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Supplementary material

Reservoir water-quality simulation using simplified mathematical models (case study: Seymareh Reservoir)

Nima Heidarzadeh[A,B], *Hesam Mahdavi*[A] *and Mahtab Yaghouti*[A]

[A]Department of Civil Engineering, Faculty of Engineering, Kharazmi University,
43 South Mofatteh Avenue, Tehran, Iran.

[B]Corresponding author. Email: n.heidarzadeh@khu.ac.ir

Table S1. Description of water quality modeling scenarios in the Seymareh reservoir

A: Using regression function between inflow and the inlet water quality characteristics (the Nazarabad station data for TDS and the SW2 station data for BOD and NO_3). B: Using SW2 station monthly data for all three input water quality constituents. 1: Eqn 3 and 4 completely mixed equations. 2: Completely mixed equations of Eqn 5 and 6 for TDS, and Eqn 10 and 11 for both NO_3 and BOD. 3: Completely mixed equations of Eqn 7 and 8 for TDS and Eqn 12 to 15 for NO_3 and BOD

Scenarios Name	Water quality characteristics			Source of input data		Model			
						Completely mixed			
	TDS	BOD_5	NO_3	A	B	1	2	3	CE-Qual-W2
TDS-A-1	*			*		*			
TDS-A-2	*			*			*		
TDS-A-3	*			*				*	
TDS-A-CE	*			*					*
TDS-B-1	*				*	*			
TDS-B-2	*				*		*		
TDS-B-3	*				*			*	
TDS-B-CE	*				*				*
BOD-A-2		*		*			*		
BOD-A-3		*		*				*	
BOD-A-CE		*		*					*
BOD-B-2		*			*		*		
BOD-B-3		*			*			*	
BOD-B-CE		*			*				*
NO3-A-2			*	*			*		
NO3-A-3			*	*				*	
NO3-A-CE			*	*					*
NO3-B-2			*		*		*		
NO3-B-3			*		*			*	
NO3-B-CE			*		*				*