



Base map from Digital Line Graph data U.S. Geological Survey, Patillas, 1:20,000, photorevised 1982; Juncos, 1:20,000, photorevised 1982; Naranjo, 1:20,000, photorevised 1982; Caguas, 1:20,000, 1964; Gurabo, 1:20,000, 1989; Yabucoa, 1:20,000, 1950; Cayey, 1:20,000, 1972; Comerío 1:20,000, 1966. Map scale in this plate is modified from 1:20,000 to 1:30,000.

STREAMFLOW AND BACTERIOLOGICAL DATA COLLECTION SITES, IMPORTANT HYDROLOGIC FEATURES, AND SANITARY CLASSIFICATION OF STREAMS WITH DRAINAGE TO OR WITHIN THE MUNICIPIO OF CAGUAS, PUERTO RICO  
By  
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2001

0 0.5 1 1.5 2 KILOMETERS  
0 0.5 1 1.5 2 MILES



Figure 1. Location of the municipio of Caguas in relation to the other municipios of Puerto Rico.

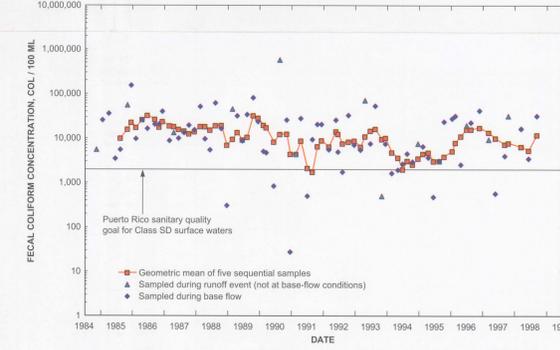


Figure 2a. Long-term geometric mean concentration of fecal coliform bacteria at the Rio Grande de Loiza at Highway PR-189 (USGS station 50055000), November 1984 to September 1998. Note that the fecal coliform concentrations are presented in a logarithmic scale.

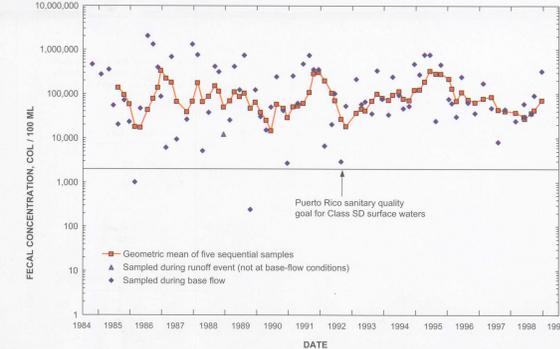


Figure 2b. Long-term geometric mean concentration of fecal coliform bacteria at the Rio Caguas at Highway PR-30 (USGS station 50052500), October 1984 to December 1998. Note that the fecal coliform concentrations are presented in a logarithmic scale.

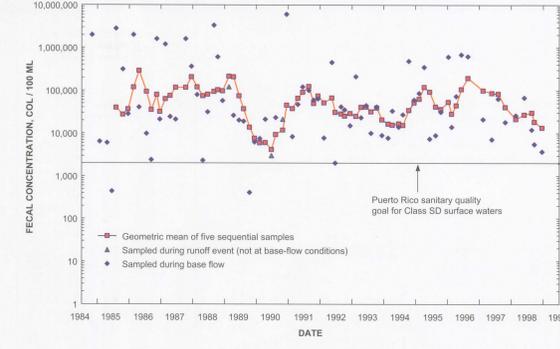


Figure 2c. Long-term geometric mean concentration of fecal coliform bacteria at the Rio Bairoa at Highway PR-1 (USGS station 50054000), October 1984 to December 1998. Note that the fecal coliform concentrations are presented in a logarithmic scale.

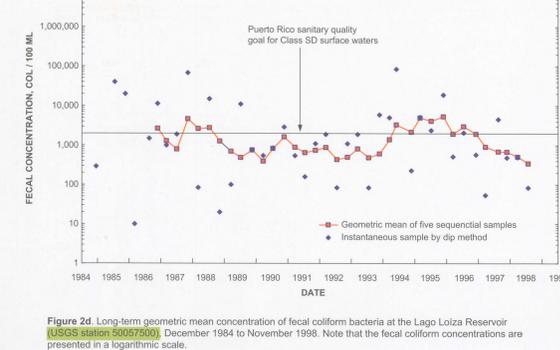


Figure 2d. Long-term geometric mean concentration of fecal coliform bacteria at the Lago Loiza Reservoir (USGS station 50057500), December 1984 to November 1998. Note that the fecal coliform concentrations are presented in a logarithmic scale.

**EXPLANATION**

Stream sanitary quality classification (as used in this study for base-flow conditions)

Ranking	Fecal coliform concentration colonies per 100 milliliters	Within delimited stream reach. Probable within delimited stream reach
Poor Presumed Poor	Greater than 2,000	Within delimited stream reach. Probable within delimited stream reach
Fair Presumed Fair	Equal probability for less than 2,000 or greater than 2,000	Within delimited stream reach. Probable within delimited stream reach
Acceptable Presumed Acceptable	Less than or equal to 2,000	Within delimited stream reach. Probable within delimited stream reach
Good Presumed Good	Less than 200	Within delimited stream reach. Probable within delimited stream reach also fecal streptococcus less than 400 colonies 100 milliliters

Riparian zone with potential as a source of contamination from household waste-water discharges (un-sewered dense housing units within 100 meters of stream)

**Flood-prone areas classification \***

Zone A	1 percent annual chance flooding, no Base Flood Elevations (BFEs) have been determined
Zone AE	1 percent annual chance flooding, BFEs have been determined
Zone X500	0.2 percent annual chance flooding, or 1 percent annual chance flooding with average depths of less than 1 foot, or area protected by levees from 1 percent annual chance flooding

\* Source of information Federal Emergency Management Agency (1996)

**Other features**

- Potential reservoir sites \*\*
  - Sub-watershed boundary
  - Municipal boundary
- \*\* Source of information Black and Veatch (1976)

**Man-made hydrologic modifications**

- Public water-supply filtration facility
- Public water-supply raw water diversion points:
  - Pump station
  - Gravity intake
- Municipal solid-wastes landfill (closed in 1986)

**Public waste-water treatment facility**

- Active
- Abandoned/closed
- Effluent-discharge point

**Data collection site**

- 50053025 USGS surface-water data collection station identification number
- Bacteriological quality-of-water station
- Stream low-flow and bacteriological quality-of-water station
- Continuous streamflow gaging station and long-term bacteriological quality-of-water monitoring station
- USGS long-term reservoir bacteriological quality-of-water station
- Stream low-flow measurement site