

Base map from Digital Line Graph data U.S. Geological Survey, Corozal, 1:20,000, photorevised 1982; Naranjito, 1:20,000, photorevised 1982; Barranquitas, 1:20,000, 1969; Comerio 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 COMERIO, PUERTO RICO

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**EXPLANATION**

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

Ranking	Fecal coliform concentration, colonies per 100 milliliters	
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 possibly contaminated by household waste-water discharges (unsewered 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
- Sub-watershed boundary with drainage to Comerio

**Man-made hydrologic modifications**

- Public water-supply filtration facility
- Public water-supply raw water diversion points:
  - Pump station
  - Gravity intake

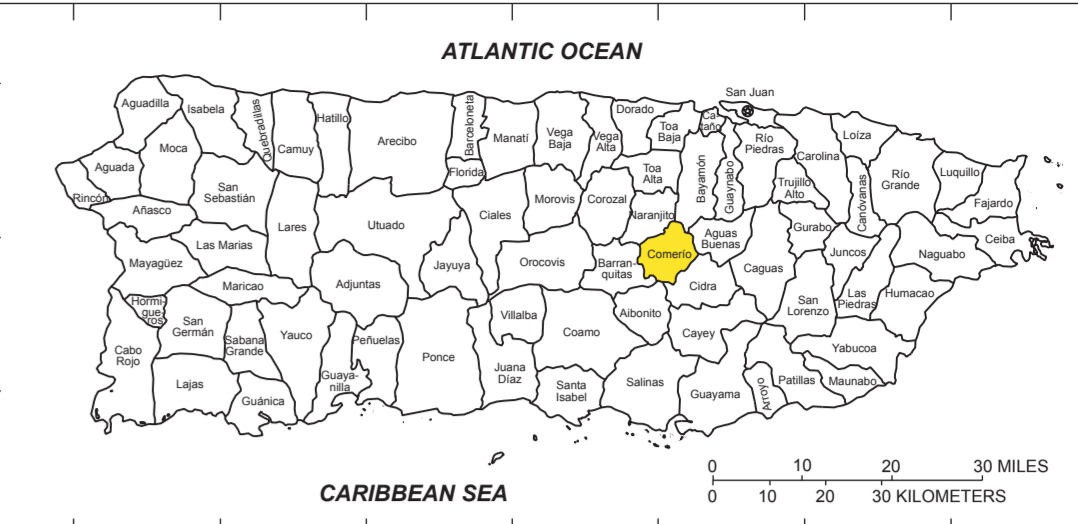


Figure 1. Location of the municipio of Comerio in relation to the other municipios of Puerto Rico.

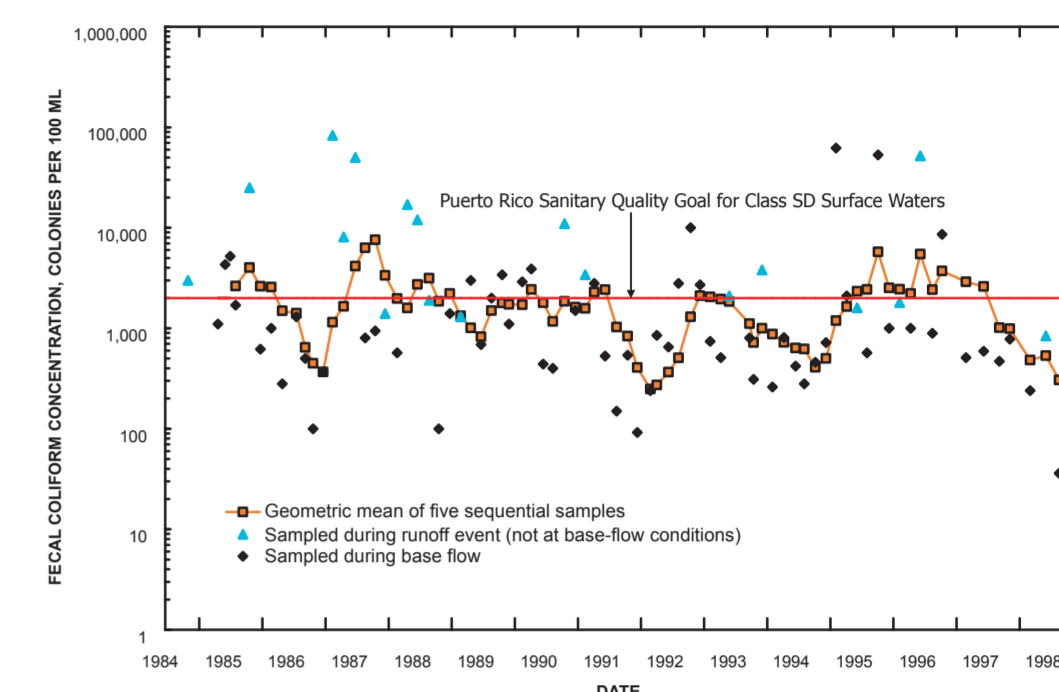


Figure 2a. Long-term geometric mean concentration of fecal coliform bacteria at Rio de la Plata near Comerio at Highway PR-156 (USGS station 50044000), October 1985 to August 1998. Note that the fecal coliform concentrations are presented in a logarithmic scale.

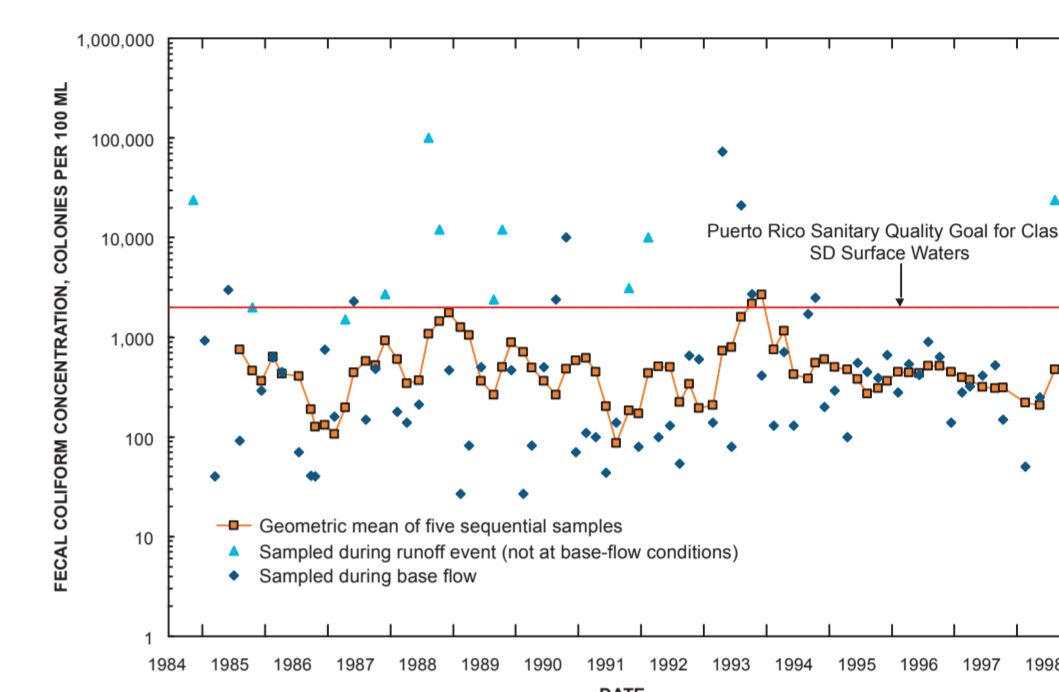


Figure 2b. Long-term geometric mean concentration of fecal coliform bacteria at Rio de la Plata near Comerio at Highway PR-173 (USGS station 50043000), November 1984 to August 1998. Note that the fecal coliform concentrations are presented in a logarithmic scale.

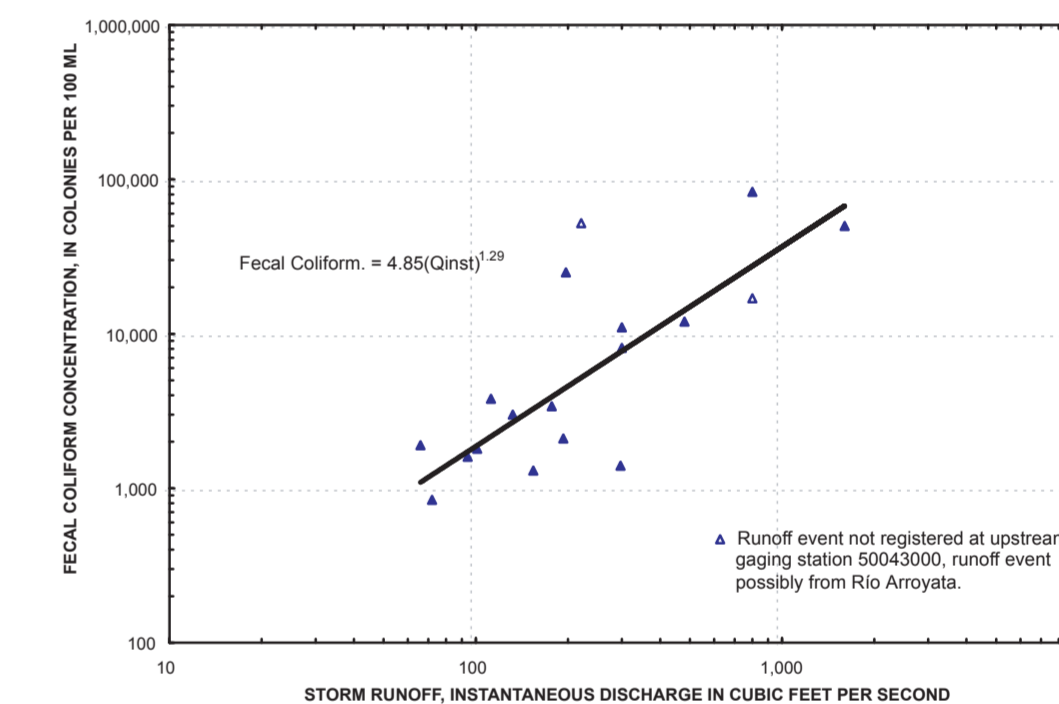


Figure 3a. Relation between fecal coliform concentrations and streamflow during storm-runoff events at Rio de la Plata near Comerio at Highway PR-156 (USGS station 50044000), data correspond to storm-runoff events shown in figure 2a).

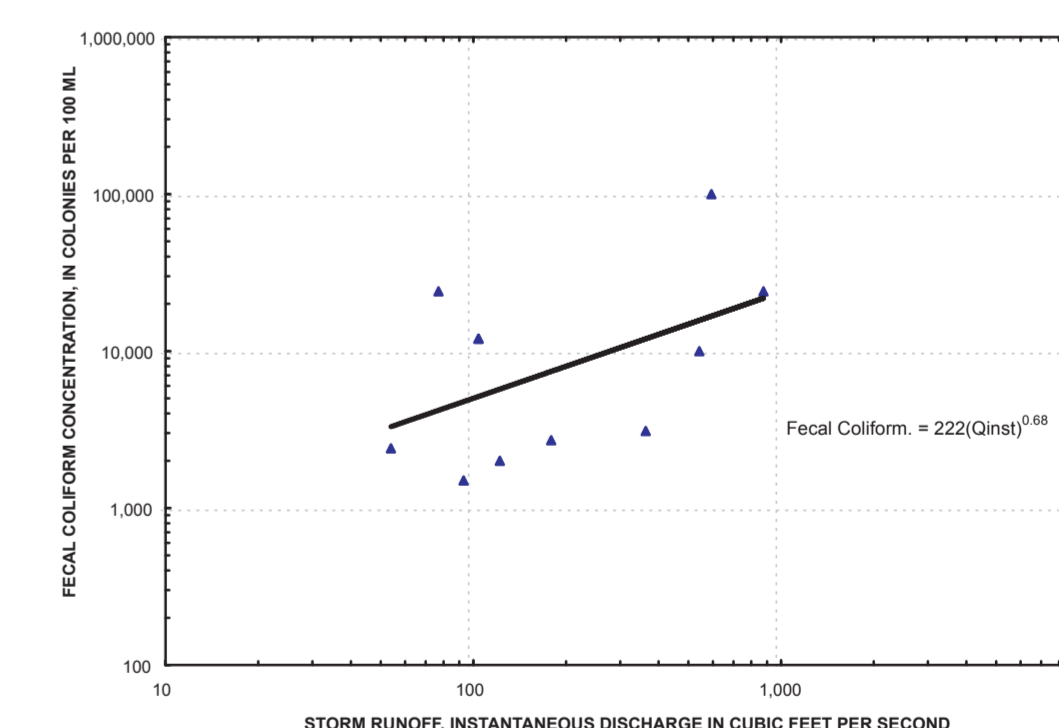


Figure 3b. Relation between fecal coliform concentrations and streamflow during storm-runoff events at Rio de la Plata near Comerio at Highway PR-173 (USGS station 50043000), data correspond to storm-runoff events shown in figure 2b).

**Public waste-water treatment facility**

- Active
- Effluent-discharge point

**Data collection site**

- 50043000 USGS surface-water data collection station identification number
- ▲ Continuous streamflow gaging station
- ▼ Bacteriological quality-of-water station
- △ Stream low-flow and bacteriological quality-of-water station
- ▽ Stream low-flow measurement site
- ▽ Continuous streamflow gaging station and long-term bacteriological quality-of-water monitoring station