



# Illinois Department of Natural Resources

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## LAKE MICHIGAN WATER ALLOCATION NEWSLETTER

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### Introduction

Since our last newsletter in August, 2011, the region, along with most of the rest of the country, has suffered through one of the longest and most intense droughts in modern history. Lake Michigan, considered a drought resistant source of supply for domestic use, is not immune to the effects of climate extremes, and has seen water levels drop to near historic lows. Lake level forecasts indicate that it is possible that by late fall/early winter, water levels could set a new record low.

In this years' newsletter, we'd like to provide you with information on how a drought impacts our Lake Michigan water allocation program, the current status of Illinois' Diversion as allowed pursuant to U.S. Supreme Court Decree, status of possible changes to the Department's Rules and Regulations that govern the allocation of water from Lake Michigan, Great Lakes Governors and Premiers Regional Water Management, recent Lake Michigan water allocation orders that have been issued and a summary of water use for the 2011 Water Year.

### Lake Michigan and the Drought of 2012

National, statewide and local news have been reporting on the severity and impact of the drought that has gripped the nation this year. Early in the summer Governor Quinn re-activated Illinois' Drought Response Task Force. While the drought was felt most in the central and southern part of the state, the northeastern Illinois region was also classified in drought for most of the summer. Dropping aquifer levels, low flows in area streams and rivers, and emergency water use restrictions were issues that many localities had to face.

The warm, dry weather also impacted the Great Lakes. All five Great Lakes are below average. Water levels on Lakes Michigan/Huron, which in a normal year rise about one foot from early March to mid-July, only rose about 4 inches this year, reaching the summer peak a month early. Since mid-June water levels have started to drop, and by the end of

September were 12 inches below their level compared to the prior year. Boaters and navigation interests have been significantly impacted, and this trend is likely to continue.

It's a common misperception that Illinois' diversion during a drought year will be very high. Due to the significant reductions in stormwater runoff during a drought year, and the impact of low Lake Michigan water levels on the amount of direct diversion of Lake Michigan water into the Chicago Sanitary and Ship Canal needed for navigation purposes, Illinois' diversion this year may set a record for the lowest diversion ever recorded. Although we do not have complete information on domestic water use of Lake Michigan water by all of our permittees, we believe that ongoing water conservation efforts by our permittees have kept peak use of Lake Michigan water to a reasonable level.

### **Status of Illinois' Diversion**

The U.S. Army Corps of Engineers did not complete any new Diversion Accounting Reports since our last newsletter in August 2011. However, the United States Geological Survey, which operates the primary gauging station on the Chicago Sanitary and Ship Canal at Lemont, has finalized the flow records at this station for Water Years 2010 and 2011. Based on an approximate relationship between this gauging station and computed diversion, it appears that Illinois' diversion for these two years will be well below the Court limit of 3200 cfs.

The Corps of Engineers has certified Illinois' diversion up through Water Year 2007. From 1981-2007, Illinois' diversion has averaged 3171 cfs, an annual average diversion that's 29 cfs below the Court limit of 3200 cfs. Illinois' diversion from Water Years 2008 through 2012 should average well below the Court limit of 3200 cfs, and as stated earlier, we expect Water Year 2012 to be a record setting low diversion year.

### **Updating the Lake Michigan Water Allocation Rules and Regulations**

Since the last newsletter we have drafted proposed revisions to our Rules. We also requested comments from our permittees regarding the substantive portion of the proposed changes, which focused on two areas: 1) updating the water efficient plumbing fixture section and 2) the elimination of the maximum unavoidable leakage allowance in the calculation of unaccounted-for-flow.

In response to our request for comments, no one expressed concern with updating the rules to reflect current low flow plumbing fixtures. However, we received 13 comments on our proposal to eliminate the maximum unavoidable leakage allowance. Two supported the proposal, while 11 recommended against it. The main concern appeared to be the economic cost to upgrade a water system to reduce water loss, rather than whether the proposal made technical/management sense. Based on the concerns expressed, we revised our proposed Rules to explicitly recognize that for some permittees it will take a long time to develop and implement an infrastructure program that will enable them to reduce system losses to a reasonable level.

We have not yet taken any official action. We still intend to circulate a draft of the proposed revisions to our Rules for your review and comment prior to taking any action to request approval of the revised Rules from the Joint Committee on Administrative Rules, the legislative body which oversees agency rulemaking. We recognize that these are significant changes to the water allocation program, and we need and value your input in this Rules revision process. Our goal continues to be for the Department's Lake Michigan water allocation program to complement your own efforts to promote the efficient use and management of Lake Michigan water.

We have also heard from a number of organizations that promote water conservation that we should consider as an alternative the adoption of the AWWA water audit method, which came out around 2003. This method does not utilize the term "unaccounted-for-flow", and so would be a significant departure from our Annual Water Use Audit Form (LMO-2). Information on this water audit method is available at: <http://www.awwa.org/Resources/WaterLossControl.cfm?ItemNumber=47846&navItemNumber=48155>. We would be very interested to hear your views on this, especially if there are any of our Lake Michigan water allocation permittees that have utilized this water audit method.

### **Great Lakes Governors and Premiers Regional Water Management**

During this past year the Great Lakes states and provinces continued individual and collective efforts to implement the Great Lakes Compact and the related Regional Agreement. Most of this effort has focused on developing a process and sequence of events for the Compact Council and the Regional Body to review an application for a exception to the prohibition on diversion. It is anticipated that within the coming year that the State of Wisconsin, on behalf of the City of Waukesha, will submit a proposal that will require Compact Council approval. The City of Waukesha is outside of the Lake Michigan basin but within a county who straddles the basin boundary. This application will likely be the first real test of the Great Lakes Compact and Regional Agreement. Further information on the Compact and its implementation can be found on the Council of Great Lakes Governors' website: [www.cglg.org](http://www.cglg.org).

Please remember that Illinois' diversion of water from Lake Michigan will continue to be governed under the terms of the U.S. Supreme Court Decree and Illinois' participation on the Compact Council will not limit our ability to continue to divert water from Lake Michigan consistent with the Decree.

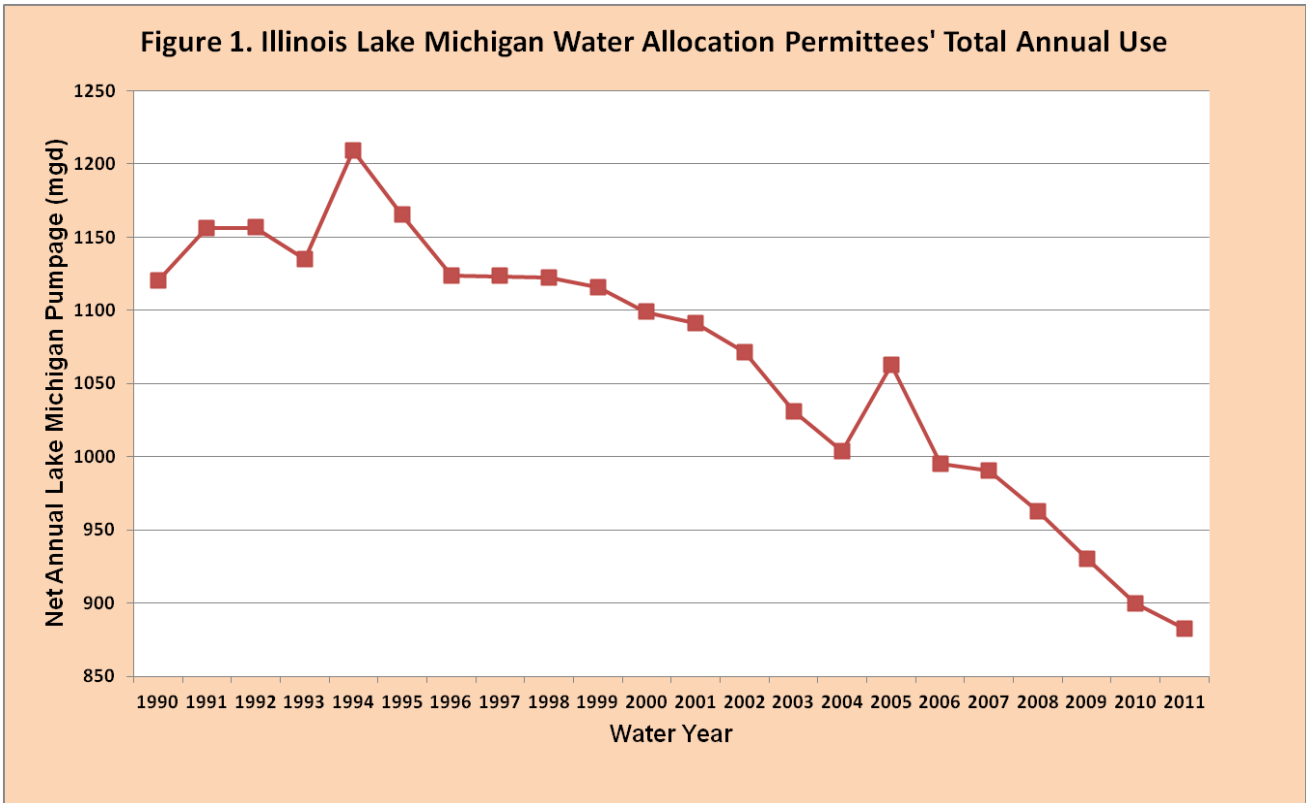
### **New Lake Michigan Water Allocation Orders**

Since our last newsletter, the Department has not issued any water allocation orders:

### **Water Use Summary for the 2011 Water Year**

The water use summary for the 2011 Water Year has been posted on our website

<http://www.dnr.illinois.gov/WaterResources/Pages/default.aspx>, and can be viewed or downloaded. This information was obtained from the Annual Water Use Audit Reports (LMO-2). Total domestic Lake Michigan water use was 887 million gallons per day (mgd). This continues a downward trend in total domestic use of Lake Michigan water that we have observed since the early 1990's. The following chart illustrates this trend.



If you have any questions, please feel free to contact:

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