



## **Reading Water Quality Variables with a Smartphone**

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Many relevant water quality variables can be measured cost-effectively with standard indicator strips. These are local measurements, although usually done within a larger water network. Only if these measurements can be made available in a central database, the entire network can benefit from the extra data point. This requires an analog data source to be converted to a digital data point. A tool that is equipped to do that and also communicate the value to a central system, is a smartphone. A water quality monitoring method is introduced that requires standard indicator strips attached to a reference card and an app with which a picture can be taken from this card. The color or other indication is automatically read with dedicated pattern recognition algorithms and, by using the gps-localization of the smartphone, is stored in the right location in the central database. The method is low-cost and very user-friendly, which makes it suitable for crowd sourcing.