Supplemental Table S3. Linear regression equations to predict each month's starting epilimnetic temperature from the previous monthly mean air temperature are listed under column headings of the seasonal epilimnetic temperature metrics (e.g., April mean air to predict 1-May water temperature, May mean air to predict 1-June water temperature, etc.) for the 12 study lakes. Models to predict July-August mean water temperature from June-August mean air temperature are also tabulated. Range of years used in each lake model is also given.

	1-May	1-June	1-July	1-Aug.	1-Sept.	1-Oct.	1-Nov.	July-Aug.
Mendota (1894-2017)								
Slope	0.593	0.742	0.704	0.613	0.588	0.505	0.588	0.707
Intercept	4.0	5.9	8.6	10.8	10.2	9.1	5.6	9.0
R^2	*0.54*	*0.49*	*0.40*	*0.39*	*0.46*	*0.43*	*0.71*	*0.60*
Mendota (1980-2017)								
Slope	0.542	0.760	0.524	0.782	0.575	0.662	0.507	0.780
Intercept	4.6	5.8	12.2	7.1	10.6	6.4	6.4	7.6
R^2	*0.40*	*0.43*	*0.25*	*0.77*	*0.45*	*0.51*	*0.45*	*0.71*
Monona (1976-2017)								
Slope	0.540	0.770	0.528	0.770	0.605	0.644	0.619	0.749
Intercept	6.3	7.0	12.8	7.7	10.3	6.9	5.0	8.6
R^2	*0.35*	*0.45*	*0.26*	*0.63*	*0.48*	*0.49*	*0.53*	*0.60*
Devil's (1986-2017)								
Slope	0.668	0.772	0.997	0.669	0.478	0.634	0.633	0.767
Intercept	5.7	7.0	4.1	10.4	13.1	7.3	5.1	8.5
R^2	*0.50*	*0.44*	*0.64*	*0.65*	*0.28*	*0.61*	*0.60*	*0.72*
Trout (1981-2017)								
Slope	0.718	0.628	0.548	0.613	0.537	0.596	0.453	0.738
Intercept	2.0	7.0	11.0	10.7	10.5	6.7	5.6	8.5
R^2	*0.47*	*0.44*	*0.26*	*0.49*	*0.37*	*0.48*	*0.45*	*0.58*
Allequash (1981-2017)								
Slope	1.012	0.490	0.549	0.660	0.503	0.646	0.510	0.762
Intercept	4.3	11.9	12.8	10.7	11.6	5.6	3.5	9.0
R^2	*0.46*	*0.29*	*0.22*	*0.49*	*0.23*	*0.34*	*0.36*	*0.54*
Sparkling (1981-2017)								
Slope	0.900	0.579	0.530	0.648	0.499	0.564	0.421	0.707
Intercept	3.2	9.2	12.3	10.6	11.9	7.7	6.2	9.6
R^2	*0.49*	*0.52*	*0.32*	*0.56*	*0.31*	*0.51*	*0.39*	*0.57*
Trout Bog (1981-2017)								
Slope	0.949	0.367	0.251	0.746	0.695	0.546	0.521	0.786
Intercept	5.0	13.4	17.2	8.7	7.5	5.9	2.8	8.0
R^2	*0.36*	*0.19*	*0.05*	*0.47*	*0.26*	*0.25*	*0.52*	*0.46*
Stechlinsee (1958-2017)								
Slope	0.974	0.882	0.600	0.976	0.726	0.562	0.482	1.045
Intercept	1.5	4.1	9.2	3.0	6.3	7.5	6.2	1.9
R^2	*0.62*	*0.56*	*0.23*	*0.74*	*0.58*	*0.65*	*0.48*	*0.65*
Hausee (1978, 1985-2017)								
Slope	0.882	0.779	0.566	0.770	0.735	0.585	0.542	1.063
Intercept	4.6	6.6	10.5	7.0	5.9	6.7	4.7	2.2
R^2	*0.61*	*0.56*	*0.25*	*0.57*	*0.47*	*0.70*	*0.59*	*0.73*
Pyhäjärvi (1982-2017)								
Slope	-	0.800	0.861	0.659	0.884	0.572	0.709	0.918
Intercept	-	5.2	5.4	8.7	3.1	5.2	1.1	4.6
R^2	-	*0.37*	*0.62*	*0.50*	*0.65*	*0.53*	*0.43*	*0.81*
Konnevesi (1984-2017)								
Slope	-	0.724	0.406	0.722	0.935	0.592	-	0.945
Intercept	-	4.2	11.1	7.4	2.6	5.4	-	4.1
R^2	-	*0.44*	*0.11*	*0.56*	*0.56*	*0.60*	-	*0.60*
Kevojärvi (1962-2017)								
Slope	-	1.434	0.954	0.594	0.742	0.678	-	0.918
Intercept	-	-1.0	3.5	7.1	3.0	1.8	-	3.5
R^2	-	*0.72*	*0.47*	*0.35*	*0.61*	*0.74*	-	*0.77*