Lake Water Ecological Simulation for a Typical Alpine Lake on the Tibetan Plateau

Supplementary Data

Table S1. Data used for initialization and modeling the ecological indicators in the AQUATOX model

Type	Parameter	Value	References*
Lake characteristics	Latitude	30.76 ºN	
	Site length	81.5 km	
	Altitude	4718 m	
	Surface area	1997.55 km^2	[47]
	Mean depth	40 m	[41]
	Maximum depth	95 m	[41]
Lake thermodynamics	Average epilimnion temperature	5.29 ºC	[50,51]
	epilimnion temperature range	12.26 ºC	[50,51]
	Average hypolimnion temperature	2.85 ºC	[50,51]
	hypolimnion temperature range	5.36 ºC	[50,51]
	Average light	500.26 Ly/d	[48,49]
	Annual light range	752.49 Ly/d	[48,49]
	Water evaporation	27.52 int	[16]
Lake ecology	**Ecological parameter**	**Initial value**	**Reference**
	Ammonia (NH_3 & NH_4^+) as N	0.01 mg L^{-1}	[52]
	Nitrate (NO_3) as N	0.08 mg L^{-1}	[52]
	Phosphate as P	0.03 mg L^{-1}	[52]
	Carbon Dioxide	0.0001 mg L^{-1}	[52]
	Oxygen	2.8 mg L^{-1}	[52,54]
	pH	9.5	[54]
	diatom algae	0.0009 mg L^{-1}	[52,53]
	green algae	0.0004 mg L^{-1}	[52,53]

*All references are cited in the main text.