SUPPLEMENTAL MATERIALS

ASCE Journal of Water Resources Planning and Management

Operational Seasonal Water Supply and Water Level Forecasting for the Laurentian Great Lakes

Lauren M. Fry, Deanna Apps, and Andrew D. Gronewold

DOI: 10.1061/(ASCE)WR.1943-5452.0001214

© ASCE 2020

www.ascelibrary.org



Lake Michigan-Huron Cumulative Error in NBS Forecast (mm)

Fig. S1: Error in cumulative NBS predictions from each model. Note that the Regression and Persistence models are applied for 1-month forecasts only, and so are shown as points.



Fig. S2: Error in cumulative NBS predictions from each model. Note that the Regression and Persistence models are applied for 1-month forecasts only, and so are shown as points.



Fig. S3: Error in cumulative NBS predictions from each model. Note that the Regression and Persistence models are applied for 1-month forecasts only, and so are shown as points.



Fig. S4: Range in cumulative NBS used to produce the water level forecast uncertainty.



Fig. S5: Range in cumulative NBS used to produce the water level forecast uncertainty.



Fig. S6: Range in cumulative NBS used to produce the water level forecast uncertainty. Note that the shift in 2014 occurred when the operational 5% and 95% supplies were updated using the latest monthly data in 2014.



Lake Michigan-Huron Water Level Forecasts (m)

Fig. S7: Water level forecasts for Lake Michigan-Huron resulting from the operator-selected NBS forecasts included in this analysis. Gray bars represent the range of uncertainty in forecasts determined using the operational 5% and 95% supplies.



Fig. S8: Water level forecasts for Lake Erie resulting from the operator-selected NBS forecasts included in this analysis. Gray bars represent the range of uncertainty in forecasts determined using the operational 5% and 95% supplies.