

## **INTRODUCTION**

Beginning in 1971, the Lake Minnetonka Conservation District (LMCD) has conducted an inventory of watercraft being stored at riparian and multiple dock sites (including district mooring areas) on Lake Minnetonka. Since 1971, this project has been conducted during 29 different boating seasons, providing for inventorying even years only from 2000 forward.

The purpose of this Report is to summarize the results of this project conducted in 2010. Three primary objectives were established for the 2010 Shoreline Boat Storage Count. These include:

1. Establish the total number of watercraft stored in 2010.
2. Outline data collected from historical shoreline boat storage counts.
3. Identify any observable trends from the data collected.

## **METHODOLOGY**

To ensure consistency and accuracy in the completion of the 2010 Shoreline Boat Storage Count, LMCD staff established the following five parameters:

1. Survey all 125 miles of lakeshore frontage Mondays through Thursdays. To best represent when LMCD staff could count the maximum number of watercraft stored on Lake Minnetonka, surveying hours were historically set between 8:00 a.m. and 12:00 p.m. As of 2006, the Board requested that staff implement the Proactive Code Enforcement Program in conjunction with the Shoreline Boat Storage Count on a bay-by-bay basis. Due to combining the two programs, surveying hours increased to as late as 4:00 p.m. Friday was established as an alternative day when weather conditions were not favorable or for other reasons. To accommodate for staffing coverage, four Fridays were utilized in 2010.
2. Fieldwork for this project was to be counted during the month of June, with a completion date of July 4<sup>th</sup>. These dates were selected to best represent when LMCD staff could count the maximum number of watercraft stored on Lake Minnetonka. Due to combining the two programs and accommodating for staff availability, surveying dates were expanded. In 2010, fieldwork for this project commenced on May 25<sup>th</sup> and was completed on July 27<sup>th</sup>; as compared to June 9<sup>th</sup> and July 22<sup>nd</sup> in 2008. Although a good part of the fieldwork for the 2010 project took place after July 4<sup>th</sup>, LMCD staff believe this had little or no impact on the outcome of the project.
3. The count of watercraft stored on Lake Minnetonka was conducted by LMCD staff, utilizing the LMCD's 19-foot runabout.

4. A shoreline storage count worksheet was established to assist in conducting the fieldwork for this project. Ten classifications of watercraft were established on this worksheet to categorize each watercraft type. The watercraft classifications include: runabout, cruiser, sailboat, pontoon, houseboat, charterboat, fishing boat, personal watercraft (PWC), aircraft, and miscellaneous. Further definition of the watercraft classifications are outlined in Appendix A.
5. Identify the number of sites that have three or four plus restricted watercraft stored within the authorized dock use area, along with those that have empty slips. For this project, a slip is defined as “either a docking structure with three clearly defined sides or a boatlift”.

### **SUMMARY OF THE 2010 SHORELINE STORAGE COUNT**

The total number of watercraft stored on Lake Minnetonka during the 2010 boating season was 9,230; 5,719 for residential storage and 3,511 for multiple dock facilities (including district mooring areas). Analysis of watercraft storage for the following respective categories are detailed below: 1) riparian sites, 2) multiple dock facilities, 3) sites storing three or more watercraft, and 4) sites maintaining empty slips:

**Riparian:** Appendix B highlights the 5,719 watercraft stored at riparian sites in 2010. Of these 5,719 watercraft, approximately 52% were found to be in either the runabout or cruiser classification. Further breakdown of this figure indicates that 31% of the watercraft inventoried were runabouts and that 21% were cruisers. The establishment of those figures took into account the removal of watercraft documented that were apart of the Mound Commons Docking Program (see Multiple Docks paragraph below). The lowest percent of watercraft stored at riparian residences were found to be in the houseboat, charter boat, and aircraft classifications, which totaled less than one percent.

**Multiple Docks:** Appendix C highlights the 3,511 watercraft stored at multiple docks in 2010, including the Mound Commons Docking Program. To further explain, the City of Mound provides the LMCD the total number of watercraft stored within the Common’s Program for the current year (see Appendix C attachment). That total details the number of Personal Watercraft (PWC), with the remainder of watercraft non-categorized (566 - 63 PWC’s = 503). For statistical purposes, staff divided the remaining 503 watercraft (251.5) evenly amongst the runabout and cruiser category; providing for slightly skewed statistics.

Of the 3,511 watercraft, approximately 68% were found to be in the runabout and cruiser classification (including the 503 from the City of Mound). Further breakdown of this figure indicates that 40% of the watercraft were runabouts and that 28% were cruisers. The lowest percentage of watercraft stored at multiple dock facilities were

houseboat, charter boat, and aircraft classifications, which totaled less than one percent.

**Three Boats/Four Boats/Empty Slips:** Appendix D highlights the number of sites that stored three or four plus restricted watercraft, along with defined empty slips. In 2010, there were 360 sites that stored three watercraft, 207 that stored four or more, and 773 that had empty slips. This compares to 2008 statistics of 332, 188, and 1102, respectively; providing for a 9% increase in three and four boat storage and a 30% decrease in empty slips.

## **SUMMARY OF HISTORICAL SHORELINE COUNTS**

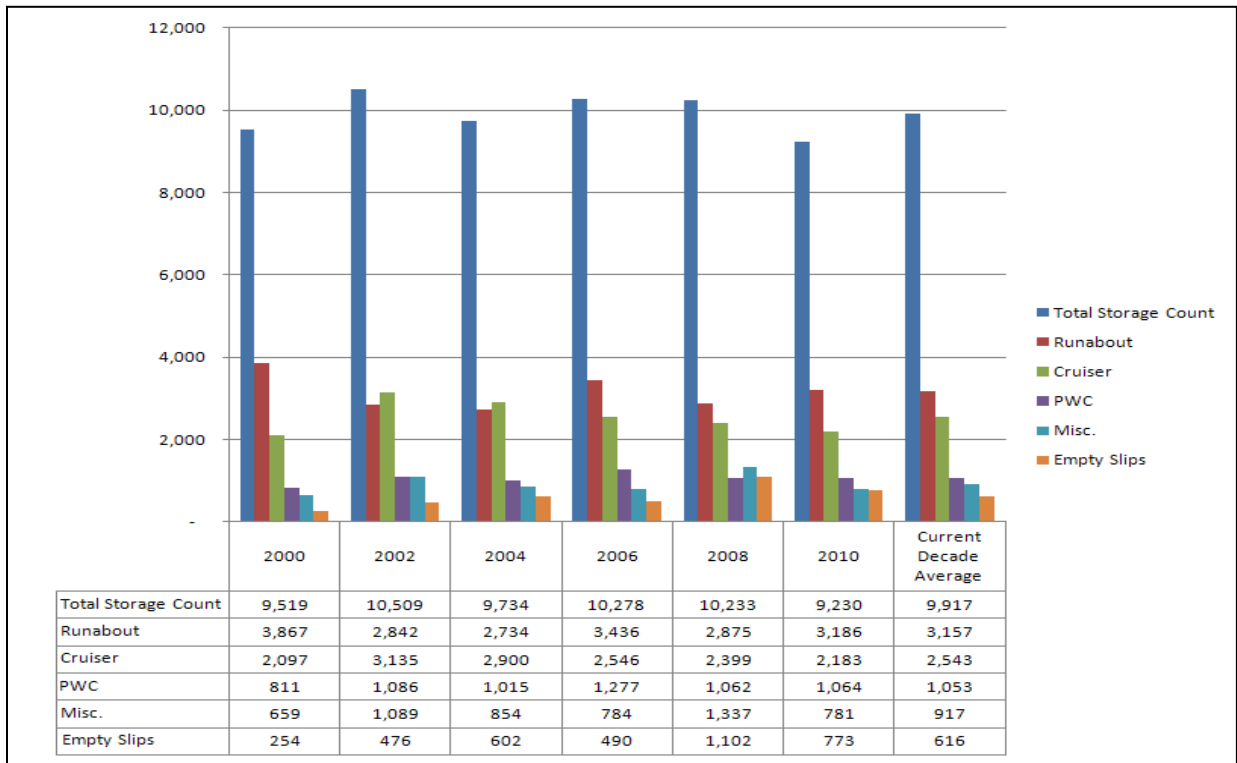
Appendix E highlights historical multiple dock and riparian shoreline counts conducted by the LMCD from 1971 to 2010. In 2010, LMCD staff documented 9,230 watercraft on Lake Minnetonka. Since 1971, there have been only four Shoreline Boat Storage Counts where the total number of watercraft exceeded 10,000 (10,475 in 1996, 10,509 in 2002, 10,278 in 2006, and 10,233 in 2008). Therefore, the current count of 9,230 falls just slightly higher than the all time (1971 to 2010) average of 8,361. Staff would like to preface that the statistical counts performed in the earlier years may not provide for the methodology utilized in the more recent years.

## **CONCLUSIONS/TRENDS**

After review of the historical statistics, staff believed that specific conclusions and trends documented within the current decade warranted notation. Those trends, and respective bar chart, are provided below:

- As noted above, the 2010 total storage count of 9,230 is slightly higher than the all time average of 8,361 (1971 to 2010). However, the current total storage count falls directly in line with this decade's average of 9,917.
- The runabout's current count of 3,186 falls directly in line with this decade's average of 3,157. However, since 2000 the counting of the watercraft's existence has regularly fluctuated. In comparing the current count to counts obtained in 2000 (3,867), 2002 (2,842), 2004 (2,734), 2006 (3,436), and 2008 (2,875), the following percentage changes are offered: 18% decrease, 12% increase, 17% increase, 7% decrease, and 10% increase, respectively.
- The existence of cruisers have consistently reduced in numbers since obtaining the 2002 count of 3,135. As compared to the current count of 2,183, there is a 30% decrease. One might say that the decrease in cruisers contributes to the economy. However, the greatest decrease in cruiser usage was between the years of 2004 (2,900) and 2006 (2,546); a 12% decrease, as compared to 2008 (2,399) and 2010 (2,183); a 9% decrease.

- In 2008, staff had reported a large increase in personal watercraft (PWC) use since 1998. However, since 2002, PWC usage has leveled out. The current PWC count of 1,064 is directly in line with the current decade's average of 1,053.
- Miscellaneous items (as defined in Appendix A) seemed to have peaked in 2002 (1,089) and 2008 (1,337). However, the 2010 usage count of 781 falls just below the current decade average of 917.
- The count of empty slips at individual sites has regularly fluctuated; however, the current count of 773 falls just slightly above the current decade average of 616. There does not seem to be a trend in the total storage count as compared to empty slips. However, the consistent presence of dock and boat lift structures are directly related to homeownership. While in the field, staff had observed homes in mid-summer with their docking structure on land. In questioning as to whether Lake Minnetonka home sale's statistics were available, staff had an opportunity to talk with a local real estate agent. The agent confirmed that the statistics in question were not available. Additionally, the agent stated that there is a perception that there are currently more homes listed; however, he believed that perception was due to the increased length of time signage has remained present; noting more homes are remaining vacant rather than selling. One might consider this trend as a reason for the drop in empty slips.



Based on the historical data outlined, it is the recommendation of staff that the next Shoreline Boat Storage Count remain as scheduled in 2012.