50111210 LAGO TOA VACA AT DAMSITE NEAR VILLALBA, PR

RIO TOA VACA BASIN

LOCATION.--Lat 18°06′07″, long 66°29′23″ referenced to North American Datum of 1927, Villalba Municipio, PR, Hydrologic Unit 21010004, at the spillway at Damsite on Río Toa Vaca, 0.45 mi (0.7 km) northwest from Higüero School, 2 mi (3.2 km) south from Villalba plaza.

DRAINAGE AREA.--22 mi^2, (57.9 km^2).

SURFACE-WATER RECORDS

PERIOD OF RECORD.--August 1997 to current year.

GAGE.--Water-stage recorder, satellite and radio telemetry at station. Datum of gage is mean sea level.

COOPERATION.--Puerto Rico Aqueduct and Sewer Authority (PRASA).

REMARKS.--Lago Toa Vaca was completed in 1972. The dam is located in the Toa Vaca river just upstream from Lago Guayabal reservoir. The Lago Toa Vaca dam is a zoned earth and rockfill embankment structure. At crest elevation 541 ft (164.9 m) (top of dam), the dam is approximately 1,740 ft (530.3 m) long, about 215 ft (65.53 m) height, and has a maximum storage capacity of about 67,759 acre-ft (83.55 hm^3) at top of dam elevation (Puerto Rico Electric Power Authority (PREPA), 1972). New capacity table based on U.S. Geological Survey Water-Resources Investigation Report 04-5035, June-July 2002. The Lago Toa Vaca dam is owned by the Puerto Rico Aqueduct and Sewer Authority (PRASA), and its primary purpose is to provide water for municipal and industrial use, and for irrigation of some of the lands served by the South Coast irrigation district through the Juana Díaz canal.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 539.45 ft (164.42 m) October 11, 2005; minimum elevation, 463.63 ft (141.31 m), August 19, 2001.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 514.74 ft (156.89 m), September 30; minimum elevation, 503.43 ft (153.44 m), October 8.

Capacity Table

(based on data from US Geological Survey Water-Resources Investigations Report 04-5035, 2002)

(Elevation in ft, capacity in acre-ft)

Elevation	Contents	Elevation	Contents
364	0	472	14,447
400	1,200	508	29,988
436	5,586	541	51,950

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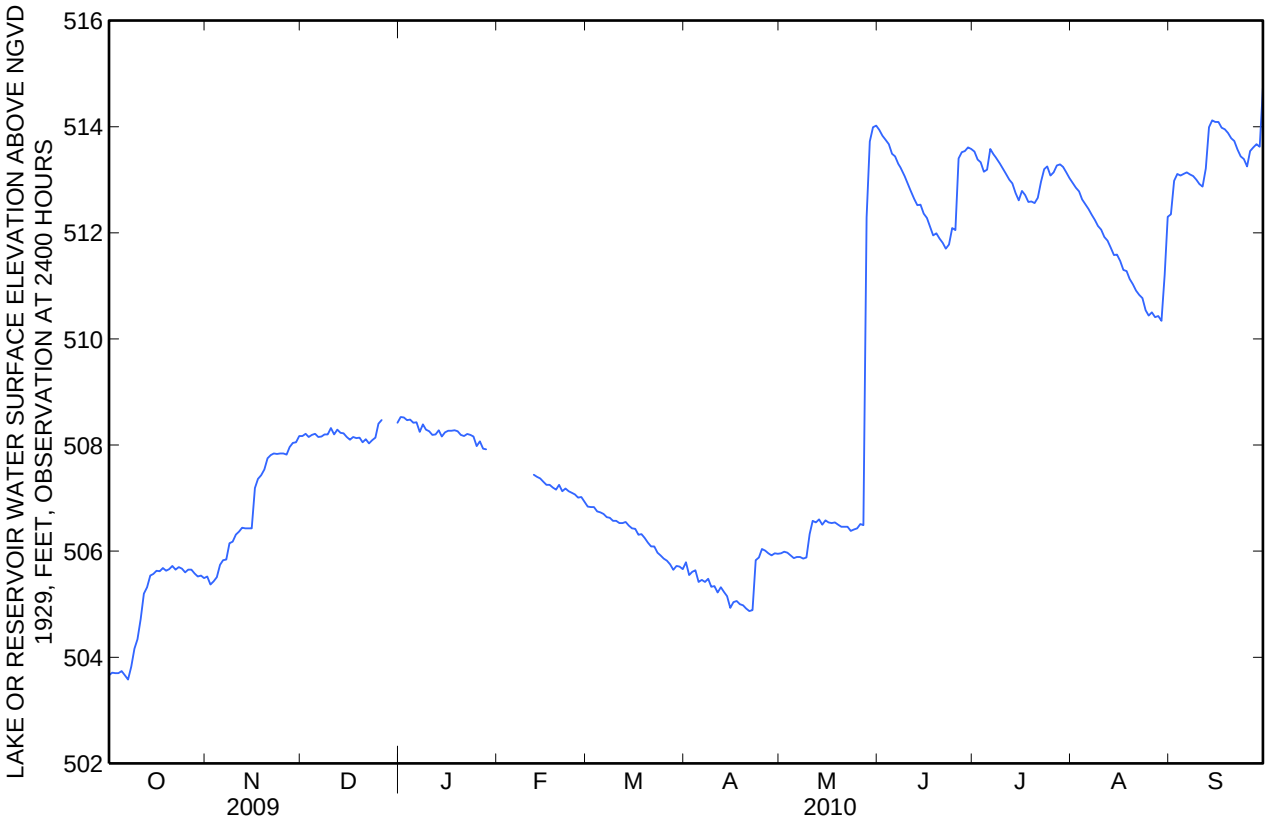
LAKE OR RESERVOIR WATER SURFACE ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010
DAILY OBSERVATION AT 2400 HOURS

[A, No gage-height record]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	503.66	505.52	508.17	508.53	A	506.84	505.79	505.96	513.94	513.53	512.94	512.35
2	503.71	505.37	508.21	508.52	A	506.83	505.55	505.99	513.83	513.38	512.85	512.98
3	503.70	505.43	508.15	508.47	A	506.83	505.61	505.97	513.75	513.33	512.78	513.11
4	503.70	505.51	508.19	508.48	A	506.75	505.64	505.92	513.67	513.15	512.63	513.08
5	503.74	505.74	508.21	508.42	A	506.73	505.42	505.87	513.49	513.19	512.54	513.11
6	503.66	505.83	508.15	508.43	A	506.70	505.46	505.89	513.44	513.58	512.45	513.14
7	503.58	505.84	508.16	508.25	A	506.64	505.42	505.89	513.30	513.48	512.34	513.10
8	503.82	506.15	508.20	508.39	A	506.63	505.48	505.86	513.20	513.41	512.24	513.07
9	504.16	506.18	508.20	508.29	A	506.57	505.33	505.88	513.06	513.30	512.13	513.00
10	504.34	506.31	508.32	508.26	A	506.57	505.34	506.32	512.92	513.21	512.06	512.92
11	504.72	506.37	508.20	508.19	A	506.53	505.22	506.57	512.78	513.11	511.92	512.87
12	505.20	506.44	508.29	508.20	507.44	506.53	505.32	506.54	512.64	513.00	511.85	513.21
13	505.32	506.43	508.23	508.28	507.40	506.55	505.23	506.60	512.52	512.93	511.72	513.99
14	505.54	506.43	508.22	508.16	507.37	506.48	505.15	506.50	512.53	512.75	511.58	514.12
15	505.57	506.43	508.15	508.24	507.31	506.43	504.93	506.58	512.36	512.61	511.59	514.09
16	505.63	507.19	508.10	508.27	507.25	506.42	505.04	506.54	512.28	512.79	511.47	514.09
17	505.62	507.36	508.15	508.27	507.25	506.31	505.06	506.53	512.12	512.71	511.30	513.98
18	505.68	507.43	508.13	508.28	507.20	506.32	505.00	506.54	511.95	512.58	511.28	513.95
19	505.63	507.54	508.14	508.26	507.16	506.25	504.98	506.50	511.99	512.59	511.13	513.88
20	505.66	507.75	508.05	508.19	507.25	506.16	504.92	506.46	511.89	512.56	511.03	513.78
21	505.72	507.81	508.11	508.17	507.13	506.09	504.87	506.46	511.81	512.66	510.91	513.73
22	505.65	507.84	508.03	508.21	507.18	506.09	504.89	506.46	511.70	512.96	510.83	513.57
23	505.70	507.83	508.09	508.19	507.13	505.97	505.83	506.38	511.78	513.20	510.77	513.44
24	505.67	507.84	508.14	508.16	507.10	505.92	505.88	506.41	512.09	513.25	510.54	513.39
25	505.60	507.84	508.40	507.98	507.07	505.86	506.04	506.43	512.05	513.08	510.44	513.25
26	505.65	507.82	508.47	508.07	507.01	505.82	506.01	506.51	513.40	513.14	510.50	513.54
27	505.65	507.96	A	507.93	507.02	505.75	505.96	506.49	513.52	513.27	510.41	513.61
28	505.58	508.04	A	507.92	506.93	505.65	505.92	512.29	513.54	513.29	510.43	513.67
29	505.52	508.05	A	A	---	505.72	505.96	513.72	513.61	513.24	510.34	513.62
30	505.54	508.17	A	A	---	505.71	505.95	513.99	513.58	513.14	511.21	514.73
31	505.49	---	508.42	A	---	505.66	---	514.02	---	513.03	512.30	---
Mean	504.98	506.88	---	---	---	506.30	505.44	507.23	512.82	513.08	511.56	513.48

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