

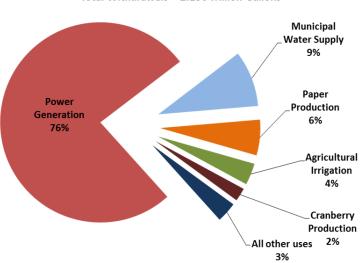
## Wisconsin Water Use

## 2011 Withdrawal Summary

**Water supply systems in Wisconsin** capable of withdrawing 100,000 gallons per day are required to register and report withdrawals. For 2011, reported withdrawals exceeded 2.155 trillion gallons of water from over 12,500 wells, ponds, streams, rivers and lakes.

### 2011 Withdrawals by Use

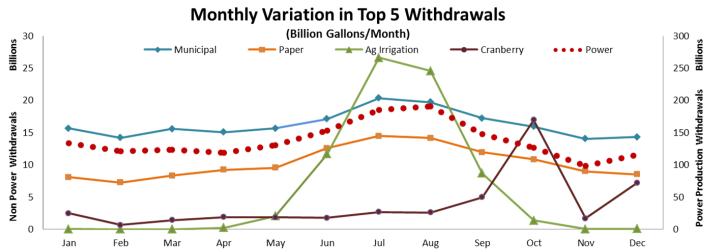
Total Withdrawals = 2.156 Trillion Gallons



Withdrawals occur when someone takes water from a surface or groundwater source making it unavailable for other purposes. The impact of a withdrawal on the resource or to other potential withdrawers depends on a number of factors. Monitoring water withdrawals by sector, source type and location will allow us to estimate the scale and impact of water use in Wisconsin and promote sustainable water use.

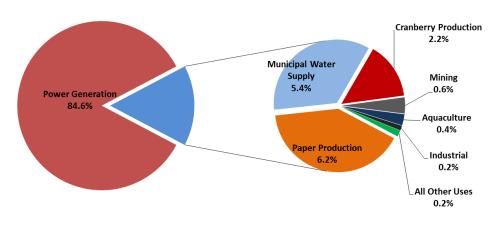
**Seasonal Variation** affects how and when water is withdrawn. Monthly withdrawals varied greatly throughout 2011 and followed temperatures and precipitation. For instance:

- Summer heat drives municipal water demand as well as cooling water demand for power and paper production.
- Agricultural irrigation peaks in July and August when crops typically require the most water.
- Cranberry growing requires the largest withdrawals in fall for harvest flooding and in early winter for frost protection.



#### **2011 Surface Water Withdrawals**

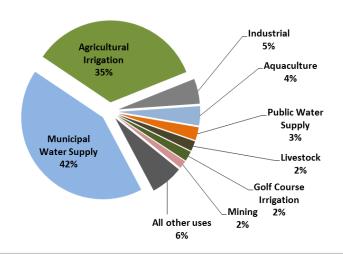
#### 1.9 trillion gallons statewide



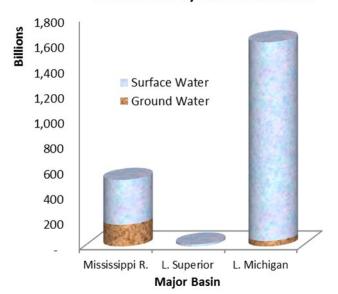
- Surface water withdrawals totaled 1.942 trillion gallons from 826 sources.
- The largest volume of water withdrawn in the state (1.6 trillion gallons) was used by power production facilities for noncontact cooling. These facilities are concentrated along Lake Michigan and the Wisconsin and Mississippi Rivers.
- Many surface water withdrawals are used and discharged near their point of withdrawal so that there is relatively little loss of water from the original source.

- Groundwater withdrawals totaled 213 billion gallons from 11,754 wells.
- Municipal water supply comprises the largest withdrawal (90 billion gallons) of groundwater in Wisconsin. They are typically owned by cities and deliver water for residential, commercial, institutional and industrial uses.
- Agricultural irrigation is the second largest use of groundwater in the state and necessary for growing many high value vegetable crops.

# 2011 <u>Groundwater</u> Withdrawals 213 billion gallons statewide



#### Withdrawals by Basin and Source



- Wisconsin water withdrawers rely much more heavily on surface water in the Great Lakes Basin than in the Mississippi River Basin.
- Despite Lake Superior being the largest freshwater lake in the world (by surface area) Wisconsin makes very few surface water withdrawals from it.

For more information regarding the Water Use Reporting program or to request more specific information on withdrawals, please visit our website or contact Water Use Program staff

dnr.wi.gov keyword "Water Withdrawal Reporting"

DNRWaterUseRegistration@Wisconsin.gov