



RESOLUTION  
Adopted Feb. 25, 2015

## Updating the accuracy of the International Great Lakes Datum (IGLD)

**Whereas**, movement of the Earth's crust across the Great Lakes - St. Lawrence River system occurs on a very gradual, continuous and non-uniform basis (in some areas in the magnitude of centimeters per decade), referred to as "glacial isostatic adjustment" or rebounding of the land surface from the weight of glaciers that retreated over 10,000 years ago; and

**Whereas**, water levels in the Great Lakes-St. Lawrence system fluctuate on a short-term, seasonal and long-term basis, requiring careful and accurate measurements within an accurately established vertical datum; and

**Whereas**, the safety and economic viability of the Great Lakes commercial navigation industry, the extensive recreational boating community and ports/harbors across the region all rely heavily on accurate water level forecasts and maintenance of congressionally authorized dredging programs to provide depths in the navigation channels including waterways connecting the Great Lakes; and

**Whereas**, all coastal zone management, including erosion prediction, flood prediction and response, and coastal structure design, construction and maintenance, rely upon an accurate vertical elevation datum; and

**Whereas**, all coastal habitat restoration, rehabilitation, creation, enhancement, improvement and protection activities currently underway and expected to be implemented under the Great Lakes Restoration Initiative (GLRI) require an accurate vertical datum; and

**Whereas**, prediction of the magnitude, timing and duration of climate variability as it affects the Great Lakes-St. Lawrence River system, and the development of adaptive management approaches thereto, require accurate water level measurements and forecasts; and

**Whereas**, the vertical elevation datum for the Great Lakes, known as the International Great Lakes Datum (IGLD), first established in 1955 and last updated in 1985, needs to be updated every 25 to 35 years to reflect continuous and differential changes in land surface elevations across the region and IGLD (1985) is now due for an update.

**Therefore, be it resolved**, that the Great Lakes Commission urges the National Oceanic and Atmospheric Administration (NOAA) to prioritize the IGLD update, with anticipated release in 2025, and to coordinate their activities with Canadian federal and provincial partners, to ensure that this foundational vertical datum is maintained to the highest accuracy possible using the best available technologies; and

**Be it resolved**, that the Great Lakes Commission urges NOAA to partner with states, Canadian provinces and federal entities to extend the accuracy of the new IGLD in all ports and harbors of refuge that were not updated in 1985;

**Be it finally resolved**, that the Great Lakes Commission urges the U.S. Congress to provide necessary financial resources to complete the IGLD update, and further requests that the Canadian federal government provide a commensurate share to ensure timely completion of this important endeavor.

*Adopted at the 2015 Semiannual Meeting of the Great Lakes Commission, February 24-25 in Washington, D.C.*