


New Antenna Uses Saltwater and Plastic to Steer Radio Beams

Here's a really interesting [article](#) about using plastic tubes that can be filled and emptied of salt water to create a directional antenna. 

My reading of this is that they essentially create a 3 element yagi by filling the centre tube as the driven element and two other tubes as the reflector and director. And the whole thing can be tuned on the spot by adjusting the amount of water. I guess they can also tweak the radiation pattern by filling nearby tubes as well. I also imagine they could go even further by adding more rings to increase the number of “elements”, or even drive multiple tubes with different phases as with this [array system](#).

I wonder how much power it can handle? My kettle uses 1500W to boil water in minutes, so I guess that if most of the energy is radiated, it could take quite a bit...