

50141500 LAGO GUAYO AT DAMSITE NEAR CASTAÑER, PR

RIO GRANDE DE AÑASCO BASIN

LOCATION.--Lat 18°12'46", long 66°50'06" referenced to North American Datum of 1927, Adjuntas Municipio, PR, Hydrologic Unit 21010003, at Lago Guayo Dam on Río Guayo, 1.1 mi (1.8 km) southwest of Lago Yahuecas, 2.6 mi (4.2 km) southwest of Lago Prieto, 2.1 mi (3.4 km) north of Castañer, and 6 mi (9.6 km) west of Adjuntas.

DRAINAGE AREA.--9.6 mi², (24.9 km²).

SURFACE-WATER RECORDS

PERIOD OF RECORD.--April 1980 to January 1985, June 1989 to current year.

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

REMARKS.--Lago Guayo was completed in 1956. The dam is on Río Guayo and is the largest in the Southwestern Puerto Rico Project. The maximum storage is 17,400 acre-ft (21.5 hm³) for power and irrigation. The dam is a concrete gravity structure with a total length of 555 ft (169 m), a maximum structural height of 190 ft (58 m), and a maximum width at the base of 145 ft (44 m). The ungated overflow spillway with a crest elevation of 60 ft (18.29 m) and a crest length of 220 ft (67 m) was designed to pass a maximum flood of 30,200 ft³/s (855 m³/s), at a reservoir elevation of 70 ft (21.34 m). Timber flashboards that were added to increase storage capacity were subsequently removed and their use discontinued. Prior to October 1994, published as Lago Guayo near Castañer. New capacity table based US Geological Survey Water-Resources Investigations Report 99-4053, October 1997.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 1,465.35 ft (446.64 m), September 22, 1998; minimum elevation recorded, 1,415.43 ft (431.42 m), June 2, 1990, but may have been less during period of no gage-height record June 2-5, 1990.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 1,463.16 ft (445.97 m), October 8; minimum elevation 1,454.21 ft (443.24 m), March 4.

Capacity Table

(based on data from US Geological Survey Water-Resources Investigations Report 99-4053, October 1997)

(Elevation in ft, capacity in acre-ft)

Elevation	Contents	Elevation	Contents
1,333	0	1,400	2,745
1,353	241	1,440	8,622
1,373	820	1,460	13,436

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LAKE OR RESERVOIR WATER SURFACE ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011
DAILY OBSERVATION AT 2400 HOURS
[A, No gage-height record]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	1,460.62	1,460.32	1,460.25	1,459.49	1,457.14	1,455.21	1,455.59	1,458.38	A	1,459.56	1,460.18	1,459.70
2	1,460.44	1,460.31	1,460.25	1,459.72	1,456.78	1,454.82	1,455.78	1,459.36	A	1,459.43	1,460.14	1,459.62
3	1,460.38	1,460.35	1,460.24	1,459.73	1,456.52	1,454.43	1,456.03	1,459.71	A	1,459.99	1,460.53	1,460.15
4	1,460.44	1,460.30	1,460.24	1,459.89	1,456.61	1,454.41	1,456.25	1,460.13	A	1,460.02	1,460.26	1,460.32
5	1,460.46	1,460.88	1,460.24	1,459.80	1,456.23	1,454.76	1,456.44	1,460.16	A	1,459.48	1,460.17	1,459.96
6	1,460.56	1,460.50	1,460.24	1,460.05	1,455.89	1,456.53	1,456.41	1,460.15	1,458.86	1,459.10	1,460.13	1,460.28
7	1,461.36	1,460.45	1,460.26	1,459.78	1,455.61	1,457.35	1,456.22	1,460.01	1,459.35	1,458.69	1,460.23	1,460.47
8	1,460.66	1,460.43	1,460.31	1,459.93	1,455.81	1,457.76	1,455.61	1,460.03	1,459.85	1,458.29	1,459.76	1,460.04
9	1,460.52	1,460.36	1,460.25	1,460.04	1,456.04	1,457.62	1,455.11	1,459.71	1,459.81	1,457.95	1,459.39	1,459.98
10	1,460.53	1,460.34	1,460.23	1,459.74	1,456.27	1,457.34	1,455.31	1,459.82	1,459.53	1,458.09	1,459.35	1,459.78
11	1,460.52	1,460.32	1,460.23	1,459.43	1,456.11	1,457.18	1,455.11	1,459.46	1,459.33	1,457.71	1,459.31	1,460.07
12	1,460.54	1,460.36	1,460.23	1,459.27	1,455.90	1,457.40	1,455.01	1,459.17	1,459.39	1,457.62	1,459.33	1,459.98
13	1,460.59	1,460.31	1,460.23	1,459.41	1,455.90	1,457.62	1,455.01	1,459.27	1,459.65	1,457.02	1,460.17	1,460.55
14	1,460.48	1,460.32	1,460.26	1,459.42	1,455.80	1,457.66	1,455.54	1,459.23	A	1,456.72	1,459.84	1,460.37
15	1,460.45	1,460.31	1,460.26	1,459.39	1,456.00	1,457.48	1,456.05	1,458.95	1,459.59	1,457.32	1,460.01	1,460.35
16	1,460.46	1,460.29	1,460.35	1,459.18	1,456.07	1,457.16	1,456.42	1,458.39	1,459.45	1,458.01	1,460.15	1,460.32
17	1,460.66	1,460.29	1,460.25	1,458.92	1,456.12	1,456.78	1,456.68	1,458.45	1,459.40	1,458.36	1,459.78	1,460.30
18	1,460.57	1,460.29	1,460.23	1,458.58	1,456.21	1,456.46	1,456.59	1,459.31	1,459.66	1,458.25	1,459.69	1,460.28
19	1,460.40	1,460.29	1,460.22	1,458.19	1,456.26	1,456.70	1,456.78	1,460.33	1,460.22	1,458.12	1,459.46	1,460.50
20	1,460.38	1,460.28	1,459.70	1,457.79	1,456.44	1,456.48	1,456.38	1,461.18	1,459.61	1,458.08	1,459.26	1,460.31
21	1,460.37	1,460.27	1,460.05	1,457.42	1,456.59	1,456.33	1,456.15	1,460.37	1,459.33	1,457.75	1,459.96	1,460.27
22	1,460.36	1,460.28	1,460.21	1,457.69	1,456.37	1,456.06	1,456.34	1,460.18	1,459.32	1,457.24	1,460.68	1,460.31
23	1,460.35	1,460.28	1,459.93	1,458.08	1,456.43	1,455.73	1,456.51	1,460.60	1,459.12	1,457.86	1,460.42	1,460.10
24	1,460.34	1,460.23	1,459.59	1,457.94	1,456.17	1,455.46	1,456.74	A	1,458.86	1,458.54	1,460.27	1,459.91
25	1,460.33	1,460.26	1,459.38	1,457.76	1,455.98	1,455.03	1,457.17	A	1,459.26	1,458.81	1,460.30	1,460.25
26	1,460.33	1,460.26	1,458.99	1,457.60	1,456.02	1,454.92	1,457.31	1,459.93	1,459.80	1,458.77	1,460.22	1,460.25
27	1,460.33	1,460.26	1,458.67	1,457.48	1,456.04	1,455.00	1,457.23	1,459.97	1,460.14	1,458.97	1,460.04	1,460.24
28	1,460.33	1,460.26	1,459.07	1,457.58	1,455.55	1,454.74	1,456.81	1,460.49	1,460.17	1,459.58	1,459.96	1,460.25
29	1,460.35	1,460.25	A	1,457.67	---	1,454.96	1,456.64	A	1,460.06	1,460.15	1,459.91	1,460.37
30	1,460.35	1,460.26	1,459.24	1,457.68	---	1,455.18	1,457.32	A	1,459.58	1,460.19	1,460.15	1,459.91
31	1,460.32	---	1,459.08	1,457.51	---	1,455.40	---	1,459.64	---	1,460.24	1,459.81	---
Mean	1,460.48	1,460.33	---	1,458.78	1,456.17	1,456.13	1,456.22	---	---	1,458.58	1,459.96	1,460.17

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