

## Cultural Environment

### Recreational Boating and Navigation

Boating on Lake Koshkonong is described in the publication “*Boating on the Rock River. Results of the 1989-1990 Wisconsin Recreational Boating Survey.*” In the study, the Rock River ranked 13<sup>th</sup> statewide in boating popularity, following behind the Mississippi River, Lake Winnebago, Wisconsin River, Lake Geneva, Lake Mendota, Wolf River, Pewaukee Lake, Fox River, Lake Monona, Shawano Lake, Green Lake and Lake Wisconsin. Residents of Rock and Jefferson Counties accounted for 75 percent of the boating use. The survey period of the study included the seven traditional months of April through October, but it should be noted that a significant amount of boating occurs in February, March in mild winters from walleye fishermen, and November from anglers and duck hunters. Like all Wisconsin waters, there has been a trend for horsepower of boats to increase, boat size to increase and for more time to be spent on personal watercraft since the 1889-90 study. Ninety-eight percent of the boats were motorized, and the average rating was 58 horsepower

The boating effort was estimated at 49,480 boating days during the seven-month period Wisconsin Recreational Boating Survey from . Effort was fairly well balanced through the seven months. May was the busiest month with 19 percent, and October was the slowest with 11 percent. The most popular activity that boaters engaged in was fishing which accounted for about half of the boating. The rest was divided into cruising, sailing, water skiing, swimming, and “other.”

Sixty-two percent of the respondents said the waters were “not at all crowded,” while 18 percent said it was slightly crowded, 19 percent said it was moderately crowded. Only one percent said it was extremely crowded. Only four percent of the boaters reported an experience that was poor to fair. Ninety-six percent described their experience as good to perfect.

Lake Koshkonong’s large expanse of open water and the shallowness make the lake prone to rough conditions. Changing winds and sudden storms have lead to disasters for unprepared boaters. The stability and the large deck area make the pontoon boat the boat of choice for most shoreline residents. Flat bottom “john boats” are popular as they can launch at the shallow landings and travel into the shallow bays. Most fishing boats are open hull; outboard propelled boats between 16 and 18 feet in length. The size and number of “cruising” type boats has increased in recent years despite their requirements for deeper launches and deeper draft.

Boat launching access is available at three private marinas, several taverns, and a few unimproved township road ends. Public access with some improvements include: Newville Public Access Site; Royce Dallman County Park; Vinne Ha Ha Public Access Site; Groeler Road Public Access Site; Kuehn Road Access; Amacher’s Landing (Bingham Road;) and two access sites in Fort Atkinson. In addition, there are numerous private launches that provide access for neighborhoods and individuals.

The marinas and a few of the private tavern sites on the Rock River are capable of launching large boats (23 feet or larger.) Private launches on the lake as well as the public access sites cannot provide launching for boats requiring over 2 feet of water. Yet many boaters have purchased roller trailers that can launch in very shallow water.

Many of the complaints on navigation stem from the fact that boats need to be moored long distances from the shore. In many cases this means from 100 to 200 feet offshore. Unless boaters build extremely long piers, they must wade out to get to their boats. Holding the water higher would provide some relief, but in some cases boats would have to be moored offshore even if the lake was higher.

Public access sites on Lake Koshkonong are several years behind the sites on neighboring lakes such as the Madison Lakes. There is a definite need for a well-developed site with a dredged harbor, breakwater and modern facilities.

The 1989-1990 boating survey did not address the months of November through March. The winter drawdown begins on November 1<sup>st</sup>. As water levels fall during the waterfowl season, navigation in marshes for duck hunting becomes extremely difficult. In the case of Mud Lake, the marsh goes completely dry.

A study was conducted by RKLD in March of 2004 to estimate the additional acreage of water that would be added by modifying the operating orders of the dam. Shorelines were examined in residential areas of the lake. Water depths were measured and the areas were mapped using g.p.s. It was determined that an additional 50 acres of water would become navigable for most boats by raising the water level 0.5 feet.

The following summarize a WDNR recreational boating survey performed from May 1989 to April 1990 titled, Boating on the Rock River.

- Boating on the Rock River was fairly evenly spread out from April through October.
- Boats on the Rock River were largely either open-hulled or pontoon, most with outboard. The percentage of boats with open hulls was 81%.
- The average horsepower of the boats on the river was 58hp.
- The average length of boat on the river was 16.2 feet.
- Inquiries of local marine dealers in the area indicates that the average draft of open-hulled boats with outboard motors is 23 inches and with inboard motors is 28 inches.

RKLD prepared and distributed a survey questionnaire to determine the consensus of opinion about many of the lake-related issues. The survey responses were summarized in a Lake Planning Grant Report submitted to the Department in 2001. The survey yielded the following:

- Spring and summer are the seasons that respondents spent the most time on the lake. The most popular watercraft usage was boat with >25 hp motor.
- The overall rating of quality of fishing was poor. Water quality was described the as murky or pea soup by 68% of the respondents and 59% reported that summer was when water quality was worst.
- Aquatic plant growth was described as too little by 49%.
- In response to negative impacts regarding the use of the lake, poor water quality, algae, low water ranked as “very much.” High water was ranked as “very little”, and weeds as none.
- The top three factors contributing to the problems on the lake were lake level changes, boat/Personal Water Craft (PWC) traffic and fertilizers/pesticides.
- The most negative aspect of the lake was worsening water quality.
- The most positive aspect was RKLD being active and concerned.
- With respect to water levels, 55% responded that there was too much variation and 43% responded that water levels were too low.
- The survey response to lake management priorities was water levels followed by water quality.

Mail surveys have been a preferred off-site survey method for many resource management agencies because they are relatively simple and cost-effective. Mail surveys can be affordably conducted. The utility of the survey results is in question, due to improper sample selection and nonresponse bias. The RKLD mail survey targeted solely RKLD members and achieved an 8% response rate. demonstrates a failed survey instrument. The survey as conducted, cannot measure preferences of Lake Koshkonong recreationalists and interested general public by sampling targeted at RKLD members. Moreover, due to the large potential non-response bias, the survey cannot measure preferences and issues of the RKLD membership. With 92% non-responding the likelihood of large nonresponse bias is great. Nonresponse to mail surveys is not a problem in itself; the problem is that nonresponse induces a nonresponse bias in the estimates. This happens because nonrespondents usually differ in important characteristics from respondents. Nonresponse bias in mail surveys can be a major problem because nonresponse can be substantial. Even when a survey and its instrument have been well designed and three mailings have been made (Dillman Method 1978); the response rate may only reach 50-75%. Response rates >60% for statewide surveys are commonly deemed reasonable. Note: The Statewide Boating Mail Survey (Boating on the Rock River) included in the appendix of the EIR achieved a 74% response rate. Surveys achieving <50% response rate are typified as low (Pollock et. al 1994.) There are primarily two ways of dealing with the problem of nonresponse bias; reducing nonresponse by good survey design (multiple mailings, use of rewards) and estimating the remaining bias with a follow-up telephone survey. The two approaches are not mutually exclusive and both can be used in the same survey. The RKLD survey used neither approach, hence the extremely low response rate.

Based on the survey results, in part, RKLD at their 2002 annual meeting overwhelming passed a proposal to request a change in the Operating Order. Nonetheless, shortly thereafter (2003), the Lake Koshkonong Wetland Association (LKWA) was formed in response to the threat of RKLD’s proposal. The formation of the LKWA was primarily

prompted by this proposed increase in water levels due to local concern about the potential adverse impacts to the more than 4000 acres of wetlands adjacent to the lake. LKWA describes their mission as an effort to protect the existing wetlands on Lake Koshkonong and the Rock River and to promote the health of natural plants, fish, birds, and other forms of wildlife in the basin.