

Saltwater Antenna

2 meter vertical monopole antenna using saltwater instead of wire

Why build a saltwater antenna?

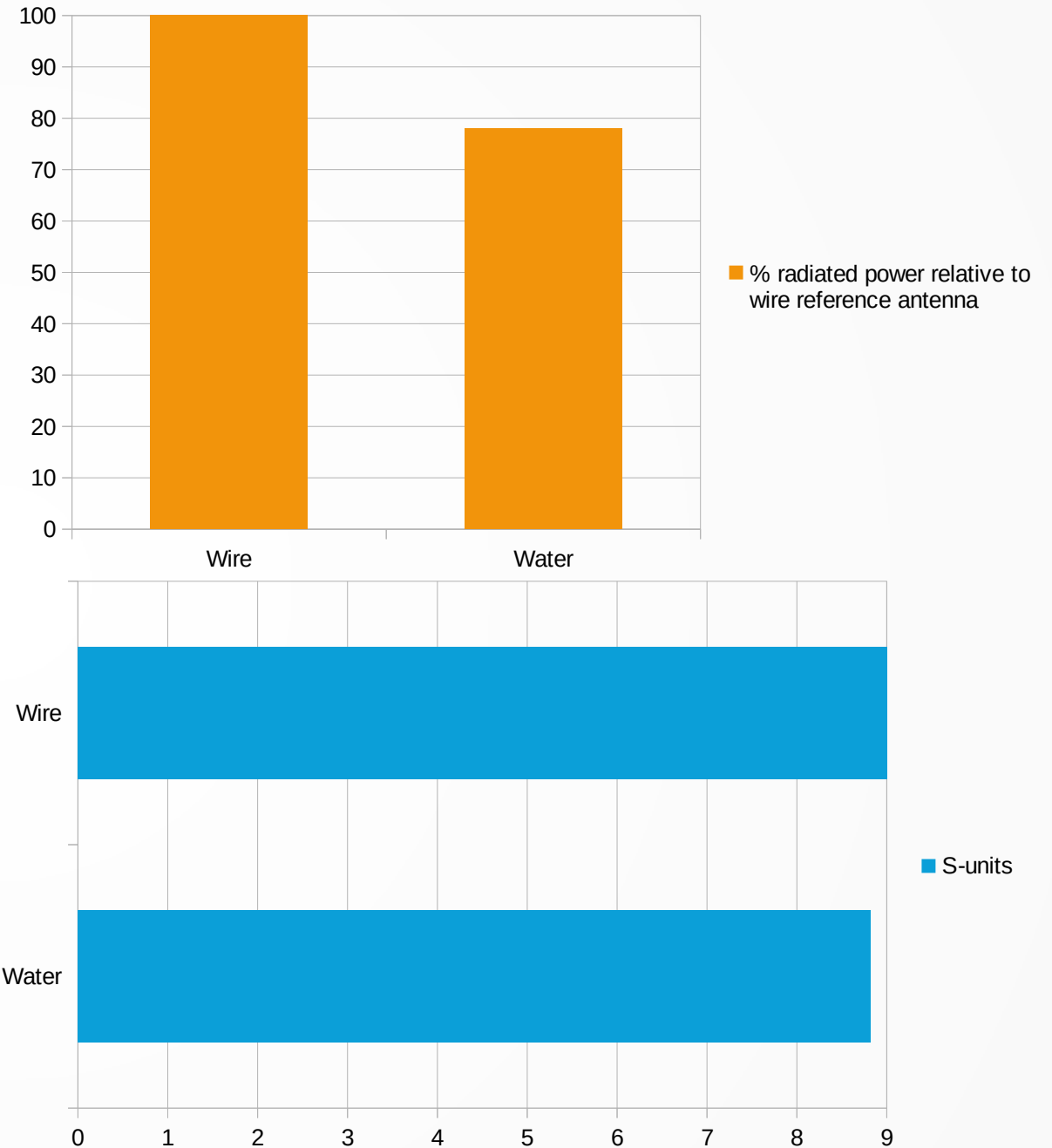
Mostly for quicker, easier tuning without wasted wire

- The element can easily be lengthened or shortened by pouring saltwater into or out of the tube.
 - With a wire antenna, if the wire is cut too short, it is often necessary to replace the entire wire. With a water antenna, more water can be added.
 - Unlike a wire antenna, it is easier to lengthen the water antenna than to shorten it. If too much water is added, it is necessary to tip the antenna over to pour water out.
 - This is not much of a problem for a 2 m antenna, but for lower bands with longer wavelengths, it could be. It would probably not be too difficult to add a valve to the bottom of the tube to allow water to be drained out.

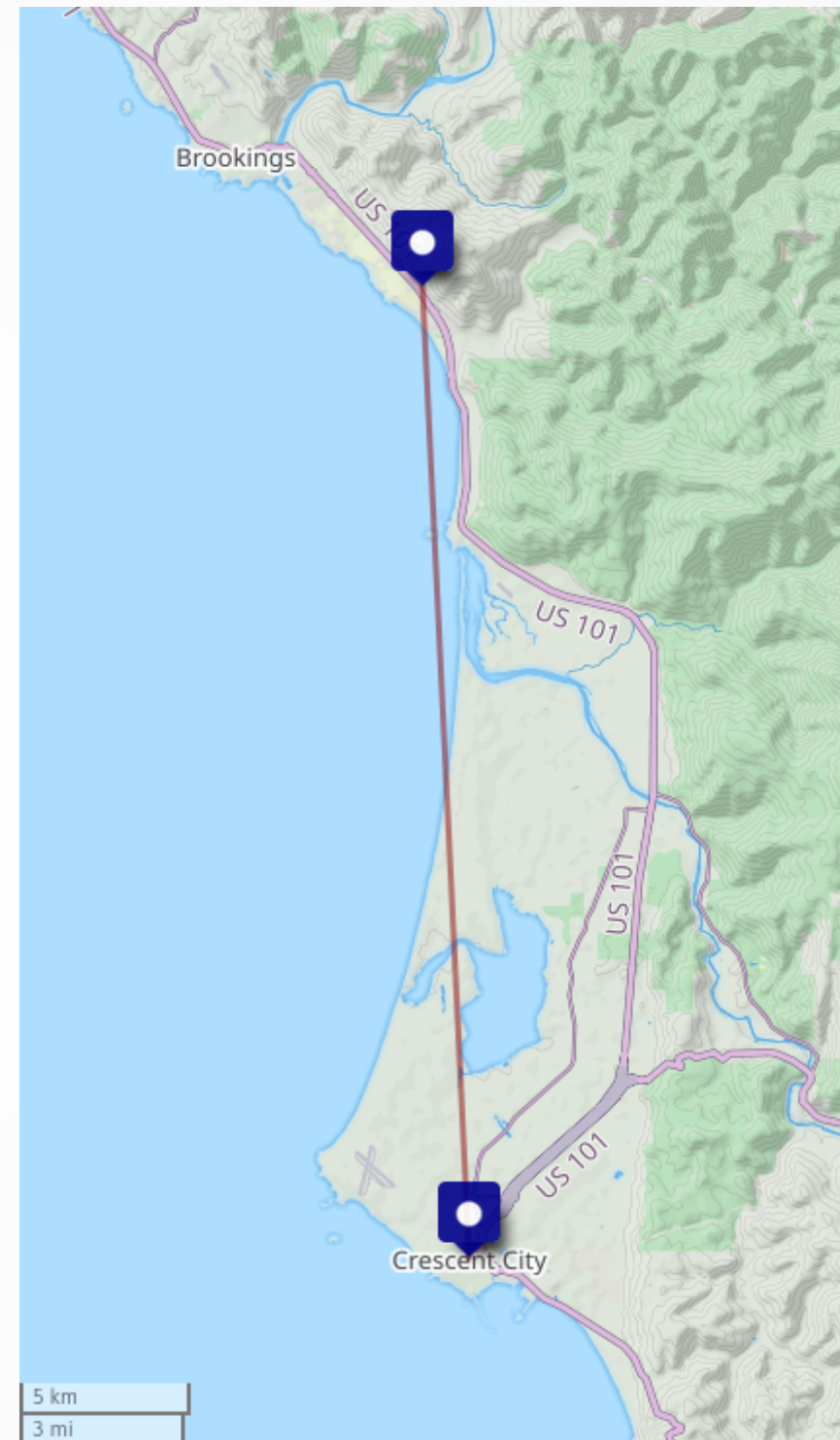
Does it work?

The radiated signal strength is very close to that with the same radio and a wire antenna.

The signal transmitted from the water antenna was about 78% as strong as that from the wire antenna (a 22% drop). While this seems like a large difference, it is only 1.1 dB, or about 1/6 of a standard S-meter unit.



**I was able to key the DNARC
146.880 repeater, located in
Crescent City, 18 mi. (20 km)
away from my antenna
outside our house in Harbor.**



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