

Water quality indicators in three surface hydraulic connection conditions in tropical floodplain lakes

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Table S1. Identification (ID) and location of the lakes and river on the Grijalva River plain. I = infrastructure, SHC = surface hydraulic connection, R = rural, U = urban.

ID	Lakes	Ubication (degrees and minutes)	River	I	SHC
IL1	Las Ilusiones ^U	18°00'N; 92°55'W	Carrizal	Embankments, roads, urbanization	Isolated
IL2	Loma de Caballo ^U	17°58'N; 93°0'W	Carrizal	Embankments, roads, urbanization	Isolated
TCL3	Playa del Pozo ^R	18°0'N; 92°47'W	Grijalva	Embankments, floodways, roads	Temporal
TCL4	Maluco ^R	18°6'N; 92°45'W	Grijalva	Embankments, floodways, roads	Temporal
PCL5	Manguito ^R	18°13'N; 92°50'W	Medellin-Gonzalez	Embankment, road with bridge	Permanent
PCL6	Pucte ^R	18°14'N; 92°50'W	Medellin-Gonzalez	Embankment, road with bridge	Permanent

Table S2: Physicochemical variables and chlorophyll-*a* in lakes under three surface hydraulic connection conditions (IL = isolated lakes, TCL = temporally connected lakes, PCL = permanently connected lakes) at four sampling times (T1: transition to low level, T2: low level, T3: transition to high level, T4: high level) throughout an annual cycle. Average values, standard deviation, minimum and maximum. Samples per connection type = 24 repetitions. SHC = surface hydraulic connection.

SHC	Variables Time	Chl- <i>a</i> μg L ⁻¹	SD m	TP mg L ⁻¹	DOS %	pH	NO ₃ ⁻ mg L ⁻¹	NH ₄ ⁺ mg L ⁻¹	CE μS cm ⁻¹	WL m
IL	T1	48.9±24	0.5±0.2	0.80±0.23	60±37	8.1±1.1	11.05±5.88	1.72±0.67	345±112	1.2±0.4
		20.1-74.1	0.4-0.9	0.44-1.12	3-106	6.9-9.2	3.96-18.08	1.20-2.80	239-449	0.9-2.0
	T2	53.7±23.5	0.3±0.2	1.62±0.54	124±77	7.8±0.8	1.76±0.70	0.15±0.06	237±8	0.9±0.5
		27.0-82.3	0.2-0.5	0.88-2.16	50-220	7.1-8.8	0.73-2.63	0.09-0.25	225-249	0.3-1.6
	T3	46.4±29.9	0.3±0.0	1.84±0.94	69±55	7.9±0.7	3.47±1.64	1.12±0.22	320±70	0.8±0.2
		16.2-76.1	0.2-0.3	0.61-2.79	47-83	7.2-8.8	1.70-6.40	0.93-1.54	253-386	0.6-1.1
	T4	32.3±6.4	0.3±0.2	0.65±0.11	129±42	7.6±0.8	0.42±0.14	0.88±1.37	341±105	1.4±0.4
		26.1-44.1	0.2-0.6	0.49-0.78	87-187	6.7-8.6	0.08-1.04	0.03-3.21	240-443	0.8-1.8
	Annual IL1	63.8±17.2	0.2±0.1	1.58±0.85	128±57	8.6±0.5	5.56±6.57	1.04±1.05	245±10	1.1±0.4
	Annual IL2	32.6-82.3	0.2-0.4	0.64-2.79	47-220	7.8-9.2	0.36-18.08	0.04-3.21	225-263	0.3-1.6
		26.9±6.4	0.5±0.2	0.87±0.38	63±27	7.1±0.2	2.79±2.61	0.90±0.80	377±87	1.1±0.5
	Annual cycle	16.2-36.9	0.3-0.9	0.44-1.70	3-108	6.7-7.4	0.08-7.66	0.03-2.29	238-449	0.6-2.0
		45.3±22.7	0.4±0.2	1.23±0.74	95±55	7.8±0.8	4.17±5.09	0.97±0.92	311±91	1.1±0.4
n=24		16.2-82.3	0.2-0.9	0.44-2.79	3-220	6.7-9.2	0.08-18.08	0.03-3.21	225-449	0.3-2.0
TCL	T1	7.3±2.1	0.8±0.4	0.55±0.12	37±38	6.7±0.4	10.04±8.09	0.81±0.13	274±99	1.1±0.2
		5.1-9.8	0.3-1.4	0.40-0.77	3-94	6.3-7.2	4.27-25.87	0.66-0.99	156-365	0.9-1.3
	T2	27.1±11.6	0.5±0.0	1.25±0.17	51±30	7.1±0.3	10.90±4.87	0.11±0.06	242±29	0.7±0.2
		15.3-39.5	0.5-0.6	0.96-1.44	24-105	6.9-7.6	6.68-20.35	0.04-0.18	213-288	0.4-1.0
	T3	18.5±4.2	0.4±0.1	0.79±0.19	34±29	7.2±0.6	1.62±0.49	0.49±0.07	358±23	0.7±0.2
		12.6-22.6	0.3-0.5	0.48-0.97	6-63	6.5-8.0	1.16-2.40	0.40-0.57	331-381	0.5-0.9
	T4	15.4±9.4	0.6±0.3	0.64±0.29	110±30	7.4±0.4	1.13±0.99	0.21±0.20	326±44	1.3±0.6
		7.7-31.2	0.3-0.9	0.32-0.99	75-155	6.8-8.0	0.30-2.40	0.11-0.48	283-376	0.5-2.3
	Annual TCL3	17.5±13.1	0.6±0.4	0.76±0.41	80±33	7.4±0.4	4.65±4.14	0.35±0.28	343±48	0.8±0.3
	Annual TCL4	5.1-39.5	0.2-1.4	0.32-1.44	44-155	6.8-8	0.30-10.78	0.04-0.79	252-381	0.4-1.4
		16.7±7.0	0.6±0.1	0.86±0.25	36±42	6.8±0.4	7.20±8.11	0.47±0.32	257±63	1.1±0.5
	Annual cycle	7.7-31.2	0.4-0.8	0.40-1.28	3-123	6.3-7.6	0.36-25.87	0.11-0.99	156-347	0.5-2.3
		17.1±10.3	0.6±0.3	0.81±0.33	58±43	7.1±0.5	5.92±6.43	0.41±0.29	300±70	1.0±0.4
n=24		5.1-39.5	0.3-1.4	0.32-1.44	3-155	6.3-8.0	0.30-25.87	0.04-0.99	156-381	0.4-2.3
PCL	T1	7.6±3.1	1.3±0.5	1.18±0.57	110±24	7.6±0.4	7.69±3.12	1.33±0.76	449±45	1.0±0.1
		4.5-10.7	0.8-1.9	0.36-1.80	85-148	7.2-8.2	2.32-11.97	0.59-2.18	395-494	0.9-1.2
	T2	7.4±3.5	0.9±0.4	0.86±0.27	110±24	7.6±0.4	1.01±0.61	0.07±0.01	449±45	0.9±0.2
		3.8-12.4	0.5-1.4	0.68-1.40	85-148	7.2-8.2	0.49-2.02	0.05-0.08	395-494	0.7-1.1
	T3	3.2±0.8	1.3±0.6	0.55±0.13	34±29	7.2±0.6	2.16±0.31	0.39±0.04	358±23	0.8±0.1
		2.3-4.1	0.7-2.1	0.36-0.73	6-63	6.5-8.0	1.64-2.50	0.31-0.43	331-381	0.7-1.0
	T4	8.9±3.6	0.8±0.2	0.48±0.11	160±24	7.7±0.3	0.31±0.25	0.13±0.18	390±6	1.2±0.3
		4.6-12.3	0.4-1.0	0.34-0.62	132-184	7.4-8.0	0.06-0.62	0.03-0.49	379-394	0-1.7
	Annual PCL5	9.1±3.5	0.7±0.2	0.89±0.45	82±41	7.4±0.3	2.68±3.16	0.35±0.28	360±103	0.9±0.1
	Annual PCL6	2.9-12.4	0.4-1.0	0.53-1.80	30-145	6.9-7.9	0.14-8.27	0.03-2.18	212-494	0.7-1.0
		4.5±1.5	1.4±0.4	0.64±0.36	130±48	8.0±0.2	2.90±3.61	0.47±0.32	356±49	1.1±0.3
	Annual cycle	2.3-7.7	0.9-2.1	0.34-1.40	56-184	7.5-8.4	0.06-11.97	0.05-0.68	282-424	0.7-1.7
		6.8±3.5	1.1±0.5	0.77±0.42	106±50	7.7±0.4	2.79±3.32	0.48±0.63	358±79	1.0±0.2
n=24		2.3-12.4	0.4-2.1	0.34-1.80	30-184	6.9-8.4	0.06-11.97	0.03-2.18	212-494	0.7-1.7
General		23.0±21.8	0.7±0.4	0.93±0.56	87±53	7.5±0.7	4.30±5.20	0.62±0.71	323±83	1.0±0.4
		2.3-82.3	0.2-2.1	0.32-2.79	3-220	6.3-9.2	0.06-25.87	0.03-3.21	156-449	0.3-2.3