

Evaporation emptying Great Lakes

By Debbie Howlett
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CHEBOYGAN, Mich. — By this time in any other year, the 95-foot ferry Kristen D would be plying the waters of the Straits of Mackinac, the channel that joins Lake Huron and Lake Michigan.

But this year, even in the Great Lakes, there's not enough water.

Several years of warm, dry weather — caused primarily by La Niña, a phenomenon in which cool Pacific waters push the jet stream north — have taken a toll on America's largest waterways. Precipitation, particularly winter snow, has decreased. Evaporation, heightened by shallower, warmer lakes, has increased.

As a result, all five lakes have lost up to 3½ feet of water in three years. By summer's end, they are expected to be at their lowest levels in the 120 years that records have been kept.

The drying of the Great Lakes poses a serious threat for nearly everyone working or playing in the waters between New York and Minnesota. It affects shipping, charter fishing, tourism, recreation and the environment.

Not to mention Ray Plaunt's family ferry business. For 68 years, April has marked the opening of Plaunt Transportation's 5-mile run to rustic Bois Blanc Island, which has 35 year-round residents and 500 summer homes. But lately, the water is barely knee-deep 200 feet from the shore — hardly enough to handle a ski boat, let alone a 95-foot ferry.

"We've had low water before, but not like this," Plaunt said. "It's the damndest thing."

For the first time, the National Weather Service last month issued a drought forecast for the nation,

rather than its usual spring flood advisory.

For the Great Lakes, the problem is less water in, more water out.

Runoff from melting snow on the Canadian Plains can boost water levels in the lakes by a foot or more during May and June. But the past two winters have been the warmest and driest in the 105 years records have been kept. Fourteen northern states had their longest snow-free periods in history; their first snowfalls came later than ever.

As a result, satellite images

taken by the National Oceanic and Atmospheric Administration in late March showed virtually no snow cover anywhere in the Great Lakes basin. Even above-average spring rainfall, experts say, would do little to elevate water levels.

The greatest loss of water, though, has been from evaporation. After the summer sun warms the lake water, cold autumn air settles on the surface and vaporizes as much as an inch of water a day. With shallower lakes, the water is warmer, and therefore the evaporation is greater.