

Great Lakes WATER LEVEL DASHBOARD



Project Managers: Drew Gronewold, Anne Clites Developer: Joeseph Smith

There is a growing need within the international water research and water resources management community for conveying Great Lakes water level data in a framework that facilitates analysis between data sets and forecasts (in some cases, from different sources) across multiple time scales. As part of the ongoing Great Lakes Restoration Initiative (GLRI), the National Oceanic and Atmospheric Administration (NOAA) Great Lakes Environmental Research Laboratory (GLERL) has developed a web-based tool (referred to as the "Great Lakes Water Level Dashboard") to address this need, using coordinated lake-wide average data from NOAA's National Ocean Service and the Canadian Hydrographic Service.

GOALS

The relative uncertainty in Great Lakes water level forecasts and historical information that arises from multiple and varying sources of information, while often overlooked, is presented clearly in the Dashboard's interactive framework. Furthermore, the Dashboard helps users visualize the magnitude of variability in Great Lakes water levels, and provides a context for how water levels are changing (particularly in light of climate change) over time. Finally, the Dashboard provides a basis for comparing past water level forecasts with observations in order to help users understand, and weigh their relative faith in, different model forecasts.

WHAT IS IT?

The Dashboard was built for the Adobe Flash environment and can be best described as a comparison and contrast tool. Features include:

- Time navigation to compare water levels from one time period to another, from as far back as 1860 to present.
- The option to overlay datasets of different variables related to the lakes, alongside various forecasts. Currently available are the forecasts generated from the GLERL's Advanced Hydrologic Prediction System (AHPS), but the framework developed allows for the rapid addition of other datasets and forecasts in the future.
- The option to 'dig into' the variability of presented datasets, and view the variability between lakes on equal scales to compare and contrast.

WEBSITE

http://www.glerl.noaa.gov/data/now/wlevels/dbd/

To download the data that is currently on the dashboard, along with potential candidate data sets, visit:

http://www.glerl.noaa.gov/data/now/wlevels/dbd/ GLCDDataDownloads/index.html

or:

http://www.glerl.noaa.gov/data/now/wlevels/dbd/ GLCDDataDownloads/index2.html (white background for easier reading)





Project Contact

Drew Gronewold NOAA Great Lakes Environmental Research Laboratory 734-741-2235 drew.gronewold@noaa.gov

