

Invited Abstract

CONTINUING LOW LAKE ERIE WATER LEVELS

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During the period 1970-1998 we experienced extremely high lake levels, the highest levels regime in our 150 plus years of record. This regime continued through most of the 1990's with a near record elevation in the summer of 1997. However during the last half of 1998 and all of 1999 the levels dropped dramatically to levels last seen in the mid 1960's. The one and two year drop between July 1998 and July 1999, and between July 1997 and July 1999 were the second largest drops in 140 years. During 1999, Lake Erie had the smallest seasonal rise since 1967 and drought conditions are prevalent in much of the eastern U.S. The first year of the millennium saw a continuation of the low water levels. The outlook for 2001 is for lake levels peaking 20 cm below last years values. The primary impacts of the decreased water levels are being felt by the commercial navigation, recreational boating, and individuals using the beaches. The lower lake levels have resulted in reduced capacity for the Great Lakes carriers and greatly reduced depths in the slips of marinas serving recreational boating. On the plus side, the wetlands have areas dewatered for the first time in 35 years, rejuvenating plant diversity. In addition, the beaches are the widest experienced in the past 30 years and the lower levels will likely result in a temporary decrease in shoreline erosion.