

Puerto Rico

Water loss is a particularly important issue in Puerto Rico, where nearly the entire population is served by the Puerto Rico Aqueduct and Sewer Authority (PRASA), the Commonwealth's publicly-owned water supplier. The US Geological Survey (USGS) estimates that in 2015 (the most recent year available), PRASA withdrew an average of about 576.35 million gallons of water per day for treatment and distribution to customers. PRASA faces enormous challenges when it comes to replacing and repairing its systems. The U.S. Environmental Protection Agency (EPA) recently found a 20-year capital improvement need of more than \$3.70 billion for Puerto Rico's water systems to continue to provide safe drinking water, even before Hurricanes Irma and Maria, which necessitated disaster recovery expenses of \$395.6 million through February 2018.

PRASA owns and operates the island-wide public water and wastewater systems. Over 97 percent of Puerto Rico's population is served by the Authority's water system, and approximately 55 percent of the population receives service from the Authority's wastewater system.

PRASA's financial difficulties have been known for some time. The following significant note accompanied its 2016 financial statement –

The accompanying financial statements have been prepared assuming that the Authority will continue as a going concern. As discussed in Note 2 to the financial statements, the Authority's significant recurring losses, working capital deficiencies, credit downgrades, large nondiscretionary capital expenditure requirement, uncertainty as to fully satisfy its obligations, fiscal oversight and lack of market access, raise substantial doubt about its ability to continue as a going concern. – p. 2. Kevane Grant Thornton, *Financial Statements and Report of Independent Certified Public Accountants, Puerto Rico Aqueduct and Sewer Authority (A Component Unit of the Commonwealth of Puerto Rico)*. June 30, 2016 and 2015.

According to a November 2015 consultant's report, PRASA has performed standardized water loss audits in the AWWA M-36 format water audits from FY 12 (and perhaps earlier) through FY 15. These reports were done by operational region and combined into an island-wide report as well. In FY 14, non-revenue water was reported to be 351 mgd, or 59% of total water production. PRASA's stated goal is to reduce real losses from 287 mgd in 2014 (48% of total water production) to 157 mgd (35% of water production) by 2020.

PRASA's Metro Region Water Resources Management Plan 2015 (consultant's report) – see esp. pp. 3-1 through 3-8:

https://www.acueductospr.com/INFRAESTRUCTURA/download/WATER_RESOURCES_MANAGEMENT_PLAN_for_METRO_REGION.pdf

“Puerto Rico Aqueduct & Sewer Authority may seek government loan”, February 22, 2018, Caribbean Business: <http://caribbeanbusiness.com/puerto-rico-aqueduct-sewer-authority-may-seek-government-loan/>

U.S. Geological Survey’s “Estimated Use of Water in the United States County-Level Data for 2015”, September 28, 2017- <https://www.sciencebase.gov/catalog/item/59a96d18e4b07e1a023db323>

EPA’s “Drinking Water Infrastructure Needs Survey and Assessment, Sixth Report to Congress”, March 2018 - https://www.epa.gov/sites/production/files/2018-03/documents/sixth_drinking_water_infrastructure_needs_survey_and_assessment.pdf