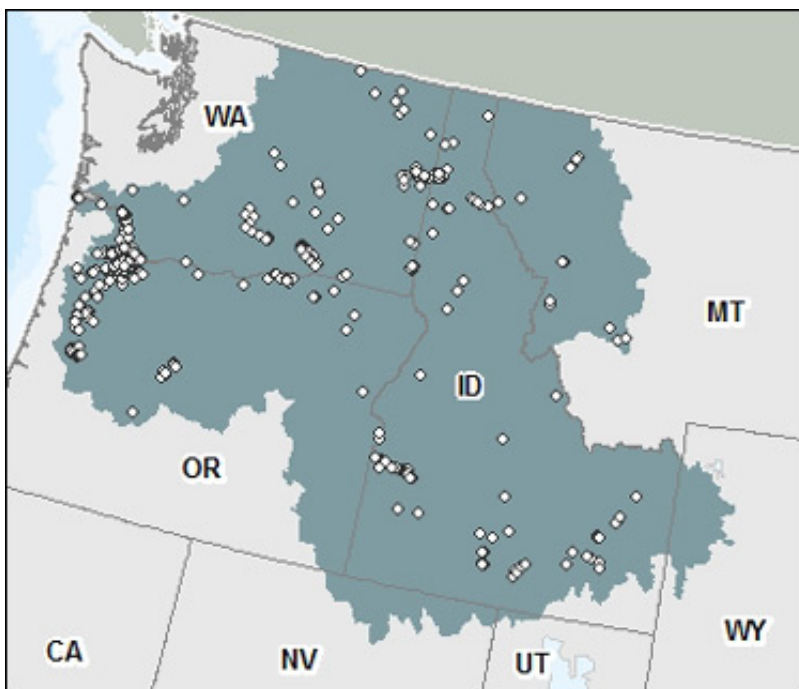




## Toxics Release Inventory (TRI) Program

### 2011 TRI National Analysis: Large Aquatic Ecosystems - Columbia River Basin



TRI facilities in Columbia River Basin

### Quick Facts for 2011

Number of TRI Facilities:	<b>466</b>
Total On-site and Off-site Disposal or Other Releases:	<b>105.6 million lbs</b>
Total On-site:	<b>96.4 million lbs</b>
• Air:	<b>13.5 million lbs</b>
• Water:	<b>4.7 million lbs</b>
• Land:	<b>78.2 million lbs</b>
• Underground Injection:	<b>none</b>
Total Off-site:	<b>9.2 million lbs</b>

[View definitions of TRI terms](#)

The Columbia River Basin covers an area of more than 260,000 square miles (194,700 square miles in the U.S.) in parts of seven U.S. states and British Columbia, Canada. The Columbia River begins in the Rocky Mountains of British Columbia, and flows for 1,200 miles through the states of Washington and Oregon before emptying into the Pacific Ocean. The Basin is home to many industries vital to the Pacific Northwest, including sport and commercial fisheries, agriculture, transportation, recreation, mining, paper mills, and hydro-electric power generation.

The Columbia River Basin ecosystem is also home to many important plant and animal species. The Columbia River salmon and steelhead runs, for example, were once the largest fish runs in the world. Recent studies and monitoring programs have found significant levels of toxic chemicals in fish and the waters they inhabit, including DDT, PCBs, mercury, dioxins, and other anthropogenic toxic chemicals. According to EPA Region 10's "Columbia River Basin Toxics Reduction Action Plan," such accumulation of toxics in fish threatens the species, and human consumption of fish with significant body burdens of toxics can lead to health problems.

In 2011, some of the largest sources of TRI chemicals in the Columbia River Basin included the land disposal of manganese, copper, lead, and zinc, as well as other metals from metal mines. Runoff from these areas, as well as wastewater effluent from numerous pulp and paper mills, is associated with degraded water quality. Hazardous waste management facilities had on-site land disposal, primarily of aluminum and zinc and lead and their compounds. On-site land disposal or other releases accounted for 81% of total on-site disposal or other releases in the Columbia River Basin in 2011. They decreased by just 1% from 2003 to 2011 and increased by 1% from 2010 to 2011.

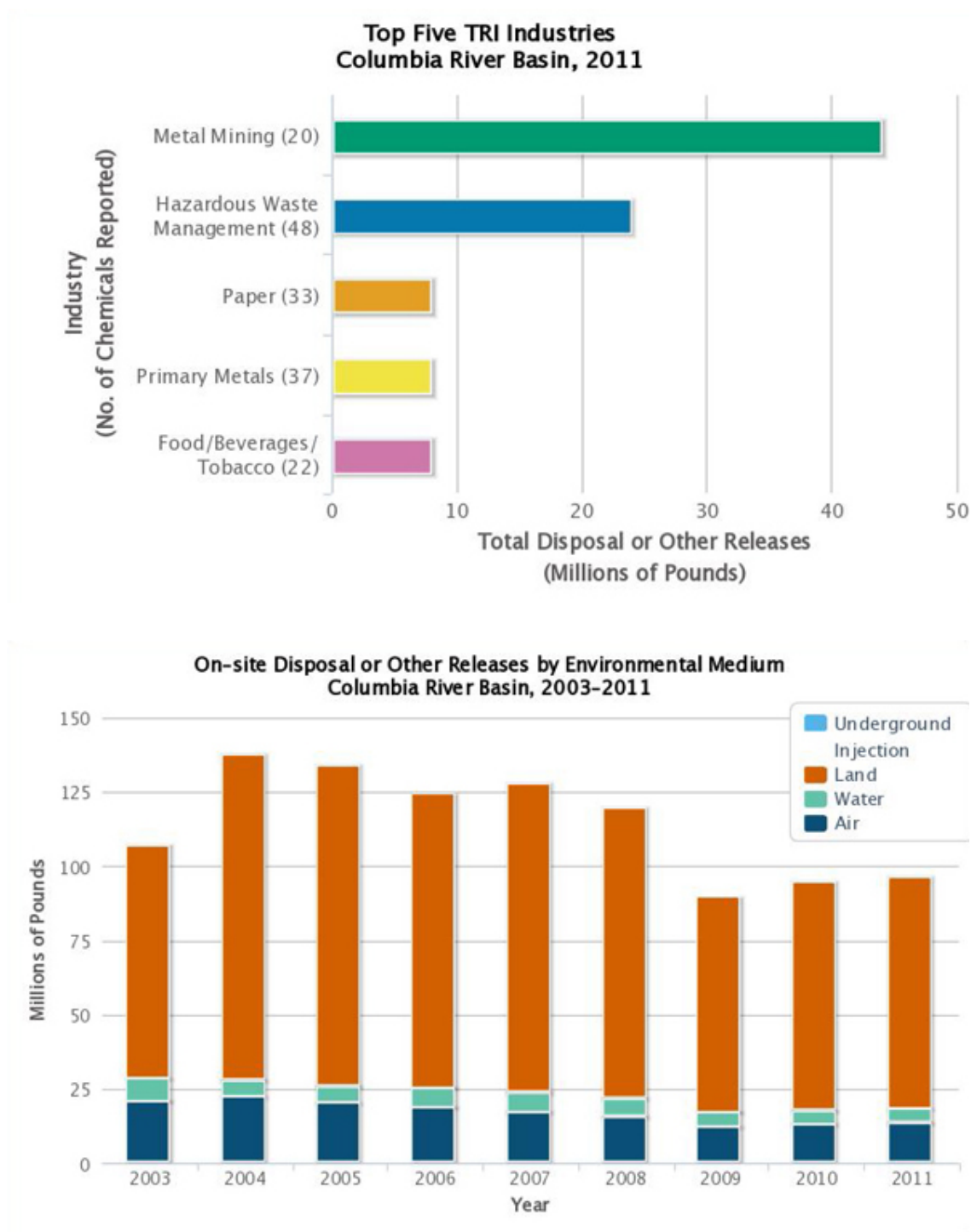
Air releases accounted for 14% of total on-site disposal or other releases in 2011. They decreased by 35% from 2003 to 2011 but increased by 3% from 2010 to 2011. The primary sources of air releases were pulp and paper mills, mainly consisting of methanol and ammonia, and food processors and chemical manufacturers, mainly consisting of ammonia.

Surface water discharges were 5% of total on-site disposal or other releases in 2011. They decreased by 39% from 2003 to 2011, including a 1% decrease from 2010 to 2011. The food processing industry accounted for over half of the surface water discharges in 2011, almost all of which was nitrate compounds.

Indian Tribes and state and federal governments are all engaged in efforts to restore and improve the water, land, and air quality of the Columbia River drainage basin, and they have committed to work together on a range of ecosystem restoration efforts. To learn more about ongoing efforts to protect the Columbia River Basin, visit:

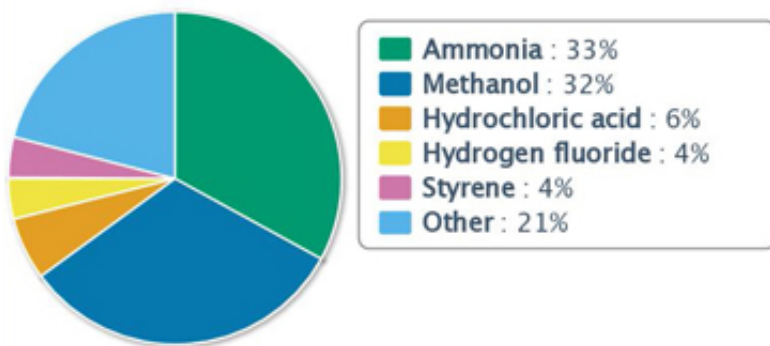
<http://www2.epa.gov/columbiariver>.

TRI National Analysis Geo-Specific Tables (Excel files)

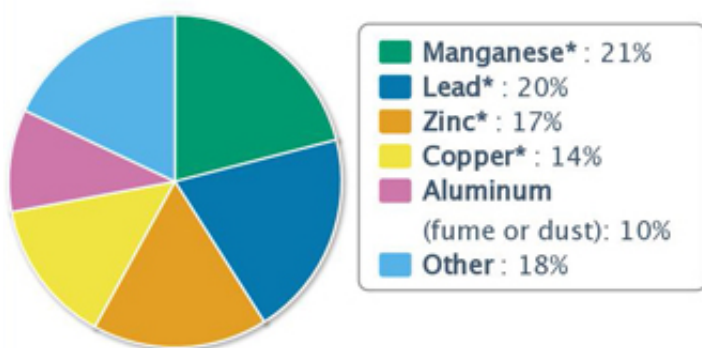


**Top Five Chemicals by Environmental Medium Columbia River Basin, 2011**

**Air**  
13.5 million pounds

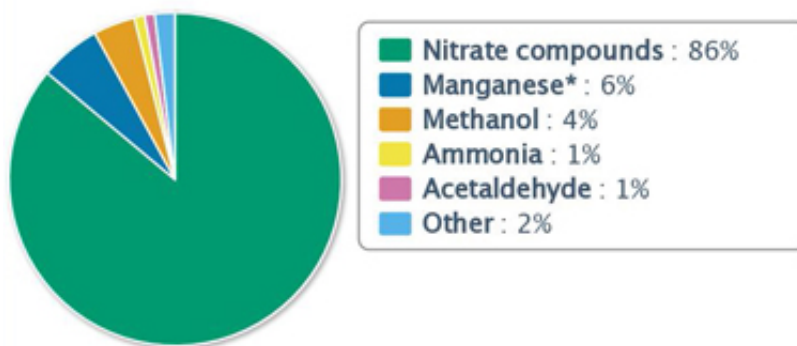


**Land**  
78.2 million pounds



\* and its compounds

**Water**  
4.7 million pounds



\* and its compounds

**No underground  
injection reported**

Note: This page was published in January of 2013 and uses the TRI National Analysis dataset made public in [TRI Explorer](#) in November 2012.

Last updated on March 16, 2014