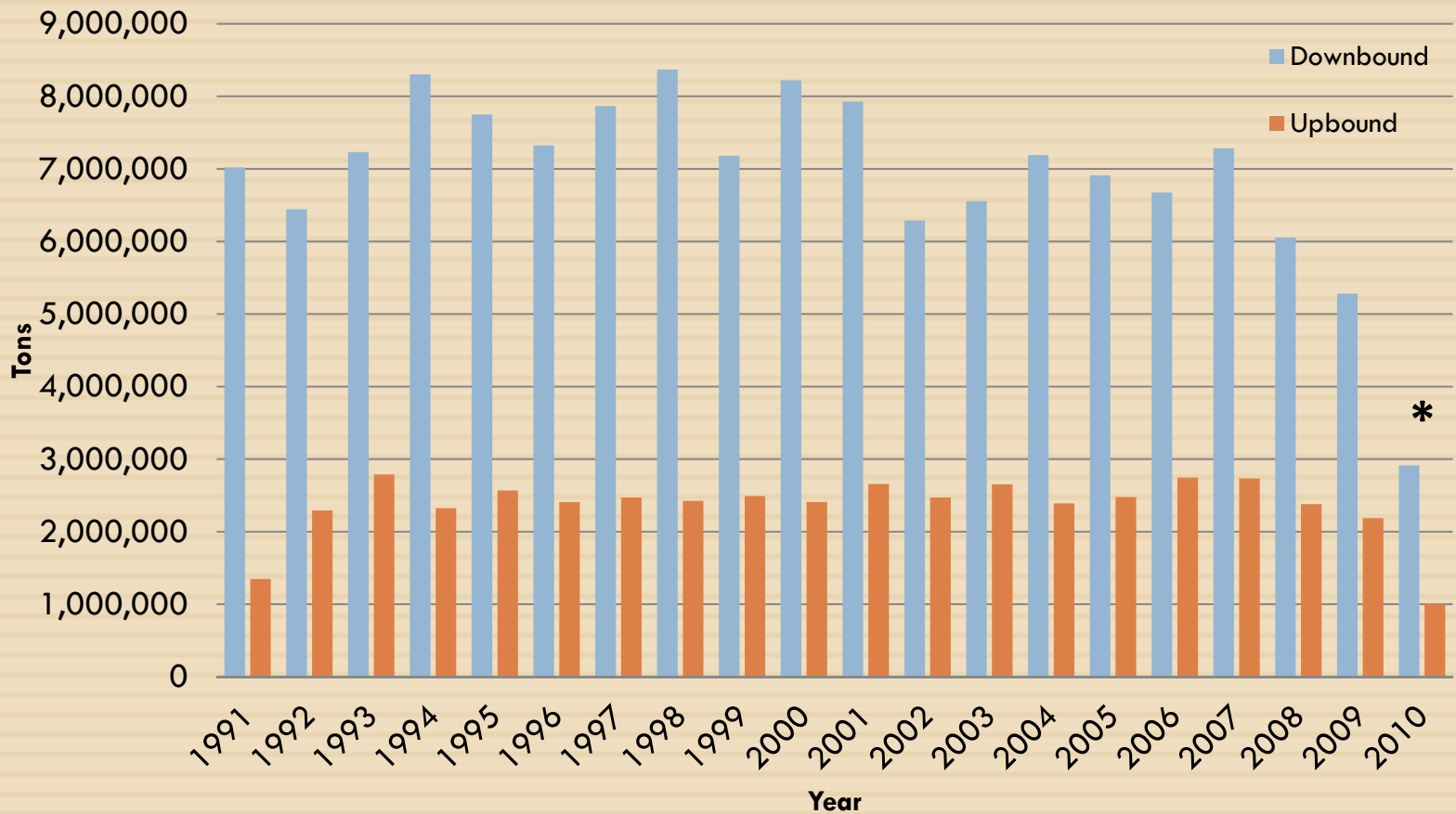
*Freight Policy Transportation Institute*



# 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

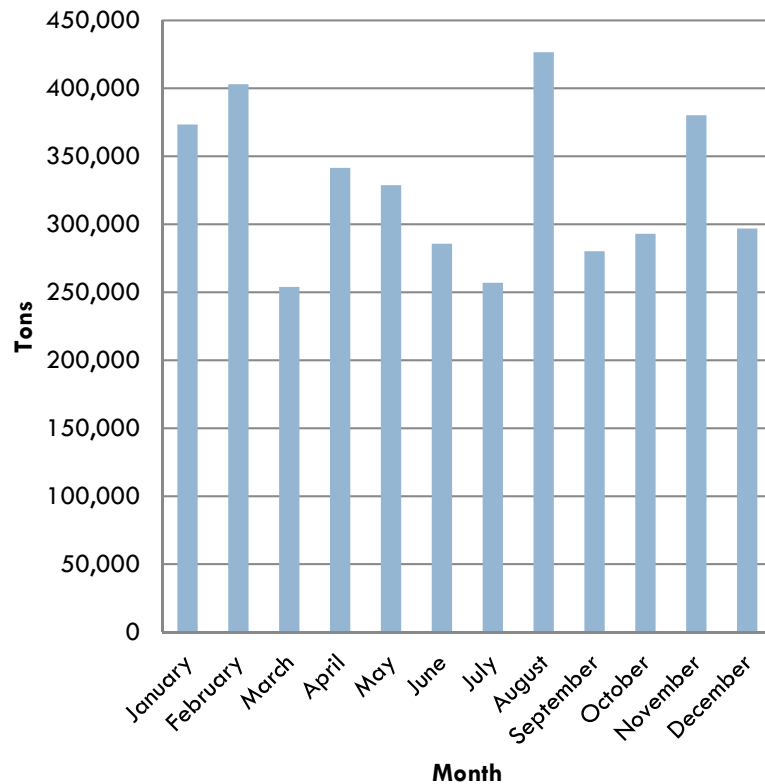
- Wheat
- Forest products
- Sand, gravel and stone
- Rye, barley, rice, sorghum and oats
- Vegetable products
- Animal feed and grain mill products
- Paper and allied products

## Upriver

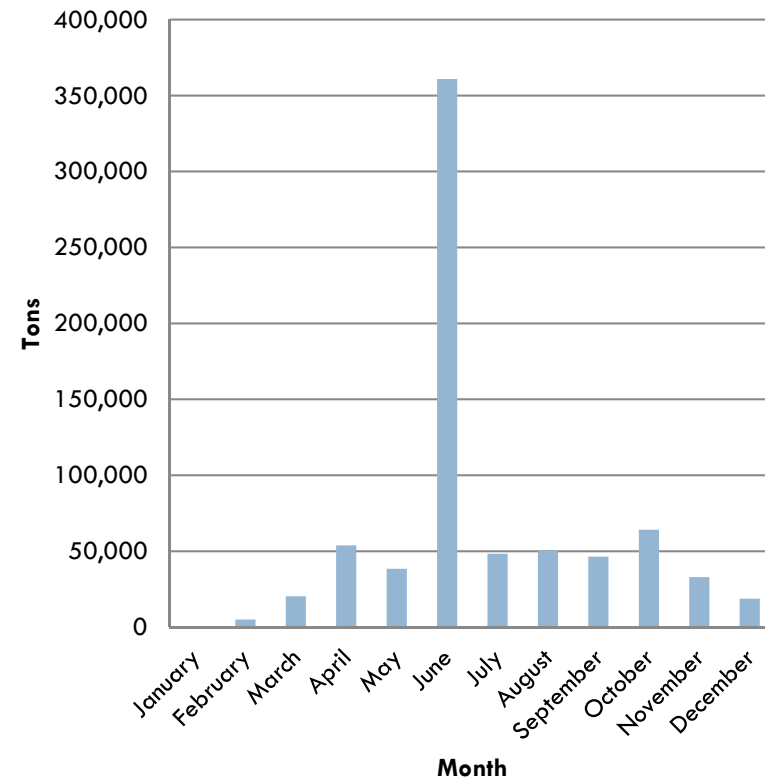
- Gasoline, jet fuel and kerosene
- Distillate, residual and other fuel oils
- Waste material
- Fertilizer
- Primary non-ferrous metallic products

# Seasonality in Major Downriver Commodities, 2008 – 2010

**Average Monthly Tonnage of Wheat**



**Average Monthly Tonnage of Sand, Gravel and Stone**

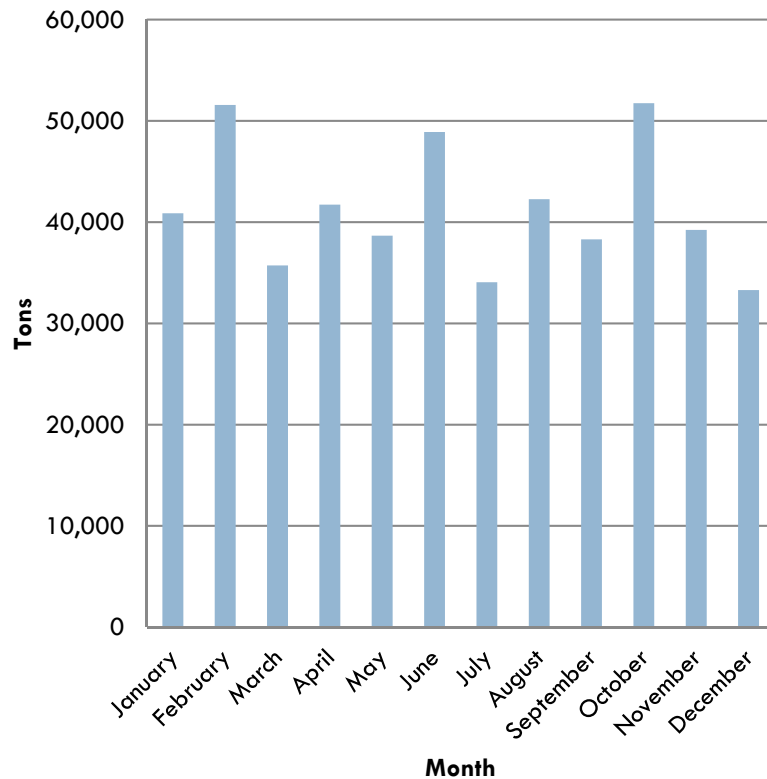


**Note:** July-December averages do not include 2010 data.

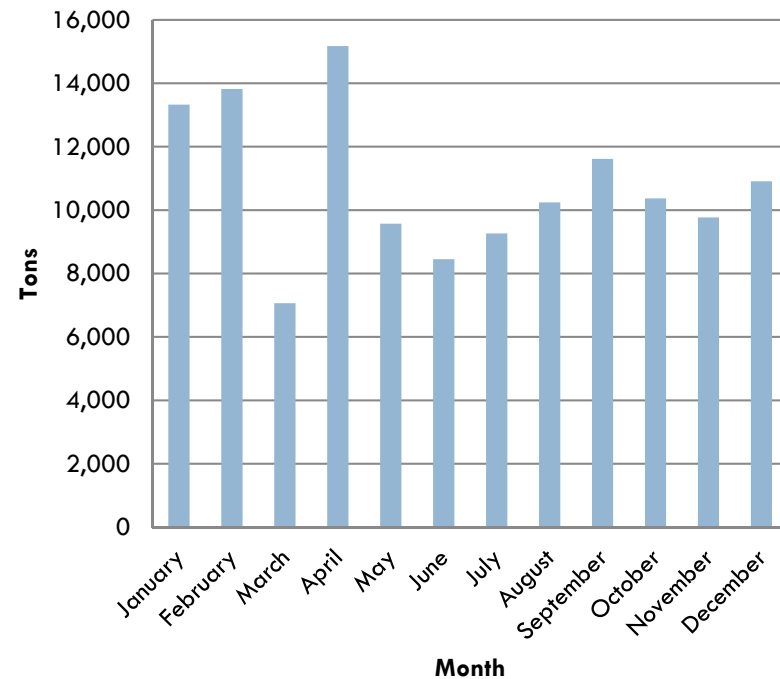


# Seasonality in Major Downriver Commodities, 2008 – 2010

**Average Monthly Tonnage of Forest Products**



**Average Monthly Tonnage of Vegetable Products, Animal Feed and Grain Mill Products and Other Agricultural Products**

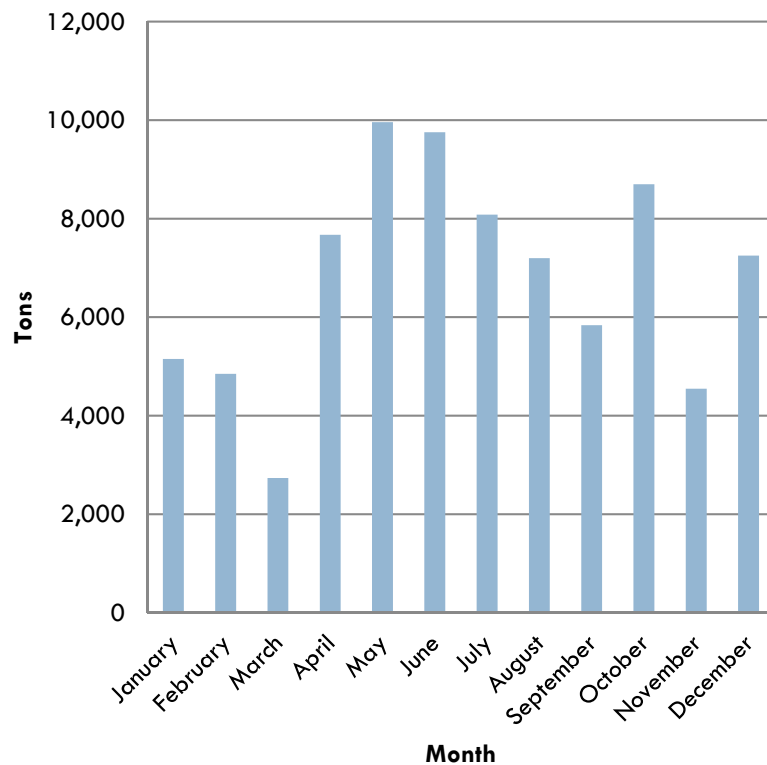


**Note:** July-December averages do not include 2010 data.

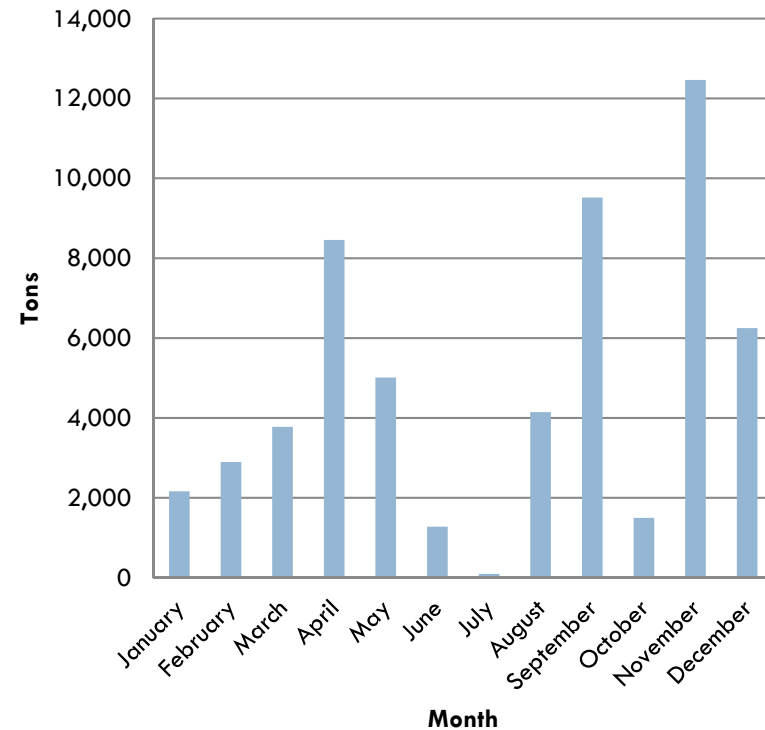


# Seasonality in Major Downriver Commodities, 2008 – 2010

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



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



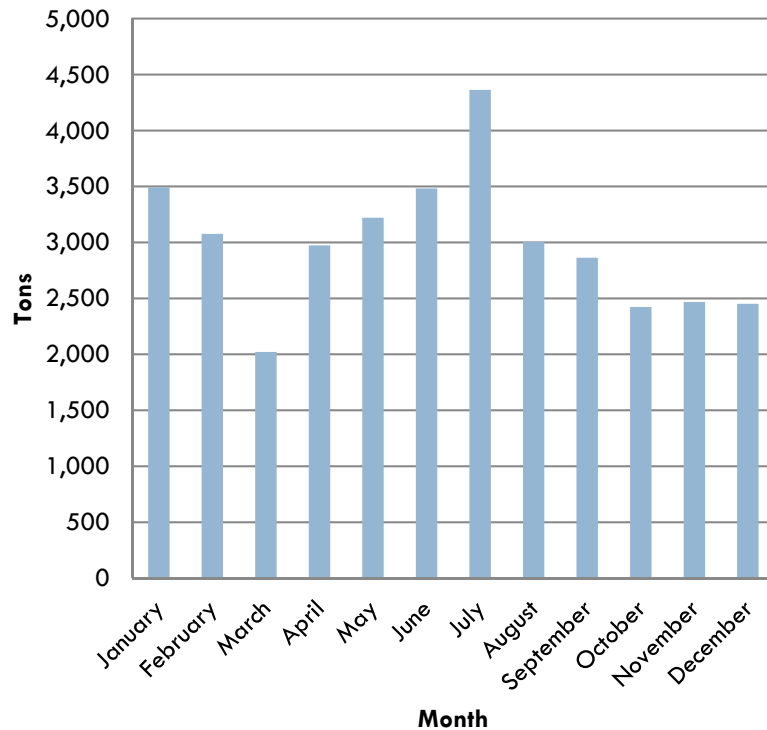
**Note:** July-December averages do not include 2010 data.



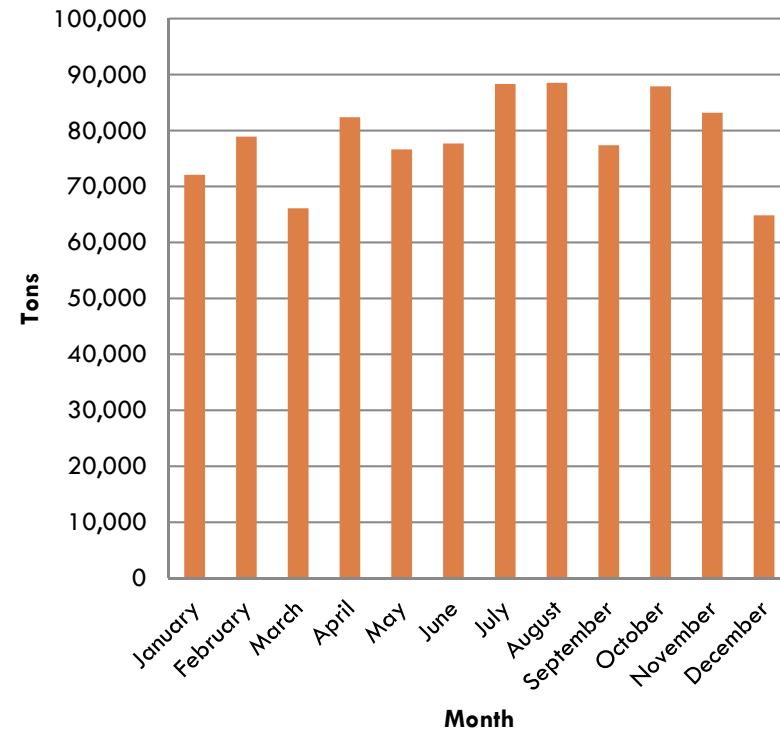


# Seasonality in Major Downriver and Upriver Commodities, 2008 – 2010

### Average Monthly Tonnage of Primary Non-Ferrous Metallic Products



### Average Monthly Tonnage of Distillate, Residual and Other Fuel Oils

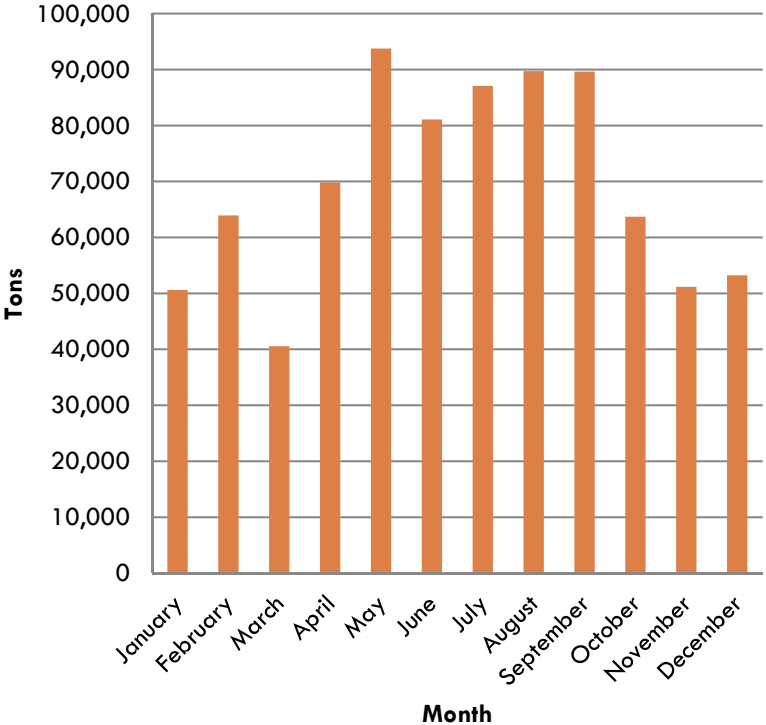


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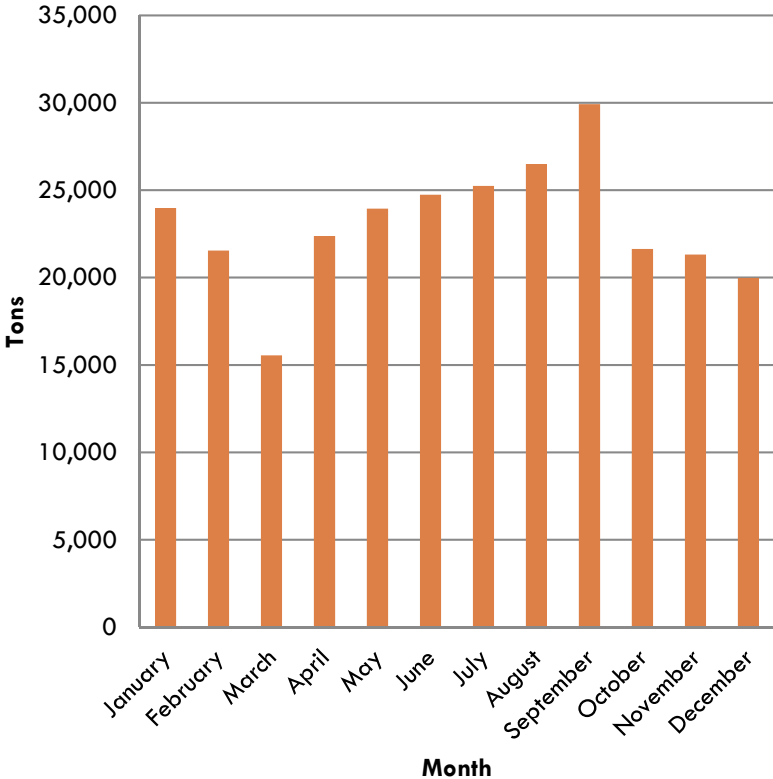


# Seasonality of Major Upriver Commodities, 2008 – 2010

**Average Monthly Tonnage of Gasoline, Jet Fuel and Kerosene**



**Average Monthly Tonnage of Waste Material**

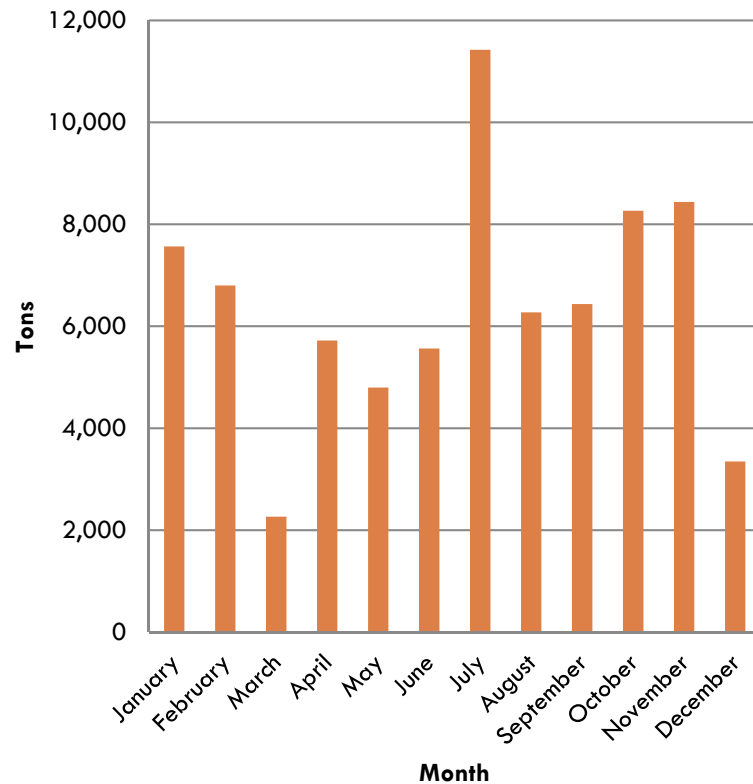


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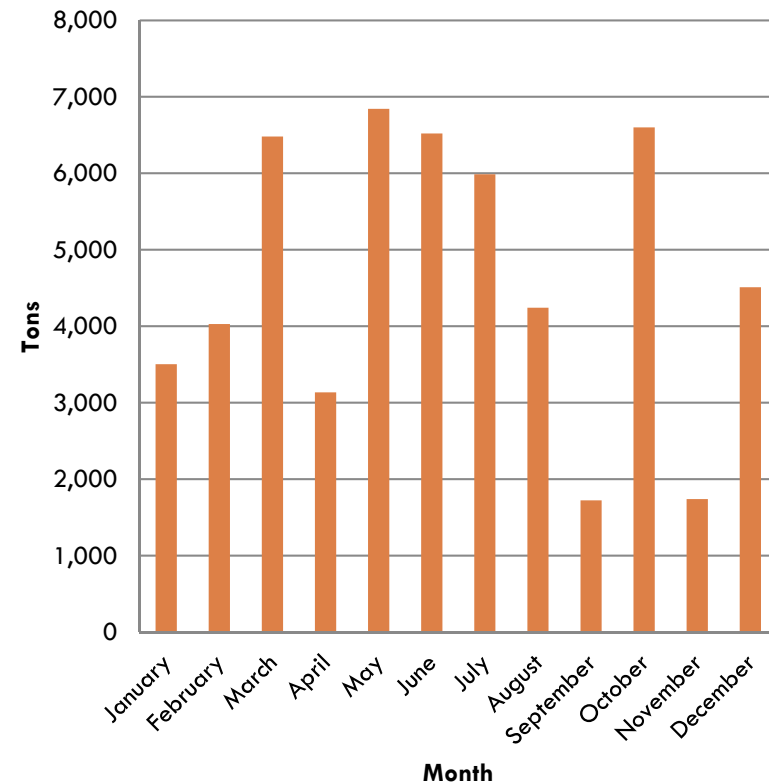


# Seasonality of Major Upriver Commodities, 2008 – 2010

### Average Monthly Tonnage of Forest Products



### Average Monthly Tonnage of Fertilizer



**Note:** July-December averages do not include 2010 data.



# Average Movements Through Bonneville, December – March

## Average Downbound Movements Through Bonneville, 2008-2010

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

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

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



# 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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