Water-Data Report 2012

# 50048680 LAGO LAS CURIAS AT DAMSITE NEAR RIO PIEDRAS, PR

RIO PUERTO NUEVO BASIN

LOCATION.--Lat 18°20′40″, long 66°03′03″ referenced to North American Datum of 1927, San Juan Municipio, PR, Hydrologic Unit 21010005, at Lago Las Curias Dam on Río Piedras, 4.15 mi (6.67 km) south of University of Puerto Rico Tower, 1.6 mi (2.57 km) northwest from José F. Díaz School, and 0.8 mi (1.28 km) north of Cupey Alto School.

DRAINAGE AREA.--1.1 $mi^2$, (2.51 $km^2$).

## SURFACE-WATER RECORDS

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

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

REMARKS.--Lago Las Curias was completed in 1946. The reservoir has a capacity of 1,135 acre-ft (1.40 $hm^3$) at spillway crest elevation 315.78 ft (96.25 m) for water supply. The dam is earthfill and has a crest elevation of 327.3 ft (99.75 m). Masonry parapet walls continous from abutment on each side of the 25 ft (7.62 m) wide crest. The dam is about 82 ft (25 m) high and 984.2 ft (300 m) long. The morning-glory inlet conduit spillway in located along the left abutment of the dam and has an uncontrolled capacity of about 5,000 $ft^3/s$ (141.6 $m^3/s$) at reservoir elevation 321.5 ft (98 m). This dam is operated by the Puerto Rico Aqueduct and Sewer Authority (PRASA). Elevation of the Morning Glory Dam-Crest was confirmed by the original Record Drawing of Water Works Facilities Rio Piedras Dam Reservoir General Plan of Dam.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 317.32 ft (96.72 m), May 23, 2004; minimum elevation, 313.04 ft (95.41 m), October 5, 1998.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 316.84 ft (96.57 m), May 18; minimum elevation, 315.78 ft (96.25 m), September 24.

Capacity Table

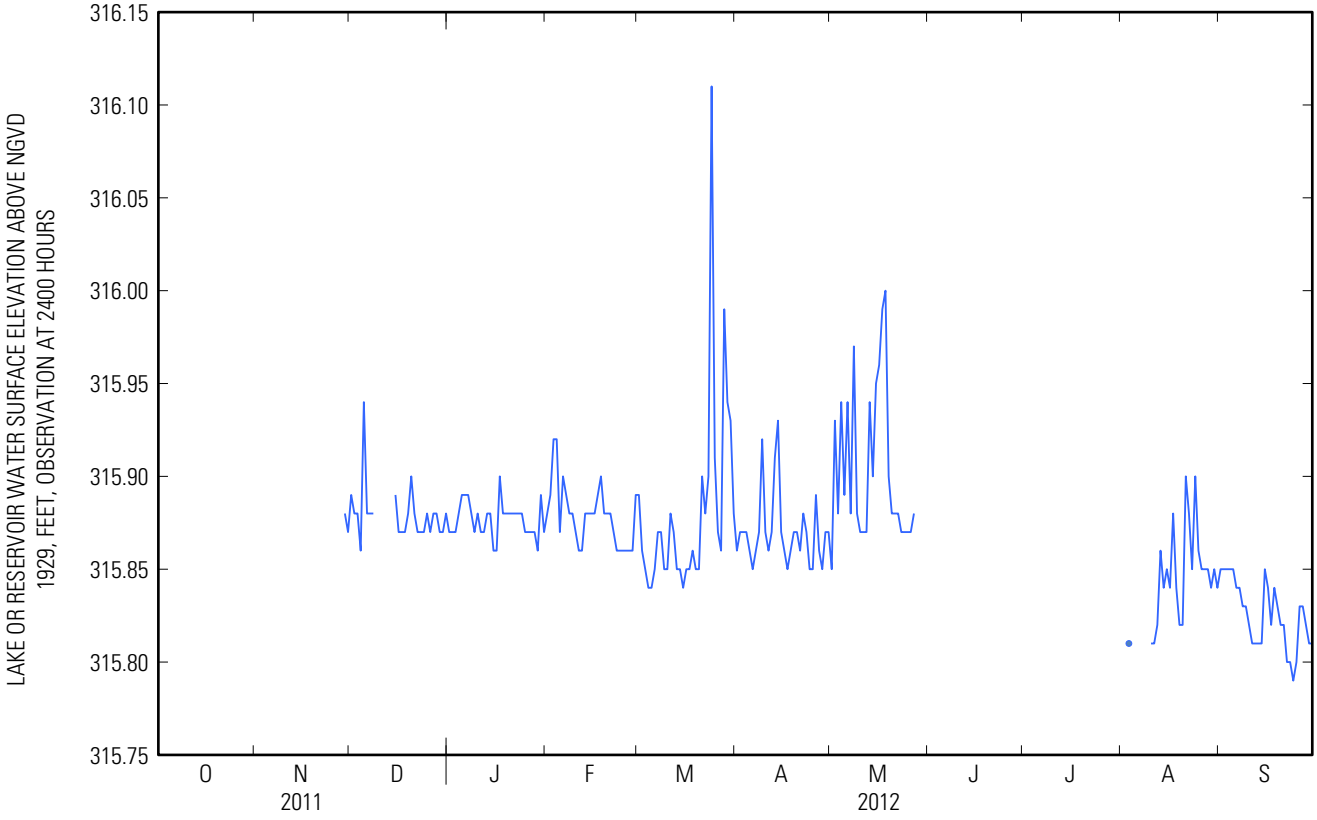
(based on data from US Geological Survey Water-Resources Investigations Report 99-41)

(Elevation in ft, capacity in acre-ft)

| Elevation | Contents | Elevation | Contents |
|---|---|---|---|
| 284.7 | 154 | 313 | 677 |
| 298.2 | 462 | 314.3 | 1,078 |
| 307.1 | 770 | 317.5 | 1,232 |

**50048680 LAGO LAS CURIAS AT DAMSITE NEAR RIO PIEDRAS, PR—Continued**

**LAKE OR RESERVOIR WATER SURFACE ELEVATION ABOVE NGVD 1929, FEET**
**WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012**
**DAILY OBSERVATION AT 2400 HOURS**
[A, No gage-height record]

| Day | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | A | A | 315.89 | 315.87 | 315.88 | 315.89 | 315.86 | 315.85 | A | A | A | 315.85 |
| 2 | A | A | 315.88 | 315.87 | 315.89 | 315.86 | 315.87 | 315.93 | A | A | A | 315.85 |
| 3 | A | A | 315.88 | 315.87 | 315.92 | 315.85 | 315.87 | 315.88 | A | A | 315.81 | 315.85 |
| 4 | A | A | 315.86 | 315.88 | 315.92 | 315.84 | 315.87 | 315.94 | A | A | A | 315.85 |
| 5 | A | A | 315.94 | 315.89 | 315.87 | 315.84 | 315.86 | 315.89 | A | A | A | 315.85 |
| 6 | A | A | 315.88 | 315.89 | 315.90 | 315.85 | 315.85 | 315.94 | A | A | A | 315.84 |
| 7 | A | A | 315.88 | 315.89 | 315.89 | 315.87 | 315.86 | 315.88 | A | A | A | 315.84 |
| 8 | A | A | 315.88 | 315.88 | 315.88 | 315.87 | 315.87 | 315.97 | A | A | A | 315.83 |
| 9 | A | A | A | 315.87 | 315.88 | 315.85 | 315.92 | 315.88 | A | A | A | 315.83 |
| 10 | A | A | A | 315.88 | 315.87 | 315.85 | 315.87 | 315.87 | A | A | 315.81 | 315.82 |
| 11 | A | A | A | 315.87 | 315.86 | 315.88 | 315.86 | 315.87 | A | A | 315.81 | 315.81 |
| 12 | A | A | A | 315.87 | 315.86 | 315.87 | 315.87 | 315.87 | A | A | 315.82 | 315.81 |
| 13 | A | A | A | 315.88 | 315.88 | 315.85 | 315.91 | 315.94 | A | A | 315.86 | 315.81 |
| 14 | A | A | A | 315.88 | 315.88 | 315.85 | 315.93 | 315.90 | A | A | 315.84 | 315.81 |
| 15 | A | A | 315.89 | 315.86 | 315.88 | 315.84 | 315.87 | 315.95 | A | A | 315.85 | 315.85 |
| 16 | A | A | 315.87 | 315.86 | 315.88 | 315.85 | 315.86 | 315.96 | A | A | 315.84 | 315.84 |
| 17 | A | A | 315.87 | 315.90 | 315.89 | 315.85 | 315.85 | 315.99 | A | A | 315.88 | 315.82 |
| 18 | A | A | 315.87 | 315.88 | 315.90 | 315.86 | 315.86 | 316.00 | A | A | 315.84 | 315.84 |
| 19 | A | A | 315.88 | 315.88 | 315.88 | 315.85 | 315.87 | 315.90 | A | A | 315.82 | 315.83 |
| 20 | A | A | 315.90 | 315.88 | 315.88 | 315.85 | 315.87 | 315.88 | A | A | 315.82 | 315.82 |
| 21 | A | A | 315.88 | 315.88 | 315.88 | 315.90 | 315.86 | 315.88 | A | A | 315.90 | 315.82 |
| 22 | A | A | 315.87 | 315.88 | 315.87 | 315.88 | 315.88 | 315.88 | A | A | 315.88 | 315.80 |
| 23 | A | A | 315.87 | 315.88 | 315.86 | 315.90 | 315.87 | 315.87 | A | A | 315.85 | 315.80 |
| 24 | A | A | 315.87 | 315.88 | 315.86 | 316.11 | 315.85 | 315.87 | A | A | 315.90 | 315.79 |
| 25 | A | A | 315.88 | 315.87 | 315.86 | 315.91 | 315.85 | 315.87 | A | A | 315.86 | 315.80 |
| 26 | A | A | 315.87 | 315.87 | 315.86 | 315.87 | 315.89 | 315.87 | A | A | 315.85 | 315.83 |
| 27 | A | A | 315.88 | 315.87 | 315.86 | 315.86 | 315.86 | 315.88 | A | A | 315.85 | 315.83 |
| 28 | A | A | 315.88 | 315.87 | 315.86 | 315.99 | 315.85 | A | A | A | 315.85 | 315.82 |
| 29 | A | 315.88 | 315.87 | 315.86 | 315.89 | 315.94 | 315.87 | A | A | A | 315.84 | 315.81 |
| 30 | A | 315.87 | 315.87 | 315.89 | --- | 315.93 | 315.87 | A | A | A | 315.85 | 315.81 |
| 31 | A | --- | 315.88 | 315.87 | --- | 315.88 | --- | A | A | --- | 315.84 | --- |
| Mean | --- | --- | --- | 315.88 | 315.88 | 315.88 | 315.87 | --- | --- | --- | --- | 315.83 |

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