

Wave Tank

PURPOSE

Mangroves act as a natural barrier protecting coastal communities, like Piñones, from flooding during severe weather events. Due to their intricate root structure, mangroves are able to break up waves before reaching land. Piñones is home to the largest mangrove forest in all of Puerto Rico and 22% of mangroves on the entire island are found here.

COPI's flood mitigation and canal cleaning project works to preserve the mangrove forest in Piñones in order to continue to protect the community from flooding and natural disasters. As part of their project, they are raising red mangrove saplings in a nursery to be planted in different reforestation zones across Piñones.

HOW TO USE

To observe how mangroves protect Piñones from floods, pull the string at the end of the tank up and down to create waves in the tank. The more you pull, the bigger the wave. As the waves travel through the mangroves, their height will be significantly reduced by the time they reach the community. Big waves can represent natural disasters like tsunamis while the smaller waves represent boating wakes.

The mangroves can also be removed from the tank to observe how the waves would act if there were no mangroves to protect the community.

