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# News Release

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News Release

## SNOWMELT SUPPLY TO THE GREAT LAKES ANTICIPATED TO BE SMALL

From the summer of 1997 to today, water levels on the middle Great Lakes have fallen from near record highs to near record lows. This decline is nearly 3.5 feet on lakes Michigan, Huron, St. Clair and Erie. This trend is forecasted to continue for the foreseeable future.

The drainage basins for lakes Superior and northern Michigan and Huron are the headwaters for the Great Lakes. This region is in the midst of one of the driest winters on record. Snowmelt runoff is a key component in replenishing groundwater and tributary stream flows into the Great Lakes. The National Weather Service recently issued a statement saying that at least one-half of the U.S. was suffering from drought conditions and that "conditions are probably going to get worse before they get better". The upper Midwest, including much of the Great Lakes region, has been suffering from below normal rainfall and snowfall over the last three years. Great Lakes water levels are approaching record lows not seen since 1963-64. The prospect of prolonged drought conditions this spring is not good news.

The National Weather Service has been conducting airborne snow surveys around the Lake Superior basin for the U.S. Army Corps of Engineers since 1983. These surveys are conducted in early March each year, when the snowpack is typically at its greatest. Airborne surveys are conducted using sensitive instruments installed in aircraft flying along predetermined routes around the lake which detect the water content of the snow, or snow water equivalent (SWE). The aircraft and instrumentation are operated by the National Operational Hydrology Remote Sensing Center (NOHRSC) in Chanhassen, MN. *(For further information on the measuring equipment and technique, please see the attached description entitled "gamma.")*

The latest snow observations for the Lake Superior basin show an astounding lack of SWE for the time of year. Usually, between 6 and 12 inches of water is contained in the snowpack around the lake. This year almost all of the southern and western shores of the lake in Michigan, Wisconsin and Minnesota is snow free. The only snowpack of merit is on the northeast and eastern sides of the lake. Snow conditions were well below normal for the preceding two winters as well. *(Attached are graphics of the SWE distributions around the lake for the last four winters.)*

Without this vital influx of snowmelt, the upper Great Lakes are expected to have only a modest rise this spring. If dry conditions continue through the spring, the seasonal peaks of Great Lakes water levels may occur earlier in the summer and start declining further before the end of the normal boating season. Marine interests are advised to be more careful when navigating in non-dredged marinas and ports and other shallow water areas. Also, when strong winds occur, water levels can decline significantly on the windward side of each Great Lake. When on the water, or about to embark, stay tuned to NOAA weather radio for the latest advisories on wind-induced changes in water levels.