WebTable 4. Model validation (2005-2014) for monthly flow and phosphorus loading at Waterville, Ohio

	Measure of model fit	Criterion for excellent fit	Heidelberg University (HU)	LimnoTech (LT)	Ohio State University (OSU)	Texas A&M University (TAMU)	University of Michigan (UM)	Model average
Flow	PBIAS	+/- 10%	-7%	10%	10%	11%	6%	6%
	NSE	> 0.5	0.82	0.90	0.91	0.86	0.89	0.88
	RSR	< 0.7	0.30	0.31	0.29	0.37	0.33	0.32
	R^2	> 0.6	0.86	0.91	0.93	0.88	0.91	0.90
Total Phosphorus Load	PBIAS	+/- 25%	37%	-6 %	-7%	-22%	7%	2%
	NSE	> 0.4	0.64	0.82	0.73	0.56	0.70	0.69
	RSR	< 0.7	0.55	0.42	0.52	0.66	0.55	0.54
	R^2	> 0.5	0.74	0.82	0.75	0.71	0.70	0.75
Dissolved Reactive Phosphorus Load	PBIAS	+/- 25%	81%	1 %	16%	-13%	-13%	14%
	NSE	> 0.4	-0.02	0.71	0.51	0.52	0.46	0.44
	RSR	< 0.7	0.89	0.52	0.68	0.69	0.72	0.70
	R^2	> 0.5	0.55	0.71	0.54	0.70	0.51	0.60

Notes: Percent bias (PBIAS) is a measure of model over- or under-estimation (values closer to 0 indicate better agreement). Nash-Sutcliffe efficiency (NSE), the root mean square error (RMSE)-observations standard deviation ratio (RSR) standardizes the RMSE (values closer to 0 indicate better agreement), and the coefficient of correlation (R^2) measure how closely a model corresponds to measured data (values closer to 1 indicate better agreement).