50059000 LAGO LOIZA AT DAMSITE NEAR TRUJILLO ALTO, PR

RIO GRANDE DE LOIZA BASIN

LOCATION.--Lat 18°19′49″, long 66°01′00″ referenced to North American Datum of 1927, Trujillo Alto Municipio, PR, Hydrologic Unit 21010005, at pumpsite at damsite and 1.9 mi (3.1 km) south of Trujillo Alto plaza.

DRAINAGE AREA.--208 mi^2 (539 km^2).

SURFACE-WATER RECORDS

PERIOD OF RECORD.--December 1987 to current year.

GAGE.--Water-stage recorder, satellite and radio telemetry at station. Elevation of gage is mean sea level(MSL).

REMARKS.--The reservoir is formed by the Loíza Dam, a concrete structure completed in 1954. Usable capacity of impoundment is 30,000 acre-ft (37 hm^3). Out flow from lake is controlled by five slide gates in power plant and pump intake structure, four sluicegates, and concrete spillway with eight radial gates. Lake is used for municipal water supply and intermittent power generation. New capacity table based on US Geological Survey Water-Resources Investigations Report 99-4143, 1996. Prior to October 1994, published as Lago Loíza at Damsite.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation 147.42 ft (44.93 m), September 18, 1989; minimum elevation, 108.52 ft (33.08 m), July 18, 1994.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 134.56 ft (41.01m), April 22; minimum elevation, 125.95 ft (38.39 m), March 28.

Capacity Table

(based on data from US Geological Survey Water-Resources Investigations Report 99-4143, 1996)

(Elevation in ft, capacity in acre-ft)

Elevation	Contents	Elevation	Contents
75	0	125	5,861
95	73	131	9,218
115	2,205	135	11,504

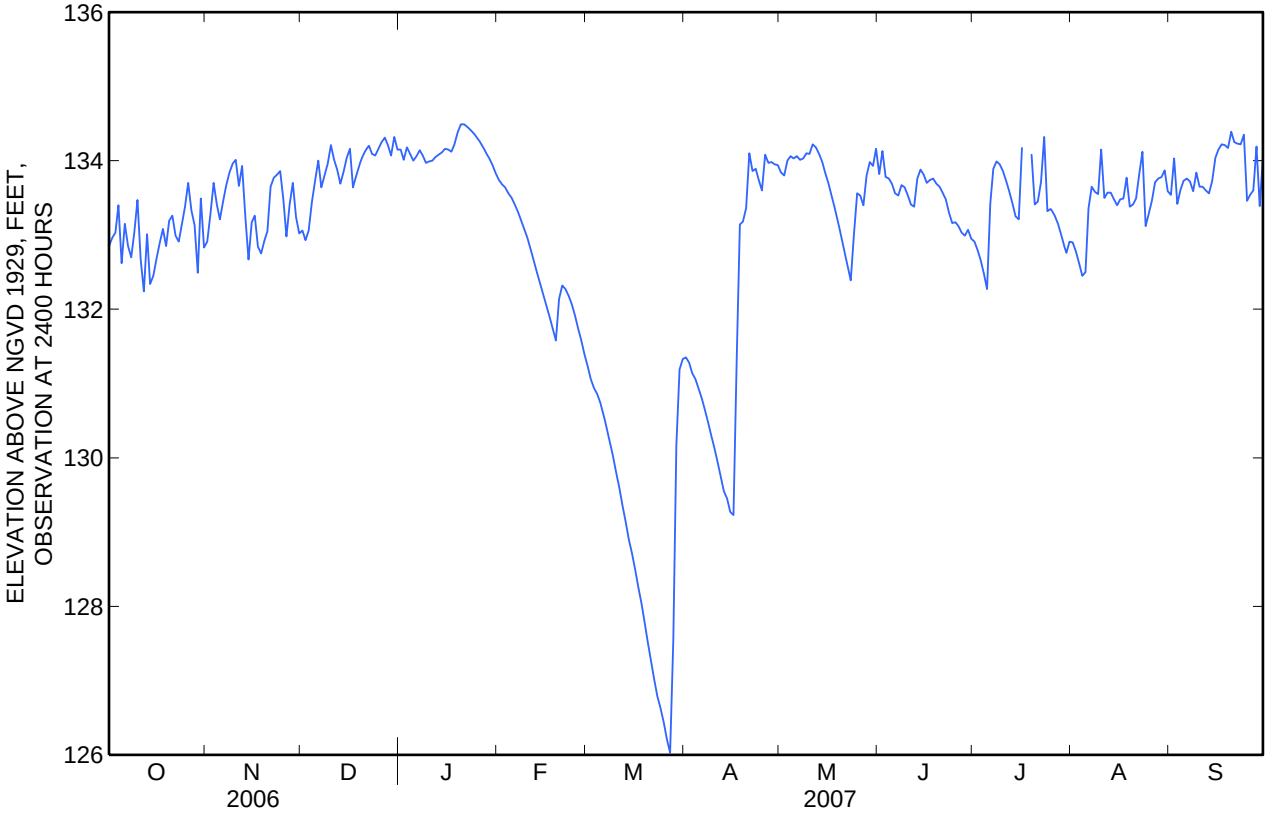
50059000 LAGO LOIZA AT DAMSITE NEAR TRUJILLO ALTO, PR—Continued

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007
DAILY OBSERVATION AT 2400 HOURS

[A, No gage-height record]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	132.85	132.91	133.06	134.15	133.74	131.23	131.35	133.84	133.82	132.91	132.90	133.54
2	132.96	133.28	132.93	134.01	133.68	131.06	131.28	133.80	134.13	132.80	132.78	134.03
3	133.03	133.70	133.06	134.18	133.64	130.94	131.14	134.00	133.78	132.66	132.62	133.42
4	133.40	133.41	133.44	134.09	133.56	130.86	131.06	134.06	133.76	132.48	132.45	133.61
5	132.62	133.21	133.73	134.00	133.50	130.74	130.93	134.03	133.69	132.27	132.50	133.73
6	133.15	133.45	134.00	134.06	133.41	130.58	130.80	134.06	133.56	133.42	133.36	133.76
7	132.85	133.67	133.64	134.14	133.31	130.40	130.64	134.01	133.53	133.89	133.65	133.72
8	132.70	133.84	133.80	134.07	133.20	130.22	130.48	134.03	133.67	133.99	133.58	133.59
9	133.03	133.96	133.96	133.97	133.08	130.02	130.30	134.10	133.64	133.95	133.55	133.84
10	133.47	134.01	134.21	133.99	132.96	129.80	130.13	134.09	133.53	133.86	134.15	133.65
11	132.67	133.66	134.01	134.00	132.81	129.59	129.94	134.22	133.41	133.73	133.50	133.65
12	132.24	133.93	133.88	134.05	132.66	129.35	129.74	134.18	133.38	133.59	133.57	133.60
13	133.01	133.25	133.69	134.08	132.49	129.14	129.55	134.09	133.76	133.43	133.57	133.56
14	132.34	132.67	133.85	134.11	132.35	128.90	129.45	133.98	133.88	133.25	133.48	133.73
15	132.45	133.17	134.04	134.16	132.19	128.71	129.27	133.83	133.81	133.21	133.40	134.04
16	132.68	133.26	134.16	134.15	132.05	128.49	129.23	133.69	133.70	134.17	133.48	134.15
17	132.89	132.84	133.64	134.12	131.89	128.26	131.31	133.52	133.74	A	133.49	134.22
18	133.08	132.75	133.80	134.22	131.74	128.04	133.14	133.35	133.76	A	133.77	134.21
19	132.85	132.92	133.94	134.38	131.58	127.78	133.18	133.17	133.69	134.08	133.38	134.17
20	133.19	133.05	134.05	134.49	132.14	127.51	133.36	132.98	133.65	133.41	133.41	134.39
21	133.26	133.65	134.15	134.49	132.32	127.26	134.10	132.79	133.57	133.45	133.49	134.25
22	132.99	133.77	134.20	134.45	132.27	127.01	133.86	132.58	133.48	133.71	133.82	134.23
23	132.91	133.81	134.09	134.42	132.18	126.79	133.89	132.39	133.30	134.32	134.12	134.22
24	133.15	133.86	134.07	134.37	132.07	126.63	133.74	133.01	133.16	133.32	133.12	134.35
25	133.38	133.47	134.16	134.31	131.92	126.44	133.60	133.56	133.17	133.35	133.29	133.46
26	133.70	132.98	134.25	134.26	131.74	126.21	134.08	133.53	133.12	133.29	133.46	133.54
27	133.33	133.41	134.31	134.18	131.58	126.03	133.97	133.40	133.03	133.19	133.71	133.60
28	133.13	133.70	134.21	134.10	131.39	127.55	133.98	133.80	132.99	133.06	133.76	134.19
29	132.49	133.24	134.07	134.03	---	130.17	133.95	133.98	133.07	132.90	133.78	133.39
30	133.49	133.02	134.32	133.94	---	131.19	133.94	133.93	132.95	132.76	133.87	134.04
31	132.83	---	134.15	133.83	---	131.33	---	134.16	---	132.91	133.59	---
Mean	132.97	133.40	133.90	134.15	132.55	128.98	131.85	133.68	133.52	---	133.44	133.86

50059000 LAGO LOIZA AT DAMSITE NEAR TRUJILLO ALTO, PR—Continued



WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1974 to current year.

WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Part 1 of 3

[Remark codes: <, less than; E, estimated; M, presence verified but not quantified.]

Date	Time	Agency analyzing sample, code (00028)	Altitude of land surface feet (72000)	Instantaneous discharge, cfs (00061)	Drainage area, mi2 (81024)	Turbdty white light, det ang 90+/-30 corrctd NTRU (63676)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unf µS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Calcium water unfltrd recoverable, mg/L (00916)	Magnesium, water, unfltrd recoverable, mg/L (00927)	Ammonia water, unfltrd mg/L as N (00610)
Nov													
07...	1100	80020	135	144	208	12	1.0	6.8	240	28.0	--	--	.18
Feb													
02...	0730	80020	135	144	208	3.1	1.4	7.2	332	26.1	26.8	9.16	.11
Apr													
20...	0745	--	135	146	208	4.2	1.7	7.3	375	27.8	--	--	.13
Aug													
01...	1430	--	135	144	208	5.8	1.3	7.2	331	29.8	25.4	7.91	.10

WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Part 2 of 3

[Remark codes: <, less than; E, estimated; M, presence verified but not quantified.]

Date	Nitrate + nitrite water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Total nitrogen, wat unf by analysis, mg/L (62855)	Phosphorus, water, unfltrd mg/L (00665)	Fecal coliform, M-FC 0.7u MF col/ 100 mL (31625)	Total coliform, M-Endo, immed, col/ 100 mL (31501)	Arsenic water, unfltrd µg/L (01002)	Cadmium water, unfltrd µg/L (01027)	Chromium, water, unfltrd recoverable, µg/L (01034)	Copper, water, unfltrd recoverable, µg/L (01042)	Cyanide water, unfltrd mg/L (00720)	Lead, water, unfltrd recoverable, µg/L (01051)	Mercury water, unfltrd ng/L (50286)
Nov													
07...	.34	.028	.93	.069	50	250	--	--	--	--	--	--	--
Feb													
02...	.13	.013	.54	.044	170	E250	.92	<.02	<.8	2.0	<.0050	.07	.49
Apr													
20...	.30	.064	.90	.075	140	160	--	--	--	--	--	--	--
Aug													
01...	<.06	.003	.90	.148	140	160	1.1	<.02	M	E.96	--	.07	--

50059000 LAGO LOIZA AT DAMSITE NEAR TRUJILLO ALTO, PR—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007
Part 3 of 3
[Remark codes: <, less than; E, estimated; M, presence verified but not quantified.]

Date	Mercury water, unfltrd recover -able, µg/L (71900)	Selen- ium, water, unfltrd µg/L (01147)	Zinc, water, fltrd, µg/L (01090)	MBAS, water, unfltrd mg/L (38260)
Nov				
07...	--	--	--	--
Feb				
02...	M	.10	2.9	<.10
Apr				
20...	--	--	--	--
Aug				
01...	M	.12	.83	E.07