

Maunabo Urbano Public Wells

Maunabo, Puerto Rico

JUNE 2024

OVERVIEW

The Maunabo Urbano Public Wells Site (Site) is in Florida Afuera, Puerto Rico. The Site's wells closed in 2002 and remedial action is complete. The Site was listed on the National Priorities List (NPL) on September 27, 2006. Now, the Environmental Protection Agency (EPA) is helping the municipality and local partners to evaluate ways the land at the Site could be used to benefit the community.

Frequent power outages, fluctuating electricity prices and extreme weather events are common challenges for communities around Puerto Rico. Creating more resilient alternative energy options is an important priority for many communities. In 2019, the Puerto Rico Energy Public Policy Act set a goal for the commonwealth to supply 100 percent of its electricity from renewable resources by 2050.

Solar photovoltaic (PV) generation can offer a resilient, cost-effective, and environmentally friendly source of energy. This document summarizes information about the surrounding area and local population and evaluates solar power generation opportunities that could benefit the municipality and residents.

Demographic Considerations

The Site includes residential areas and has a population of approximately 1,636. This population was determined using EPA's [EJ Screen tool](#), which calculates approximate population using EPA Site boundaries and an appropriate surrounding area if needed.

The Site is in proximity to two comunidades especiales, Sector García in Talante, and Batey Columbia in Calzada. This means that those areas qualify for special attention and resources under the 2001 "Comunidades especiales de Puerto Rico" law. This designation is intended to facilitate infrastructure and economic opportunities for the most marginalized members of an area.

For more information about climate and economic justice in Puerto Rico, see the [Climate and Economic Justice Screening Tool](#).

QUICK FACTS

Description: Formerly contaminated groundwater wells.

Location: Florida Afuera Ward, Road 666, Florida Afuera, PR

Size: 210 acres/ 0.85 km²

Owner: Puerto Rico Industrial Development Corporation (PRIDCO)

Remedial Action Status: Remedial Design

Solar Capacity (Estimated): 0.3 megawatts

Redevelopment Considerations:

- Long-term groundwater monitoring

Website: www.epa.gov/superfund/maunabo-groundwater

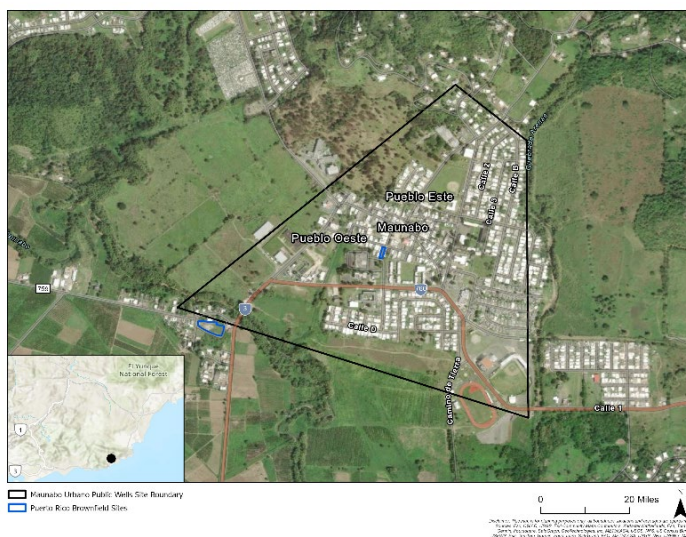


Figure 1: Approximate Maunabo Urbano Public Wells Superfund Site boundary.

Reuse Opportunities

Reuse opportunities identified for the Site include:

Solar renewable energy generation

PV energy could be used to provide power to the community surrounding the Site. Solar panels can be mounted on rooftops and in an array on the ground.

- **Rooftop Solar** – Residents, municipalities or businesses can use rooftop solar panels to help save resources on electricity and create more energy independence. Buildings in the vicinity of the Site are either owned privately or by the municipality.
 - If property owners install their own rooftop solar, [LUMA](#) Energy can purchase 75% of PV electric output that customers do not use at their property. LUMA will purchase excess power from rooftop solar at \$0.10/kilowatt-hours (kWh). This is known as net metering. The PV system size limit for net metering is 25 kilowatts for residential and 1 megawatt for commercial.
 - For community-wide or emergency electricity needs, larger rooftop solar systems could benefit Maunabo. There are two PRIDCO buildings on site that could support rooftop solar.
 - The Maunabo Government building has approximately 1,750 square meters and could support up to a 262 kilowatt or 0.3 MW rooftop solar PV system. This type of system could create a reliable source of electricity and benefit the broader community using battery storage and creation of a resilience hub.
- **Battery Storage** – Solar panels can be connected to a battery storage system which creates a microgrid system that provides residents or users with power during a storm.
- **Resilience Hub** – Resilience hubs are systems tailored to a community's energy needs that can provide electricity during grid events or climate related disasters. The U.S. Department of Energy ([DOE](#)) has awarded funding to help communities create buildings or centers with reliable power and infrastructure to support basic communication and community health needs. If space is available in the building, Maunabo's municipal building could potentially serve as a resilience hub for the community.

Solar Economics

There are several ways that the community and municipalities could help sponsor and benefit from a solar project at the Site. The municipality or a development partner could pursue an approximately 1,750 square meter solar (0.3 megawatt) project on the rooftop of the municipal building. A typical project of this size would cost about \$740,000. Two ways that a project could be developed and support community electricity needs are described below.

- **Direct ownership** – The municipality or private land property owners finance, build, own, operate and maintain the solar panels and control the electricity it generates. Most smaller solar projects are developed this way and owners use net metering to sell unused power back to the utility.
- **Community solar** – For larger solar projects that could support multiple households or customers, a community solar project allows customers to buy into the project and access power at a set rate.

CONTACT INFORMATION

Hermes Chacon, EPA Remedial Project Manager
Chacon.Hermes@epa.gov, (787) 977-5833

Brenda Reyes, EPA Community Involvement Coordinator
Reyes.Brenda@epa.gov, (787) 977-5869

Marla Wieder, EPA Region 2 Redevelopment
Coordinator, Wieder.Marla@epa.gov, (212) 637-3184

Claudia Shuman, EPA Region 2 Redevelopment
Coordinator, Shuman.Claudia@epa.gov,
(212) 212-637-4279

Agustín F. Carbó, DOE, Agustin.Carbo@hq.doe.gov,
(240) 751-8856

