

The Clever GIRL (Global Intelligent Rip Locator)

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Rip currents are a major hazard on beaches all over the world. According to the United States Lifesaving Association, 90% of beach drowning's and 80% of beach recues are attributed to rip currents. Throughout America each year, over 100 people drown due to rip currents on beaches. To eliminate the chance of swimmers becoming caught in a rip, I designed and developed the Clever GIRL (Global Intelligent Rip Locator). The Clever GIRL harnesses the potential energy of a rip to create kinetic energy, as demonstrated when the turbine underneath the buoy rotates. This turbine is attached to a generator, which transforms the kinetic energy to electrical energy, thus powering a warning light on the top of the buoy. This warning light advises swimmers not to swim there as a rip is underneath. Unlike other products, the renewable rip energy does not need to be stored in a battery, as the energy is only needed when the rip is actually underneath the product. The Clever Girl is a product that will help everyone on a beach. Firstly, it will help swimmers of any age or background, as it can be a universal warning system (as there will be no language barriers). This will help both locals and tourists alike. This product will also assist in lifeguarding duties, as the lifeguards will not have to perform as many rescues because there will be less swimmers caught in rips. This means they can focus on other areas of the beach.